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WORKHOLDING

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Spindle Tooling for Automatics, Turret Lathes and Rotary Transfer Machines

TURNING MILLING GRINDING WORKHOLDING ROTARY

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Serving the Industry since 1890

Manufacturing Workholding Products for over a Century

Hardinge is the world's largest manufacturer of spindle tooling. Products are ready from stock in a vast array of styles, shapes and sizes for single- and multi-spindle automatic screw machines, turret lathes, rotary transfer machines, CNC lathes, mills and grinding machines.

Generations of Hardinge machinists have been producing collets, feed fingers and pads for all makes and models of machines for the past 100+ years. Hardinge continually strives to bring products to meet ever increasing machining requirements.

Hardinge is no stranger to special re-quirements – non-typical workpiece materials, workholding for specialty and high-production machines, assembly and other process tooling requirements. We specialize in finding solutions to your hard-to-grip parts – extruded stock, non-round parts, eccentric, off-center and stepped parts. Hardinge will work closely with you to solve your individual needs while working within your parameters.

PMPA and the Industry

Hardinge actively supports the Precision Machined Products Association (PMPA) in their role to provide management and technical services to member companies in areas of supervision and production. Today, PMPA serves a growing membership from across North America.

Access to information is imperative. Hardinge shares their 100+ years of experience as a manufacturer, as a machine shop, as an educator and as a technological leader through organizations such as PMPA, industry trade shows, conferences and a very comprehensive website. Hardinge is your unparalleled resource for technology, information, products and performance – your performance.

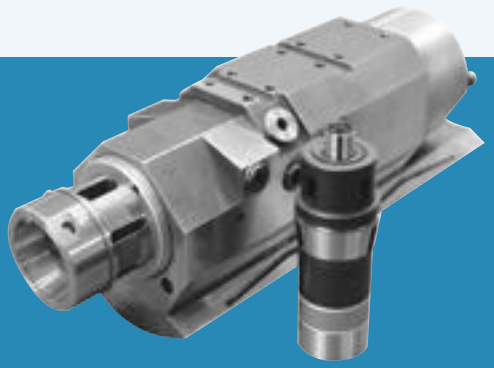
World-renowned Machine Tool Builder

Hardinge has provided metalworking leadership to the world for over a century. They have developed into a global leader with manufacturing facilities on three continents and a presence in thirty countries. Hardinge continually integrates new and advanced technologies into their products and services to assist you in enhancing your operations. Hardinge manufactures a broad range of machines for high-performance turning, milling and grinding, and of course the industry's premier line of workholding and industrial products in Elmira, New York.

Six spindle cover photo courtesy of Index Corporation.

Customer Saves over $40,000

Hardinge designed an economical pick-off collet compatible with Euroturn, Gildemeister and Tornos Deco machines. The customer inserts the Hardinge ID collet assembly into the machines "standard" OD pick-off attachment instead of purchasing a costly ID pick-off attachment from the machine builder. Euroturn's "standard" OD pick-off attachment, as shown to the right, will have the flexibility to grip the part internally using the Hardinge ID pick-off collet shown.



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Hardinge Workholding Overview

…highest manufacturing standards in the industry

Swiss-Type Collets, Guide Bushings and Bar Loader Collets

Hardinge offers 24-hour delivery of headstock and sub-spindle collets for most Swiss-type lathes! Also available are bar loader collets for FMB, LNS and Robobar bar loaders, along with remnant retraction collets for Lipe bar loaders.

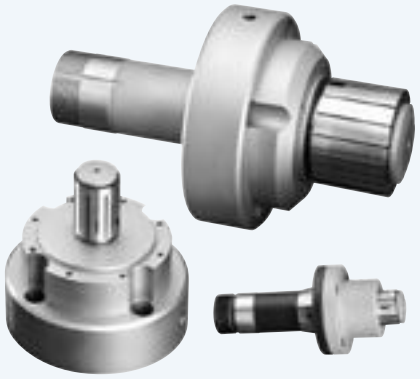
Request Brochure #2283

Spindle Tooling for Lathes, Mills, Grinding Machines & Fixtures

Hardinge has manufactured collets for over 110 years—world renowned for quality and precision. We offer accuracy and durability at competitive prices with off-the-shelf delivery of collets for all brands of machine tools!

- Hardened and Ground
- Extended-Nose
- Special-Accuracy
- Collet Stops
- Emergency
- Special Shapes
- Dead-Length® Systems
- Step Chucks

Request brochure #2348



Sure-Grip® Expanding Collet Systems

Complete more operations with expansion collets than with standard collets and 3-jaw chucks. Instant centering, quick changeover, wide size range with true parallel gripping, high grip force and exact part length control are featured.

- #100 to #600-style
- For 5C, 16C, 20C, 25C, 3J, A2-5, A2-6 and A2-8 spindles
- 3J Expanding Collet Assemblies
- Expanding arbors for lathes, mills, grinding machines and fixtures

Request brochure #2270

Custom Workholding Solutions Provider

Hardinge experts will design and manufacture custom collets and workholding devices for your typical and nontypical applications. Specials are manufactured to rigid specifications including material, proper heat treat and machined accuracy. See chapter five for more information.

Request brochure #2349

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Hardinge Workholding Overview

…the machine tool builder with the total package

HCAC™ Collet Adaptation Chucks

Perform precision collet work on all brands of jaw chuck machines using a Hardinge HCAC Collet Adaptation Chuck. Experience increased productivity, increased capability and increased control over 3-jaw chucks.

- Plain Nose
- Stepped Nose
- B65
- Dead-Length® Style "B"
- Style "S" Master
- Spindle-to-Spindle
- Scroll-Style Chucks

Request brochure #2352

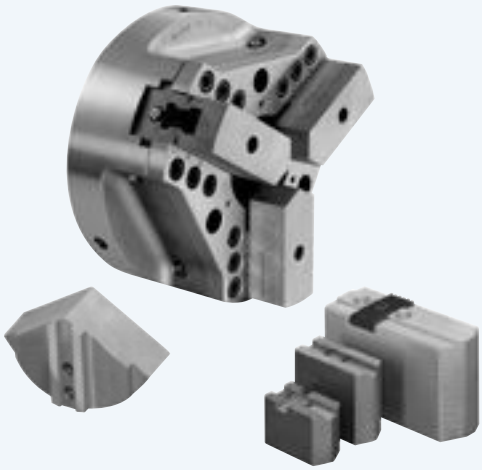
HQC® Quick-Change Collet Systems

Drastically reduce collet changeover time to increase profits—change collet size in less than 20 seconds! Features ±1/64" gripping range per collet head. Patented slot seal design allows operator to replace worn seals in seconds–unlike other systems that have to be sent out to be revulcanized. Systems for multi-spindle lathes, collet spindle lathes and chuck spindle lathes are available.

Request brochure #2339

Collets and Accessories for Automatic Screw Machines

Look to Hardinge for solids, masters & pads, feed fingers and pads for all brands of automatics and rotary transfer machines. –details in this catalog!



Sure-Grip® 3-Jaw Power Chucks and Jaws for all brands of Chucks

Hardinge power chucks are competitively priced and designed for increased productivity. They are lever-operated, counter- and dynamic-balanced and designed to run at high RPM. Hardinge also supplies jaws for all chuck brands.

- 3-Jaw Chucks
- Quick-Change Chucks
- Adaptable to All Brands of CNC Lathes
- Metric Serrations
- Counter-Centrifugal Design
- Jaws for All Brands of Chucks

Request brochures #2357 (chucks), #2358 (jaws)

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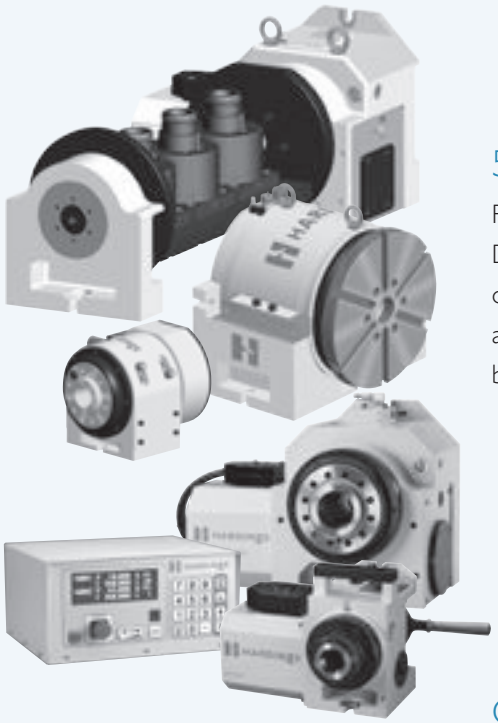
Hardinge Workholding Overview

…precision and reliability for increased productivity



5C, 16C, and 3J Rotary Systems and Accessories

Reduce setup and cycle times with leading positioning technology from Hardinge. DIRECT-DRIVE Rotary Systems incorporate a wraparound torque motor with no gear or mechanical elements for ZERO backlash. The result is Super-Precision® positioning and repeatability in a small footprint. The Hardinge spindle nose allows quick change between collets, expanding collets, step chucks, power chucks and face plates.

- Direct-Drive, Super-Precision® Rotary Systems
- High-Precision Rotary Systems
- All-digital, state-of-the-art Servo Control
- Trunnion Products
- Tailstock and Collet Closer Options

Request brochure #2372

CNC Mill Tooling

Available for all machines requiring BT and CAT-V tool holding systems. AT3 shank-taper accuracy exceeds ANSI standards by 35%.

- Solid-Style Toolholders—end mill, shell mill, semi-flush slitting saw, stub arbor, tapping, boring tool, Jacobs taper, Morse taper and blanks
- ER and TG Collet-Style Holders—stub, standard, extended, extra-extended and strong and rugged (S&R) configurations
- Toolholder Collets—ER8, ER11, ER16, ER20, ER25, ER32, TG100 and TG150
- Mill Accessories—5C and 16C collet blocks, collet extension holders, "Cool Stop" seals, retention knobs and mounting fixtures

Request brochure #2350

Toolholders, Toolholder Collets and Bushings

Hardinge mastered the art of precise heat treatment and manufacturing processes to bring you long-lasting products. Provided are collets, bushings and toolholders for Swiss-type lathes, CNC lathes and manual lathes, as well as CNC and manual mills. Look to Hardinge for optimum gripping force and efficient push-back control.

- Single-angle
- Double-angle
- Precision Bushings
- Solid Bushings
- Preset Bushings
- Cincinnati Monoset
- Lathe style
- Lensmaker
- Floating Tap Collets
- Tap Holder

Request brochure #2351

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Hardinge-trained phone correspondents are waiting for your call. To expedite the ordering process, please be prepared to supply the Hardinge part number or product description, your machine make and model number, and the size and shape of the collet order hole (for example 1/2" hex or 29 mm round).

Hardinge offers quick and easy ordering via the Internet at any hour, any day of the week! Visit hardingetooling.com to place your direct order for collets, chucks and other workholding systems. Pricing and stock status is at your fingertips. When you've selected everything you need, it is safe and easy to "check out" with confidence using the secure website. You will receive instant confirmation that your order has been received by Hardinge, followed by exact delivery information from a Hardinge correspondent.

Hardinge accepts payment by VISA, MasterCard, American Express or Discover card. Purchase order numbers are accepted for established accounts. In the United States, the regular method of shipping is via United Parcel Service (UPS). Overnight and second-day delivery service is available for in-stock items at additional charge.

From bar stock to finished product – 100% in-house

Individual care goes into every collet, feed finger and pad, at each manufacturing process, from handling the initial bar stock to polishing and laser etching. Generations of skilled-machine operators have taken part in the many important processes of producing a hardened and ground collet. Hardinge has been manufacturing workholding and industrial products for all brands of lathes, mills and grinding machines for over a century. Process expertise, precision and accuracy provides a workholding product that is world-renowned.

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Spindle Tooling for Automatics

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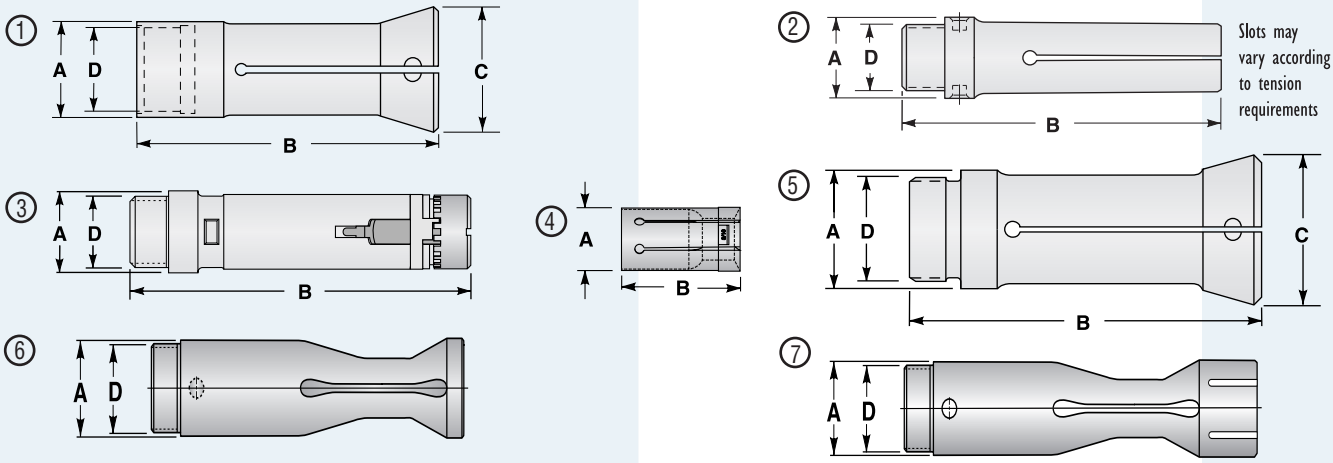
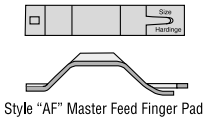
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
ACME-GRIDLEY: 7/16" Capacity – RA6 (Larger Capacity Solid Collets Available up to 43/64" Round, 37/64" Hex, 15/32" Square)											
Collet, Solid	4001	1			.936" (23.77)	3.094" (78.59)	1.165" (29.59)	.812" x 32 LH	7/16" (11.11)	3/8" (9.53)	19/64" (7.54)
Collet, Burring	See page 14										
Feed Finger, Solid	4007	2			.664" (16.87)	2.875" (73.03)	—	.591" x 32 LH	15/32" (11.90)	3/8" (9.53)	5/16" (7.93)
Feed Finger, Squirrel Cage & Stock Saver	See page 15										
Feed Finger, Solid Sweat-In	4009	2			.664" (16.87)	2.875" (73.03)	—	—	1/2" (12.70)	7/16" (11.11)	11/32" (8.73)
Feed Finger, Style "B" Master	6221	2	B10	6643	.664" (16.87)	2.875" (73.03)	—	.591" x 32 LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
									Round Min.	Round Max.	Hexagon Min. / Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7055	3	AF10	7321[1] 7323[2]	.664" (16.87)	2.781" (70.64)	—	.591" x 32 LH	1/16" (1.59)	3/8" (9.53)	1/8" (3.18) / 5/16" (7.94)
Bushing, Style "AF"	7365	4	AF10		.395" (10.03)	.906" (23.01)	—	—	1/16" (1.59)	9/32" (7.14)	1/8" (3.18) / 1/4" (6.35)
ACME-GRIDLEY: 9/16" Capacity – G, R6 [Prior 22068] – External Thread (Larger Capacity Solid Collets Available up to 47/64" Round, 5/8" Hex, 1/2" Square)											
Collet, Solid	4011	5			1.027" (26.09)	2.906" (73.81)	1.380" (35.05)	.917" x 32 LH	9/16" (14.29)	31/64" (12.30)	25/64" (9.92)
Collet, Burring	See page 14										
Feed Finger, Solid	4017	2			.780" (19.81)	2.750" (69.85)	—	.685" x 32 LH	9/16" (14.29)	31/64" (12.30)	25/64" (9.92)
Feed Finger, Squirrel Cage & Stock Saver	See page 15										
Feed Finger, Solid Sweat-In	4019	2			.780" (19.81)	2.750" (69.85)	—	—	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)

1 - Round
2 - Hexagon

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



Style "B" Master Feed Finger & Pad


Style "AF" Master Feed Finger Pad

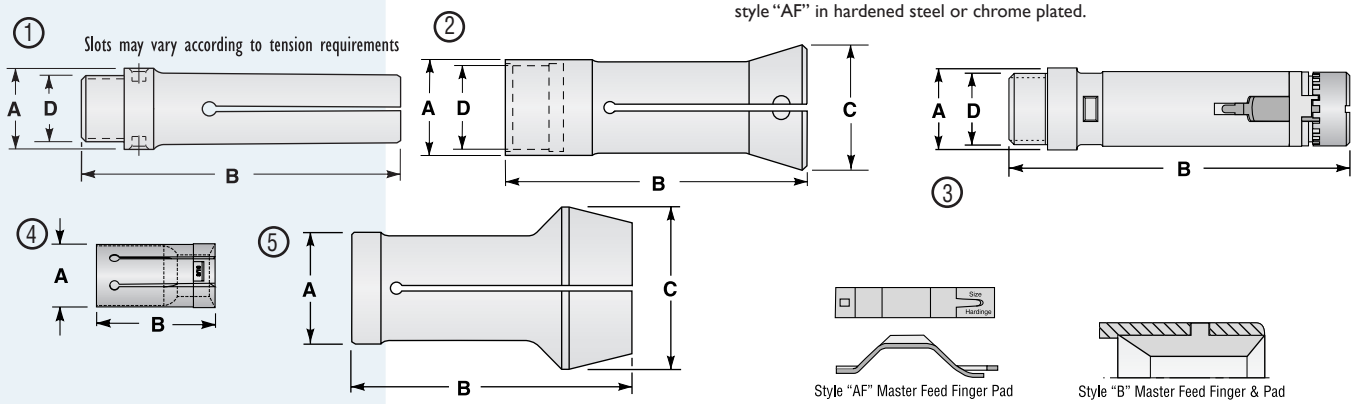
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
ACME-GRIDLEY: 9/16" Capacity – R6 [After 22068], RA6, C – Internal Thread (Larger Capacity Solid Collets Available up to 25/32" Round, 21/32" Hex, 17/32" Square)											
Collet, Solid	4013	2			1.152" (29.26)	4.156" (105.56)	1.395" (35.43)	1.000" x 20 LH	9/16" (14.29)	31/64" (12.30)	25/64" (9.92)
Collet, Burring	See page 14										
Feed Finger, Solid	4017	1			.780" (19.81)	2.750" (69.85)	—	.685" x 32 LH	9/16" (14.29)	31/64" (12.30)	25/64" (9.92)
Feed Finger, Solid Sweat-In	4019	1			.780" (19.81)	2.750" (69.85)	—	—	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
Feed Finger, Style "B" Master	6223	1	B2	6607	.780" (19.81)	2.750" (69.85)	—	.685" x 32 LH	7/16" (11.11)	3/8" (9.53)	19/64" (7.54)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7057	3	AF10A	7321[1] 7323[2]	.780" (19.81)	2.656" (67.46)	—	.685" x 32 LH	1/16" (1.59)	3/8" (9.53)	1/8" (3.18)	5/16" (7.94)
Bushing, Style "AF"	7367	4	AF10A		.492" (12.50)	1.156" (29.36)	—	—	1/16" (1.59)	3/8" (9.53)	1/8" (3.18)	5/16" (7.94)
ACME-GRIDLEY: 5/8" Capacity – RN6 (Larger Capacity Solid Collets Available up to 27/32" Round, 23/32" Hex, 19/32" Square)											
Collet, Solid	4021	2			1.215" (30.86)	4.156" (105.56)	1.455" (36.96)	1.062" x 20 LH	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
Collet, Burring	See page 14										
Feed Finger, Solid	4025	1			.837" (21.26)	2.750" (69.85)	—	.748" x 32 LH	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
Feed Finger, Squirrel Cage & Stock Saver	See page 15										
Feed Finger, Style "B" Master	6225	1	B3	6611	.837" (21.26)	2.750" (69.85)	—	.748" x 32 LH	1/2" (12.70)	27/64" (10.72)	11/32" (8.73)
ACME-GRIDLEY: 3/4" Capacity – F – Push Out (Larger Capacity Solid Collets Available up to 1 1/32" Round, 57/64" Hex, 47/64" Square)											
Collet, Solid	MP1085	5			1.340" (34.04)	3.250" (82.55)	1.685" (42.80)	—	3/4" (19.05)	41/64" (16.27)	33/64" (13.10)
Collet, Burring	See page 14										
Feed Finger, Solid	MP1394	1			1.025" (26.04)	4.063" (103.20)	—	.918" x 32 LH	3/4" (19.05)	41/64" (16.27)	33/64" (13.10)
Feed Finger, Style "B" Master	6227	1	B4	6617	1.025" (26.04)	4.063" (103.20)	—	.918" x 32 LH	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)

1 - Round
2 - Hexagon

NOTE: Millimeters in parentheses. Collets and feed fingers available for larger capacity machines. Collets available in smooth or serrated order holes. For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



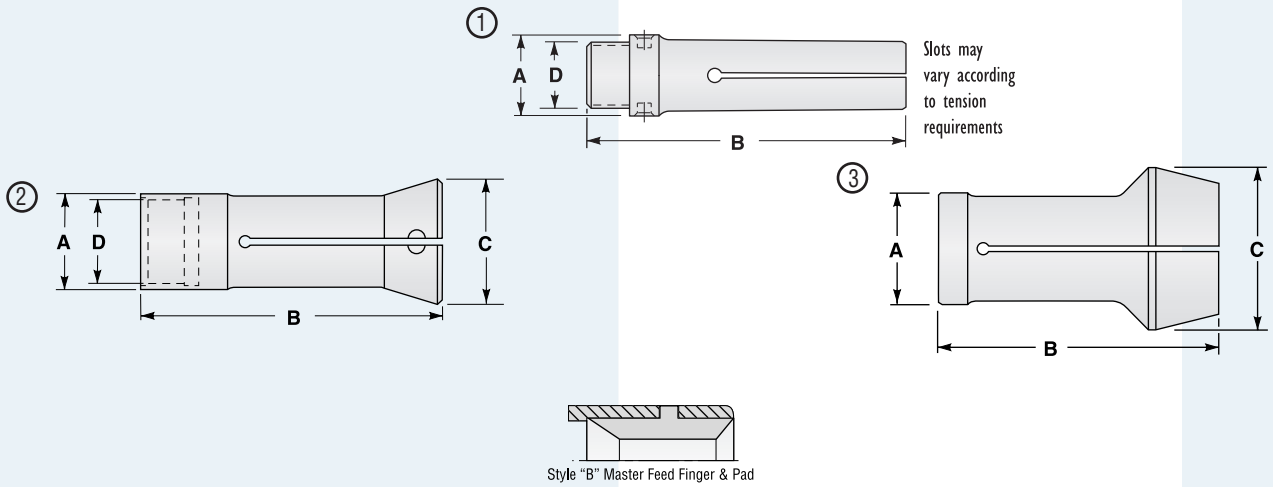
To Order Contact: Exact Tooling / www.exacttooling.com / sales@exacttooling.com / 888-988-8820

Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
ACME-GRIDLEY: ¾" Capacity – RA8 – Draw In – Collet (Larger Capacity Solid Collets Available up to 31/32" Round, 53/64" Hex, 11/16" Square)											
Collet, Solid	4027	2			1.370" (34.80)	5.125" (130.18)	1.830" (46.48)	1.250" x 20 LH	¾" (19.05)	41/64" (16.27)	33/64" (13.10)
Collet, Burring	See page 14										
Feed Finger, Solid	4029	1			.985" (25.02)	5.250" (133.35)	— —	.904" x 32 LH	¾" (19.05)	41/64" (16.27)	33/64" (13.10)
Feed Finger, Squirrel Cage & Stock Saver	See page 15										
Feed Finger, Style "B" Master	6229	1	B4	6617	.985" (25.02)	5.250" (133.35)	— —	.904" x 32 LH	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
ACME-GRIDLEY: 7/8" Capacity – F – Push Out (Larger Capacity Solid Collets Available up to 1 5/32" Round, 1" Hex, 13/16" Square)											
Collet, Solid	MP1086	3			1.464" (37.19)	3.250" (82.55)	1.685" (42.80)	—	7/8" (22.23)	¾" (19.05)	39/64" (15.48)
Feed Finger, Solid	MP1396	1			1.150" (29.21)	4.000" (101.60)	— —	1.043" x 32 LH	7/8" (22.23)	¾" (19.05)	39/64" (15.48)
Feed Finger, Style "B" Master	6233	1	B5	6621	1.150" (29.21)	4.000" (101.60)	— —	1.043" x 32 LH	¾" (19.05)	41/64" (16.27)	33/64" (13.10)
ACME-GRIDLEY: 7/8" Capacity – G, R, R4, RA4 – Draw In (Larger Capacity Solid Collets Available up to 1 3/64" Round, 15/16" Hex, 25/32" Square)											
Collet, Solid	4031	2			1.495" (37.97)	5.250" (133.35)	1.830" (46.48)	1.375" x 20 LH	7/8" (22.23)	¾" (19.05)	39/64" (15.48)
Feed Finger, Solid	4033	1			1.150" (29.21)	5.250" (133.35)	— —	1.043" x 32 LH	7/8" (22.23)	¾" (19.05)	39/64" (15.48)
Feed Finger, Style "B" Master	6231	1	B5	6621	1.150" (29.21)	5.250" (133.35)	— —	1.043" x 32 LH	¾" (19.05)	41/64" (16.27)	33/64" (13.10)

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



Style "B" Master Feed Finger & Pad

To Order Contact: Exact Tooling / www.exacttooling.com / sales@exacttooling.com / 888-988-8820

Spindle Tooling for Automatics

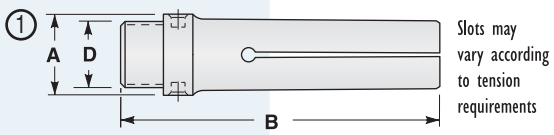
HARDINGE

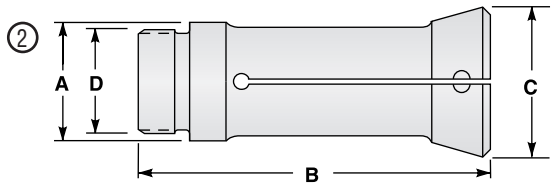
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
ACME-GRIDLEY: 1" Capacity – C, R, R4, R6, RA, RA4, RA6, RAN6, RAS6 (Larger Capacity Solid Collets Available up to 1 3/32" Round, 1 3/32" Hex, 29/32" Square)											
Collet, Solid	4035	2			1.745" (44.32)	5.500" (139.70)	2.130" (54.10)	1.558" x 18 LH	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, HQC Quick-Change	See page 101										
Collet, Burring	See page 14										
Collet, Style "S" Master	5101	2	S10	5601[3]	1.745" (44.32)	5.500" (139.70)	2.130" (54.10)	1.558" x 18 LH	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, Martin Master	5425	2	M10	5901[3]	1.745" (44.32)	5.500" (139.70)	2.130" (54.10)	1.558" x 18 LH	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, Style "CB" Master	2101	2	CB10	2201[3]	1.745" (44.32)	5.500" (139.70)	2.130" (54.10)	1.558" x 18 LH	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, Style "CT" Master	2115	2	CT10	2215[3]	1.745" (44.32)	5.500" (139.70)	2.130" (54.10)	1.558" x 18 LH	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Feed Finger, Solid	4041	1			1.370" (34.80)	5.438" (138.13)	—	1.247" x 20 LH	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Feed Finger, Style "B" Master	6235	1	B6	6625	1.370" (34.80)	5.438" (138.13)	—	1.247" x 20 LH	7/8" (22.23)	3/4" (19.05)	39/64" (15.48)
Feed Finger, Style "A" Master	6425	1	A10	6715	1.370" (34.80)	5.438" (138.13)	—	1.247" x 20 LH	15/16" (23.81)	51/64" (20.24)	21/32" (16.67)
Feed Finger, Squirrel Cage & Stock Saver	See page 15										

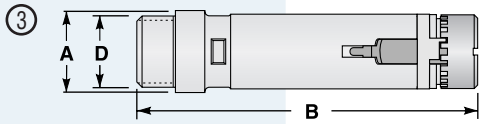
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7059	3	AF6	7313[1] 7315[2]	1.370" (34.80)	5.188" (131.78)	—	1.247" x 20 LH	3/8" (9.53)	7/8" (22.23)	3/8" (9.53)	3/4" (19.05)
Bushing, Style "AF"	7361	4	AF6		.990" (25.15)	1.688" (42.88)	—	—	3/8" (9.53)	7/8" (22.23)	3/8" (9.53)	3/4" (19.05)

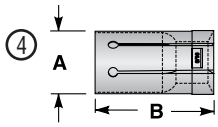
1 - Round
2 - Hexagon
3 - Master Collet Pads available in smooth or serrated order holes

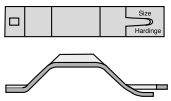
NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.

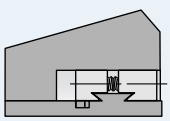


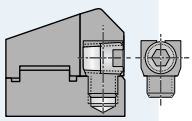


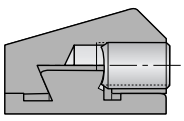





Style "AF" Master Feed Finger Pad


Style "S" Master Collet & Pad


Martin Master Collet & Pad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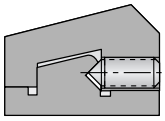
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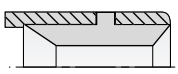
Style "B" Master Feed Finger & Pad

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Spindle Tooling for Automatics

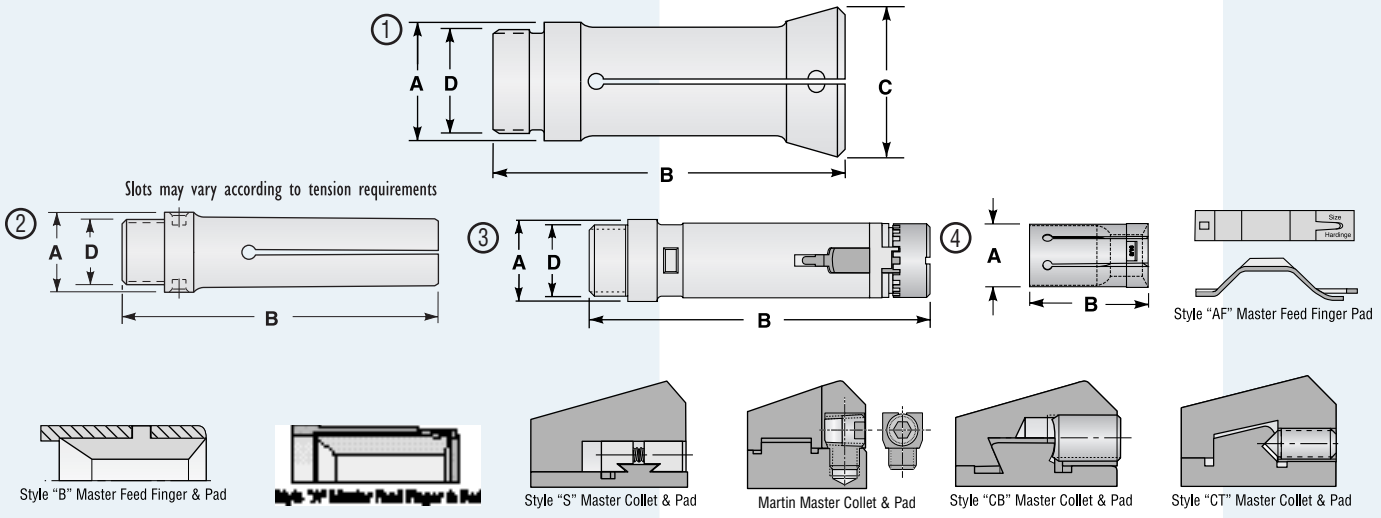
HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
ACME-GRIDLEY: 1¼" Capacity – G, G4, GA4, R, R6, RA, RA4, RA6, RB6, RB8 (Larger Capacity Solid Collets Available up to 1 17/32" Round, 1 5/16" Hex, 1 1/16" Square)											
Collet, Solid	4043	1			2.058" (52.27)	6.000" (152.40)	2.550" (64.77)	1.810" x 20 LH	1¼" (38.90)	1 5/64" (33.34)	7/8" (26.99)
Collet, HQC Quick-Change	See page 101										
Collet, Burring	See page 14										
Collet, Style "S" Master	5103	1	S12	5603[3]	2.058" (52.27)	6.000" (152.40)	2.550" (64.77)	1.810" x 20 LH	1¼" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Collet, Martin Master	5427	1	M12	5903[3]	2.058" (52.27)	6.000" (152.40)	2.550" (64.77)	1.810" x 20 LH	1¼" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Collet, Style "CB" Master	2103	1	CB12	2203[3]	2.058" (52.27)	5.875" (149.23)	2.550" (64.77)	1.810" x 20 LH	1⅜" (34.93)	1 3/16" (30.16)	31/32" (24.61)
Collet, Style "CT" Master	2117	1	CT12	2217[3]	2.058" (52.27)	5.875" (149.23)	2.550" (64.77)	1.810" x 20 LH	1⅜" (34.93)	1 3/16" (30.16)	31/32" (24.61)
Feed Finger, Solid	4047	2			1.545" (39.24)	6.625" (168.28)	— —	1.435" x 20 LH	1¼" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Feed Finger, Style "B" Master	6237	2	B7	6631	1.545" (39.24)	6.625" (168.28)	— —	1.435" x 20 LH	1⅛" (28.58)	31/32" (24.61)	25/32" (19.85)
Feed Finger, Style "A" Master	6443	2	A12	6719	1.545" (39.24)	6.625" (168.28)	— —	1.435" x 20 LH	1 3/16" (30.16)	1 1/64" (25.80)	53/64" (21.03)
Feed Finger, Squirrel Cage & Stock Saver	See page 15										

									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7061	3	AF7	7317[1] 7319[2]	1.545" (39.24)	6.375" (161.93)	— —	1.435" x 20 LH	½" (12.70)	1⅛" (28.58)	½" (12.70)	15/16" (23.81)
Bushing, Style "AF"	7363	4	AF7		1.235" (31.37)	1.938" (49.23)	— —	—	½" (12.70)	1⅛" (28.58)	½" (12.70)	15/16" (23.81)

1 - Round
2 - Hexagon
3 - Master Collet Pads available in smooth or serrated order holes

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.



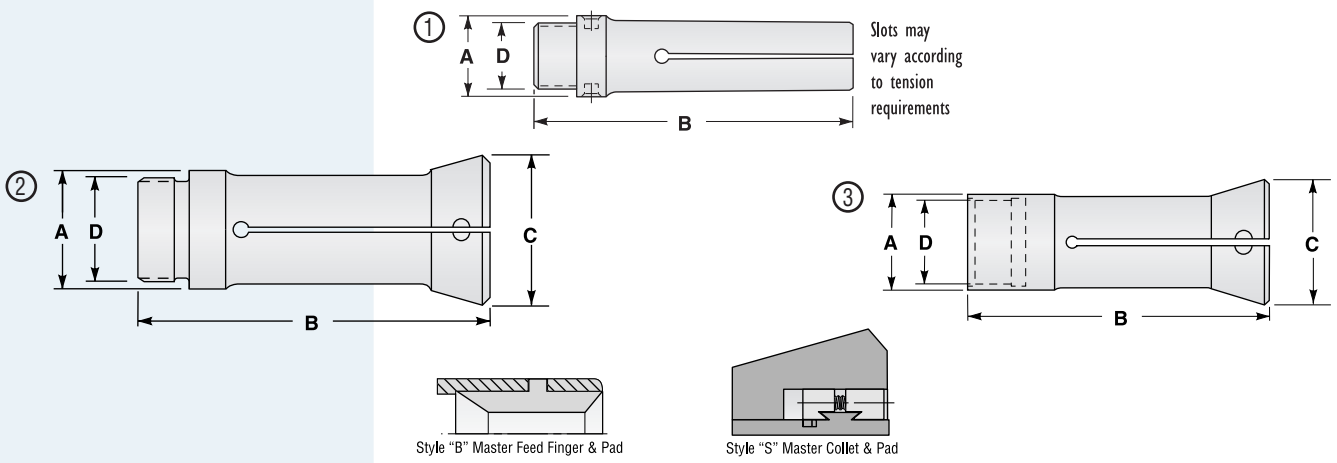
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
ACME-GRIDLEY: 1⅜" Capacity – G, GA, R, R4, RA, RA4, RAS4 (Larger Capacity Solid Collets Available up to 1¾" Round, 1½" Hex, 1$^{7}/_{32}$" Square)											
Collet, Solid	4065	2			2.241" (56.92)	6.000" (152.40)	2.755" (69.98)	1.997" x 20 LH	1⅜" (34.93)	1$^{3}/_{16}$" (30.16)	$^{31}/_{32}$" (24.61)
Collet, Burring	See page 14										
Collet, Style "S" Master	5105	2	S15	5605[3]	2.241" (56.92)	6.000" (152.40)	2.755" (69.98)	1.997" x 20 LH	1½" (38.10)	1$^{19}/_{64}$" (32.94)	1$^{3}/_{64}$" (26.59)
Feed Finger, Solid	4049	1			1.740" (44.20)	6.625" (168.28)	— —	1.622" x 20 LH	1⅜" (34.93)	1$^{3}/_{16}$" (30.16)	$^{31}/_{32}$" (24.61)
Feed Finger, Squirrel Cage & Stock Saver	See page 15										
Feed Finger, Style "B" Master	6241	1	B7	6631	1.740" (44.20)	6.625" (168.28)	— —	1.622" x 20 LH	1⅛" (28.58)	$^{31}/_{32}$" (24.61)	$^{25}/_{32}$" (19.85)
ACME-GRIDLEY: 1¼", 1⅜" Capacity – AG6 (Larger Capacity Solid Collets Available up to 1$^{51}/_{64}$" Round, 1$^{35}/_{64}$" Hex, 1$^{15}/_{64}$" Square)											
Collet, Solid	4289	3			2.183" (55.45)	5.906" (150.01)	2.768" (70.31)	1.903" x 20 LH	1⅜" (34.93)	1$^{3}/_{16}$" (30.16)	$^{31}/_{32}$" (24.61)
Collet, Burring	See page 14										
Collet, Style "S" Master	5053	3	S15	5605[3]	2.183" (55.45)	5.906" (150.01)	2.768" (70.31)	1.903" x 20 LH	1½" (38.10)	1$^{19}/_{64}$" (32.94)	1$^{3}/_{64}$" (26.59)
Feed Finger, Solid	4504A	1			1.675" (42.55)	6.000" (152.40)	— —	1.558" x 20 LH	1⅜" (34.93)	1$^{3}/_{16}$" (30.16)	$^{31}/_{32}$" (24.61)
ACME-GRIDLEY: 1½" Capacity – GA (Larger Capacity Solid Collets Available up to 1$^{55}/_{64}$" Round, 1$^{39}/_{64}$" Hex, 1$^{5}/_{16}$" Square)											
Collet, Solid	MP1768	3			2.245" (57.02)	6.125" (155.57)	2.755" (69.98)	2.060" x 20 LH	1½" (38.10)	1$^{19}/_{64}$" (32.94)	1$^{3}/_{64}$" (26.59)
Collet, Burring	See page 14										
Collet, Style "S" Master	5001	3	S15	5605[3]	2.245" (57.02)	6.125" (155.57)	2.755" (69.98)	2.060" x 20 LH	1½" (38.10)	1$^{19}/_{64}$" (32.94)	1$^{3}/_{64}$" (26.59)
Feed Finger, Style "B" Master	MP2906	1	B8	6635	1.845" (46.86)	6.625" (168.28)	— —	1.716" x 20 LH	1⅜" (34.93)	1$^{3}/_{16}$" (30.16)	$^{31}/_{32}$" (24.61)

3 - Master Collet Pads available in smooth or serrated order holes

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.



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Spindle Tooling for Automatics

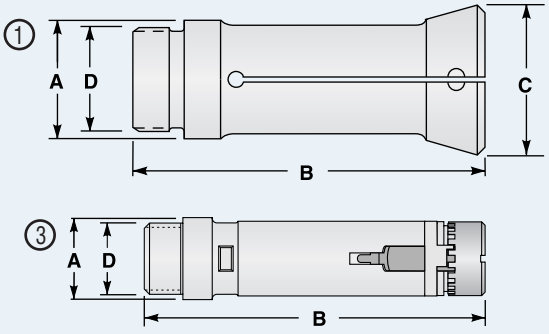
HARDINGE

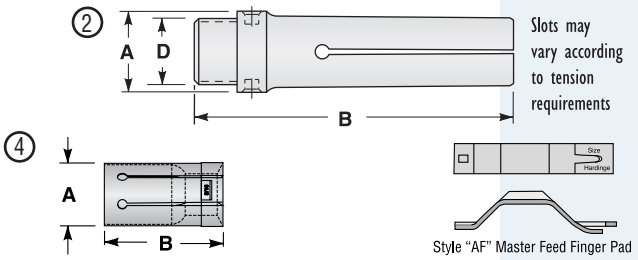
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
ACME-GRIDLEY: 1⅝" Capacity – C, G, GA, GA4, R, R4, R6, RA, RA4, RA6, RA8, RAS4, RB, RB6, RB8, RBN8 (Larger Capacity Solid Collets Available up to 1 29/32" Round, 1 21/32" Hex, 1 11/32" Square)											
Collet, Solid	4051	1			2.494" (63.35)	6.375" (161.93)	2.910" (73.91)	2.184" x 16 LH	1⅝" (41.28)	1 13/32" (35.72)	1 9/64" (28.97)
Collet, HQC Quick-Change	See page 101										
Collet, Burring	See page 14										
Collet, Style "S" Master	5107	1	S16	5607[3]	2.494" (63.35)	6.375" (161.93)	2.910" (73.91)	2.184" x 16 LH	1⅝" (41.28)	1 13/32" (35.72)	1 9/64" (28.97)
Collet, Martin Master	5431	1	M16	5907[3]	2.494" (63.35)	6.375" (161.93)	2.910" (73.91)	2.184" x 16 LH	1⅝" (41.28)	1 13/32" (35.72)	1 9/64" (28.97)
Collet, Style "CB" Master	2105	1	CB16	2205[3]	2.494" (63.35)	6.375" (161.93)	2.910" (73.91)	2.184" x 16 LH	1¾" (44.45)	1 33/64" (38.50)	1 15/64" (31.35)
Collet, Style "CT" Master	2119	1	CT16	2219[3]	2.494" (63.35)	6.375" (161.93)	2.910" (73.91)	2.184" x 16 LH	1¾" (44.45)	1 33/64" (38.50)	1 15/64" (31.35)
Feed Finger, Solid	4053	2			2.030" (51.56)	6.000" (152.40)	— —	1.872" x 20 LH	1⅝" (41.28)	1 13/32" (35.72)	1 9/64" (28.97)
Feed Finger, Style "B" Master	6245	1	B8	6635	2.030" (51.56)	6.000" (152.40)	— —	1.872" x 20 LH	1⅜" (34.93)	1 3/16" (30.16)	31/32" (24.61)
Feed Finger, Style "B" Master	6247	1	B16	6657	2.030" (51.56)	6.000" (152.40)	— —	1.872" x 20 LH	1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
Feed Finger, Style "A" Master	6429	1	A16	6727	2.030" (51.56)	6.000" (152.40)	— —	1.872" x 20 LH	1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
Feed Finger, Squirrel Cage & Stock Saver	See page 15										

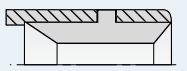
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7063	3	AF16	7325[1] 7327[2]	2.030" (51.56)	5.688" (144.48)	— —	1.872" x 20 LH	⅝" (15.88)	1 7/16" (36.51)	⅝" (15.88)	1¼" (31.75)
Bushing, Style "AF"	7369	4	AF16		1.610" (40.89)	2.375" (60.33)	— —	—	⅝" (15.88)	1 7/16" (36.51)	⅝" (15.88)	1¼" (31.75)

1 - Round
2 - Hexagon
3 - Master Collet Pads available in smooth or serrated order holes

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.



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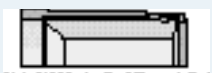
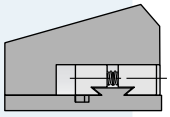
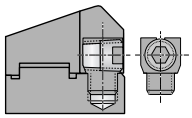
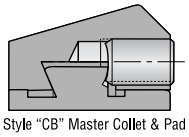
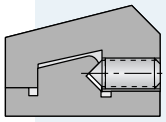



Style "S" Master Collet & Pad


Martin Master Collet & Pad


Style "CB" Master Collet & Pad


Style "CT" Master Collet & Pad

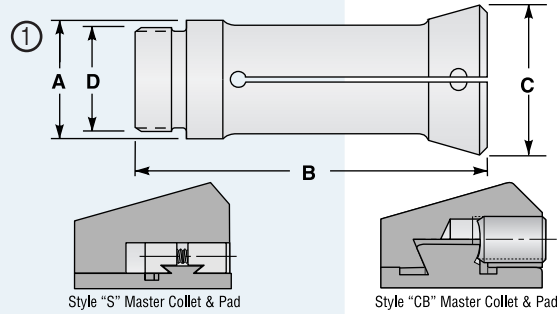
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
ACME-GRIDLEY: 1¾" Capacity – G, GAR, R (Larger Capacity Solid Collets Available up to 2 7/32" Round, 1 29/32" Hex, 1 9/16" Square)											
Collet, Solid	MP1109	1			3.041" (77.24)	7.125" (180.98)	3.630" (92.20)	2.621" x 16 LH	1¾" (44.45)	1 33/64" (38.50)	1 15/64" (31.35)
Collet, Burring	See page 14										
Feed Finger, Solid	MP1402	2			2.430" (61.72)	7.500" (190.50)	— —	2.184" x 24 LH	1¾" (44.45)	1 33/64" (38.50)	1 15/64" (31.35)
Feed Finger, Style "B" Master	MP2907	2	B8	6635	2.430" (61.72)	7.500" (190.50)	— —	2.184" x 24 LH	1⅜" (34.93)	1 3/16" (30.16)	31/32" (24.61)
Feed Finger, Style "B" Master	MP2772	2	B20	6661	2.430" (61.72)	7.500" (190.50)	— —	2.184" x 24 LH	1¾" (44.45)	1 33/64" (38.50)	1 15/64" (31.35)
ACME-GRIDLEY: 2" Capacity – B, R, R4, R6, RA, RA4, RA6, RAS, RAS4, RAS6, RB, RB6, RL (Larger Capacity Solid Collets Available up to 2 11/32" Round, 2 1/32" Hex, 1 21/32" Square)											
Collet, Solid	4067	1			3.020" (76.71)	7.125" (180.98)	3.760" (95.50)	2.683" x 16 LH	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
Collet, Burring	See page 14										
Collet, Style "S" Master	5109	1	S20	5609[3]	3.020" (76.71)	7.125" (180.98)	3.760" (95.50)	2.683" x 16 LH	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
Collet, Style "CB" Master	2107	1	CB20	2207	3.020" (76.71)	7.125" (180.98)	3.760" (95.50)	2.683" x 16 LH	2¼" (57.15)	1 15/16" (49.21)	1 37/64" (40.08)
Collet, Style "CT" Master	2121	1	CT20	2221	3.020" (76.71)	7.125" (180.98)	3.760" (95.50)	2.683" x 16 LH	2 3/16" (55.56)	1 57/64" (48.02)	1 35/64" (39.29)
Feed Finger, Solid	4055	2			2.495" (63.37)	6.563" (166.70)	— —	2.309" x 24 LH	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
Feed Finger, Style "B" Master	6249	2	B20	6661	2.495" (63.37)	6.563" (166.70)	— —	2.309" x 24 LH	1¾" (44.45)	1 33/64" (38.50)	1 15/64" (31.35)
Feed Finger, Squirrel Cage & Stock Saver	See page 15										
ACME-GRIDLEY: 2¼" Capacity – B, G, R, R4, R6, R8, RA, RA4, RA6, RA8, RL (Larger Capacity Solid Collets Available up to 2 17/32" Round, 2 3/16" Hex, 29/32" Square)											
Collet, Solid	MP2307	1			3.025" (76.84)	7.000" (177.80)	3.755" (95.38)	2.808" x 18 LH	2¼" (57.15)	1 15/16" (49.21)	1 37/64" (40.08)
Collet, Burring	See page 14										
Collet, Style "S" Master	5111	1	S22	5611[3]	3.025" (76.84)	7.000" (177.80)	3.755" (95.38)	2.808" x 18 LH	2¼" (57.15)	1 15/16" (49.21)	1 37/64" (40.08)
Feed Finger, Solid	4057	2			2.650" (67.31)	7.125" (180.98)	— —	2.496" x 18 LH	2¼" (57.15)	1 15/16" (49.21)	1 37/64" (40.08)
Feed Finger, Style "B" Master	6251	2	B22	6665[4]	2.650" (67.31)	7.125" (180.98)	— —	2.496" x 18 LH	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)

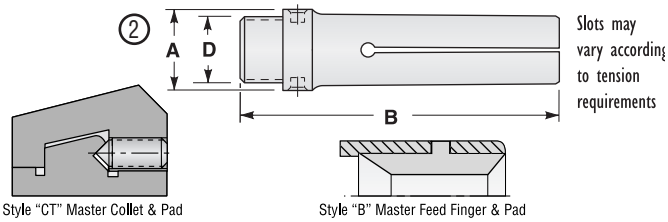
3 - Master Collet Pads available in smooth or serrated order holes

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.



Style "S" Master Collet & Pad

Style "CB" Master Collet & Pad



Style "CT" Master Collet & Pad

Style "B" Master Feed Finger & Pad

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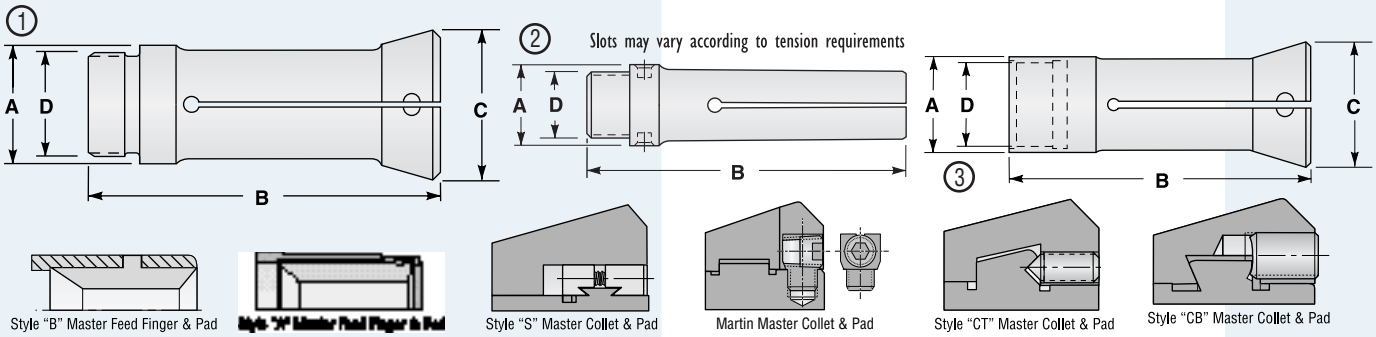
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
ACME-GRIDLEY: 2⅝" Capacity – G, G4, GA4, GR, R, R4, RA, RA4, RB4 — External Thread (Larger Capacity Solid Collets Available up to 3³⁄₃₂" Round, 2⅝" Hex, 2⁹⁄₆₄" Square)											
Collet, Solid	4089	1			3.806" (96.67)	7.750" (196.85)	4.505" (114.43)	3.431" x 16 LH	2⅝" (66.68)	2¹⁷⁄₆₄" (57.55)	1²⁷⁄₃₂" (46.83)
Collet, Burring	See page 14										
Collet, Style "S" Master	5119	1	S26	5613[3]	3.806" (96.67)	7.750" (196.85)	4.505" (114.43)	3.431" x 16 LH	2⅝" (66.68)	2¹⁷⁄₆₄" (57.55)	1²⁷⁄₃₂" (46.83)
Feed Finger, Solid	MP1405	2			2.925" (74.30)	7.000" (177.80)	— —	2.838" x 24 LH	2⅝" (66.68)	2¹⁷⁄₆₄" (57.55)	1²⁷⁄₃₂" (46.83)
ACME-GRIDLEY: 2⅝" Capacity – M, R, R6, R8, RA, RA6, RA8, RB6, RB8 — Internal Thread (Larger Capacity Solid Collets Available up to 3⅛" Round, 2¹¹⁄₁₆" Hex, 2⅜₁₆" Square)											
Collet, Solid	4059	3			3.627" (92.13)	6.500" (165.10)	4.380" (111.25)	3.375" x 18 RH	2⅝" (66.68)	2¹⁷⁄₆₄" (57.55)	1²⁷⁄₃₂" (46.83)
Collet, HQC Quick-Change	See page 101										
Collet, Burring	See page 14										
Collet, Style "S" Master	5113	3	S26	5613[3]	3.627" (92.13)	6.500" (165.10)	4.380" (111.25)	3.375" x 18 RH	2⅝" (66.68)	2¹⁷⁄₆₄" (57.55)	1²⁷⁄₃₂" (46.83)
Collet, Martin Master	5437	3	M26	5915[3]	3.627" (92.13)	6.500" (165.10)	4.380" (111.25)	3.375" x 18 RH	2⅝" (66.68)	2¹⁷⁄₆₄" (57.55)	1²⁷⁄₃₂" (46.83)
Collet, Style "CB" Master	2109	3	CB26	2209[3]	3.627" (92.13)	6.500" (165.10)	4.380" (111.25)	3.375" x 18 RH	2⅞" (73.03)	2³¹⁄₆₄" (63.10)	2¹⁄₃₂" (51.60)
Collet, Style "CT" Master	2123	3	CT26	2223[3]	3.627" (92.13)	6.500" (165.10)	4.380" (111.25)	3.375" x 18 RH	2⅞" (73.03)	2³¹⁄₆₄" (63.10)	2¹⁄₃₂" (51.60)
Feed Finger, Solid	4201	2			2.995" (76.07)	7.000" (177.80)	— —	2.870" x 24 LH	2⅝" (66.68)	2¹⁷⁄₆₄" (57.55)	1²⁷⁄₃₂" (46.83)
Feed Finger, Squirrel Cage & Stock Saver	See page 15										
Feed Finger, Style "B" Master	6137	2	B26	6673	2.995" (76.07)	7.000" (177.80)	— —	2.870" x 24 LH	2⅜" (60.33)	2³⁄₆₄" (51.99)	1⁴³⁄₆₄" (42.47)
Feed Finger, Style "A" Master	6449	2	A26	6739	2.995" (76.07)	7.000" (177.80)	— —	2.870" x 24 LH	2⁹⁄₁₆" (65.09)	2⁷⁄₃₂" (56.36)	1⁵¹⁄₆₄" (45.64)
ACME-GRIDLEY: 2⅞" Capacity – C, G, GA (Larger Capacity Solid Collets Available up to 3⁷⁄₃₂" Round, 2²⁵⁄₃₂" Hex, 2⁹⁄₃₂" Square)											
Collet, Solid	MP1438	1			3.931" (99.85)	7.875" (200.03)	4.505" (114.43)	3.557" x 16 LH	2⅞" (73.03)	2³¹⁄₆₄" (63.10)	2¹⁄₃₂" (51.60)
Collet, Burring	See page 14										
Feed Finger, Solid	MP1406	2			3.245" (82.42)	7.875" (200.03)	— —	2.995" x 24 LH	2⅝" (66.68)	2¹⁷⁄₆₄" (57.55)	1²⁷⁄₃₂" (46.83)

3 - Master Collet Pads available in smooth or serrated order holes

NOTE: Millimeters in parentheses. Collets and feed fingers available for larger capacity machines. Collets available in smooth or serrated order holes. For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated. S-pads available in hardened and ground, semi-hard emergency and soft emergency.



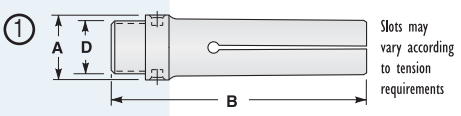
Spindle Tooling for Automatics

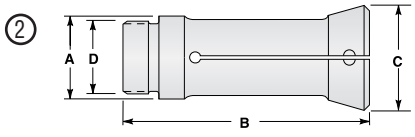
HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
ACME-GRIDLEY: 3" Capacity – GA, R, R4, RA4, RA6 (Larger Capacity Solid Collets Available up to 3 17/32" Round, 3 1/16" Hex, 2 1/2" Square)											
Collet, Solid	MP1114	2			4.023" (102.18)	7.625" (193.68)	4.755" (120.78)	3.807" x 18 LH	3" (76.20)	2 19/32" (65.88)	2 7/64" (53.58)
Collet, Burring	See page 14										
Feed Finger, Solid	MP2136	1			3.520" (89.41)	7.500" (190.50)	— —	3.371" x 18 LH	3" (76.20)	2 19/32" (65.88)	2 7/64" (53.58)
ACME-GRIDLEY: 3 5/16" Capacity – B, GA, R, R4 (Larger Capacity Solid Collets Available up to 3 25/32" Round, 3 9/32" Hex, 2 43/64" Square)											
Collet, Solid	MP1963	2			4.328" (109.93)	7.875" (200.03)	5.015" (127.38)	4.056" x 18 LH	3 5/16" (84.14)	2 55/64" (72.63)	2 21/64" (59.13)
Collet, Burring	See page 14										
Feed Finger, Solid	MP1964	1			3.800" (96.52)	8.500" (215.90)	— —	3.620" x 18 LH	3 5/16" (84.14)	2 55/64" (72.63)	2 21/64" (59.13)
ACME-GRIDLEY: 3 1/2" Capacity – G, GA, R4 (Larger Capacity Solid Collets Available up to 3 29/32" Round, 3 25/64" Hex, 1 49/64" Square)											
Collet, Solid	MP2587	2			4.491" (114.07)	7.938" (201.63)	5.130" (130.30)	4.183" x 18 LH	3 1/2" (88.90)	3 1/64" (76.60)	2 15/32" (62.71)
Collet, Burring	See page 14										
Collet, Style "S" Master	MP2730	2	S35	5617[3]	4.491" (114.07)	7.938" (201.63)	5.130" (130.30)	4.183" x 18 LH	3 1/2" (88.90)	3 1/64" (76.60)	2 15/32" (62.71)
Feed Finger, Solid	MP2623	1			3.895" (98.93)	7.938" (201.63)	— —	3.745" x 18 LH	3 1/2" (88.90)	3 1/64" (76.60)	2 15/32" (62.71)
Feed Finger, Style "B" Master	6009	1	B35	6681	3.895" (98.93)	7.938" (201.63)	— —	3.745" x 18 LH	3 1/8" (79.38)	2 45/64" (68.66)	2 13/64" (55.96)
ACME-GRIDLEY: 3 1/2" Capacity – M, MR, R6, R8, RA, RA4, RA6, RB4, RB6, RB8 (Larger Capacity Solid Collets Available up to 3 29/32" Round, 3 3/8" Hex, 2 3/4" Square)											
Collet, Solid	4063	2			4.491" (114.07)	7.938" (201.63)	5.755" (146.18)	4.183" x 18 LH	3 1/2" (88.90)	3 1/64" (76.60)	2 15/32" (62.71)
Collet, Burring	See page 14										
Collet, Style "S" Master	5115	2	S35	5617[3]	4.491" (114.07)	7.938" (201.63)	5.755" (146.18)	4.183" x 18 LH	3 1/2" (88.90)	3 1/64" (76.60)	2 15/32" (62.71)
Collet, Martin Master	5439	2	M35	5921[3]	4.491" (114.07)	7.938" (201.63)	5.755" (146.18)	4.183" x 18 LH	3 1/2" (88.90)	3 1/64" (76.60)	2 15/32" (62.71)
Collet, Style "CB" Master	2111	2	CB35	2211[3]	4.491" (114.07)	7.938" (201.63)	5.755" (146.18)	4.183" x 18 LH	3 1/2" (88.90)	3 1/64" (76.60)	2 15/32" (62.71)
Collet, Style "CT" Master	2125	2	CT35	2225[3]	4.491" (114.07)	7.938" (201.63)	5.755" (146.18)	4.183" x 18 LH	3 1/2" (88.90)	3 1/64" (76.60)	2 15/32" (62.71)
Feed Finger, Solid	4061	1			3.910" (99.31)	10.188" (258.78)	— —	3.745" x 18 LH	3 1/2" (88.90)	3 1/64" (76.60)	2 15/32" (62.71)
Feed Finger, Squirrel Cage & Stock Saver	See page 15										
Feed Finger, Style "B" Master	6253	1	B35	6681	3.910" (99.31)	10.188" (258.78)	— —	3.745" x 18 LH	3 1/8" (79.38)	2 45/64" (68.66)	2 13/64" (55.96)

3 - Master Collet Pads available in smooth or serrated order holes

NOTE: Millimeters in parentheses. Collets and feed fingers available for larger capacity machines. Collets available in smooth or serrated order holes. For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated. S-pads available in hardened and ground, semi-hard emergency and soft emergency.





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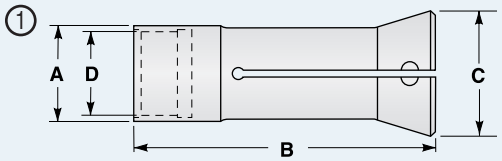
Spindle Tooling for Automatics

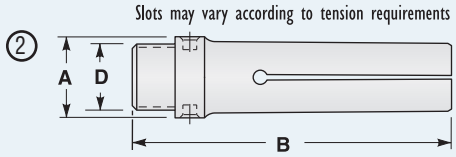
HARDINGE

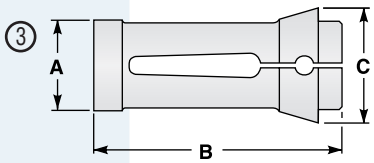
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
ACME-GRIDLEY: 4" Capacity – RB6, RB8 (Larger Capacity Solid Collets Available up to 4 25/32" Round, 4 9/64" Hex, 3 3/8" Square)											
Collet, Solid	4173	1			5.367" (136.32)	8.813" (223.85)	6.515" (165.48)	5.062" x 18 LH	4" (101.60)	3 29/64" (87.71)	2 53/64" (71.83)
Collet, Burring — see below											
Collet, Style "S" Master	5117	1	S40	5619[3]	5.367" (136.32)	8.813" (223.85)	6.515" (165.48)	5.062" x 18 LH	4" (101.60)	3 29/64" (87.71)	2 53/64" (71.83)
Collet, Style "CB" Master	2113	1	CB40	2213[3]	5.367" (136.32)	8.813" (223.85)	6.515" (165.48)	5.062" x 18 LH	4 1/4" (107.95)	3 43/64" (93.27)	3" (76.20)
Collet, Style "CT" Master	2127	1	CT40	2227[3]	5.367" (136.32)	8.813" (223.85)	6.515" (165.48)	5.062" x 18 LH	4 1/8" (104.78)	3 9/16" (90.49)	2 29/32" (73.82)
Feed Finger, Solid	4239	2			4.562" (115.88)	10.750" (273.05)	None None	4.375" x 18 LH	4" (101.60)	3 29/64" (87.71)	2 53/64" (71.83)
ACME-GRIDLEY: Burring Collets											
Collet, Burring [7/16"] [RA6] Mechanically Operated	4003	4			.801" (20.35)	2.503" (63.58)	1.001" (25.43)	.625" x 24 LH	33/64" (13.09)	7/16" (11.11)	11/32" (8.73)
Collet, Burring [7/16"] [RAN6] Air Operated [AH2570]	4005	4			.561" (14.25)	1.719" (43.66)	.700" (17.78)	.438" x 32 LH	25/64" (9.92)	11/32" (8.73)	9/32" (7.14)
Collet, Burring [9/16", 5/8"] Air Operated [AJ2450]	4015	4			.875" (22.23)	2.968" (75.39)	1.005" (25.53)	.750" x 20 LH	1 1/16" (17.46)	19/32" (15.08)	31/64" (12.30)
Collet, Burring [5/8"] [RN6] 2nd Generation [AK2920]	4083	4			.935" (23.75)	3.000" (76.20)	1.128" (28.65)	.750" x 20 LH	1 1/16" (17.46)	19/32" (15.08)	31/64" (11.90)
Collet, Burring [3/4"] [RA8] Air Operated [AL2450]	4069	4			1.123" (28.52)	3.000" (76.20)	1.265" (32.13)	1.000" x 20 LH	3/4" (19.05)	41/64" (16.27)	33/64" (13.10)
Collet, Burring [1"] [RA6] Mechanically Operated	4037	3			.749" (19.02)	2.385" (60.58)	1.313" (33.35)	—	15/16" (23.81)	13/16" (20.64)	21/32" (16.67)
Collet, Burring [1"] [RA6, RAN6] Air Operated [AO2450]	4039	4			1.310" (33.27)	3.000" (76.20)	1.450" (36.83)	1.188" x 20 LH	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, Burring [1"] [RA6] 2nd Generation [AO2920]	4079	4			1.249" (31.72)	3.500" (88.90)	1.505" (38.23)	1.125" x 20 LH	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, Burring [1 1/4"] [R6, RA6, RB6, RB8, G4, GA4] Air Operated [JM2450]	4045	4			1.623" (41.22)	3.375" (85.73)	1.890" (48.01)	1.438" x 20 LH	1 11/32" (34.52)	1 5/32" (29.76)	61/64" (24.20)
Collet, Burring [1 1/4", 1 3/8"] [JM2920] [AG6]	4085	1			1.561" (39.65)	4.500" (114.30)	1.880" (47.75)	1.438" x 20 LH	1 1/4" (31.75)	1 7/64" (28.17)	7/8" (22.23)

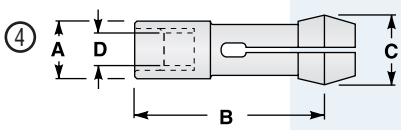
3 - Master Collet Pads available in smooth or serrated order holes

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
Larger burring collets available on application.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.

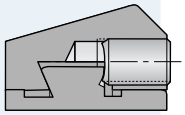








Style "B" Master Feed Finger & Pad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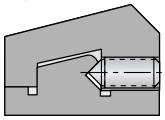
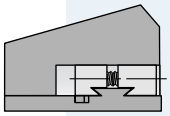
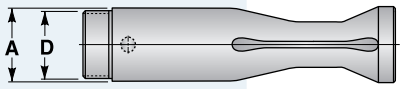

Style "CT" Master Collet & Pad

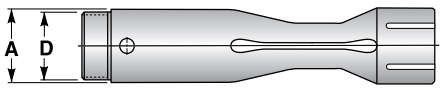

Style "S" Master Collet & Pad

Spindle Tooling for Automatics

HARDINGE

Description		Hardinge Part Number	Figure	A Back Bearing Diameter	C Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
ACME-GRIDLEY: 7/16" Capacity – RA6									
Feed Finger, Squirrel Cage	- Steel	4007-88-	1	.664"	—		7/16"	7/16"	11/32"
	- Bronze	4007-90-	1	(16.87)	—	—	(12.70)	(11.11)	(8.73)
Feed Finger, Stock Saver	- Steel	4007-89-	2	.664"	—		7/16"	7/16"	11/32"
	- Bronze	4007-91-	2	(16.87)	—	—	(12.70)	(11.11)	(8.73)
ACME-GRIDLEY: 9/16" Capacity – RA6, R6, RAN6									
Feed Finger, Squirrel Cage	- Steel	4017-88-	1	.780"	—		9/16"	31/64"	25/64"
	- Bronze	4017-90-	1	(19.81)	—	.685" x 32 LH	(14.29)	(12.30)	(9.92)
Feed Finger, Stock Saver	- Steel	4017-89-	2	.780"	—		9/16"	31/64"	25/64"
	- Bronze	4017-91-	2	(19.81)	—	.685" x 32 LH	(14.29)	(12.30)	(9.92)
ACME-GRIDLEY: 5/8" Capacity – RN6									
Feed Finger, Squirrel Cage	- Steel	4025-88-	1	.837"	—		5/8"	17/32"	7/16"
	- Bronze	4025-90-	1	(21.26)	—	.748" x 32 LH	(15.88)	(13.50)	(11.11)
Feed Finger, Stock Saver	- Steel	4025-89-	2	.837"	—		5/8"	17/32"	7/16"
	- Bronze	4025-91-	2	(21.26)	—	.748" x 32 LH	(15.88)	(13.50)	(11.11)
ACME-GRIDLEY: 3/4" Capacity – RA6, RA8-4									
Feed Finger, Squirrel Cage	- Steel	4029-88-	1	.985"	—		3/4"	41/64"	33/64"
	- Bronze	4029-90-	1	(25.02)	—	.904" x 32 LH	(19.05)	(16.27)	(13.10)
Feed Finger, Stock Saver	- Steel	4029-89-	2	.985"	—		3/4"	41/64"	33/64"
	- Bronze	4029-91-	2	(25.02)	—	.904" x 32 LH	(19.05)	(16.27)	(13.10)
ACME-GRIDLEY: 1" Capacity – RA6, R4, R6, RAS6									
Feed Finger, Squirrel Cage	- Steel	4041-88-	1	1.370"	—		1"	55/64"	45/64"
	- Bronze	4041-90-	1	(34.80)	—	1.247" x 20 LH	(25.40)	(21.83)	(17.86)
Feed Finger, Stock Saver	- Steel	4041-89-	2	1.370"	—		1"	55/64"	45/64"
	- Bronze	4041-91-	2	(34.80)	—	1.247" x 20 LH	(25.40)	(21.83)	(17.86)
ACME-GRIDLEY: 1 1/4" Capacity – RA6, R6, RB8									
Feed Finger, Squirrel Cage	- Steel	4047-88-	1	1.545"	—		1 1/4"	1 5/64"	7/8"
	- Bronze	4047-90-	1	(39.24)	—	1.435" x 20 LH	(31.75)	(27.38)	(22.23)
Feed Finger, Stock Saver	- Steel	4047-89-	2	1.545"	—		1 1/4"	1 5/64"	7/8"
	- Bronze	4047-91-	2	(39.24)	—	1.435" x 20 LH	(31.75)	(27.38)	(22.23)
ACME-GRIDLEY: 1 3/8" Capacity									
Feed Finger, Squirrel Cage	- Steel	4049-88-	1	1.740"	—		1 3/8"	1 3/16"	31/32"
	- Bronze	4049-90-	1	(44.20)	—	1.622" x 20 LH	(34.93)	(30.16)	(24.61)
Feed Finger, Stock Saver	- Steel	4049-89-	2	1.740"	—		1 3/8"	1 3/16"	31/32"
	- Bronze	4049-91-	2	(44.20)	—	1.622" x 20 LH	(34.93)	(30.16)	(24.61)
ACME-GRIDLEY: 1 5/8" Capacity – RA6, RB8									
Feed Finger, Squirrel Cage	- Steel	4053-88-	1	2.030"	—		1 5/8"	1 13/32"	1 9/64"
	- Bronze	4053-90-	1	(51.56)	—	1.872" x 20 LH	(41.28)	(35.72)	(28.97)
Feed Finger, Stock Saver	- Steel	4053-89-	2	2.030"	—		1 5/8"	1 13/32"	1 9/64"
	- Bronze	4053-91-	2	(51.56)	—	1.872" x 20 LH	(41.28)	(35.72)	(28.97)

① 

② 

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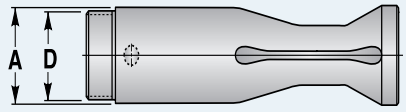
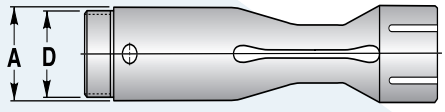
Spindle Tooling for Automatics

HARDINGE

Description		Hardinge Part Number	Figure	A Back Bearing Diameter	C Diameter	D Thread		Machine Tool Builder's Rated Capacity Round	Hexagon	Square
ACME-GRIDLEY: 2 " Capacity — RA6, RB6, RB8										
Feed Finger, Squirrel Cage	- Steel	4055-88-	1	2.495"	—			2"	1 23/32"	1 13/32"
	- Bronze	4055-90-	1	(63.37)	—	2.309" x 24 LH		(50.80)	(43.66)	(35.72)
Feed Finger, Stock Saver	- Steel	4055-89-	2	2.495"	—			2"	1 23/32"	1 13/32"
	- Bronze	4055-91-	2	(63.37)	—	2.309" x 24 LH		(50.80)	(43.66)	(35.72)
ACME-GRIDLEY: 2⅝" Capacity — RA6, RB8										
Feed Finger, Squirrel Cage	- Steel	4201-88-	1	2.995"	—			2⅝"	2 17/64"	1 27/32"
	- Bronze	4201-90-	1	(76.07)	—	2.870" x 24 LH		(66.68)	(57.55)	(46.83)
Feed Finger, Stock Saver	- Steel	4201-89-	2	2.995"	—			2⅝"	2 17/64"	1 27/32"
	- Bronze	4201-91-	2	(76.07)	—	2.870" x 24 LH		(66.68)	(57.55)	(46.83)
ACME-GRIDLEY: 3½" Capacity — RB6, RB8										
Feed Finger, Squirrel Cage	- Steel	4061-88-	1	3.910"	—			3½"	3 1/64"	2 15/32"
	- Bronze	4061-90-	1	(99.31)	—	3.745" x 18 LH		(88.90)	(76.60)	(62.71)
Feed Finger, Stock Saver	- Steel	4061-89-	2	3.910"	—			3½"	3 1/64"	2 15/32"
	- Bronze	4061-91-	2	(99.31)	—	3.745" x 18 LH		(88.90)	(76.60)	(62.71)

NOTE: Larger capacity feed fingers available on application.

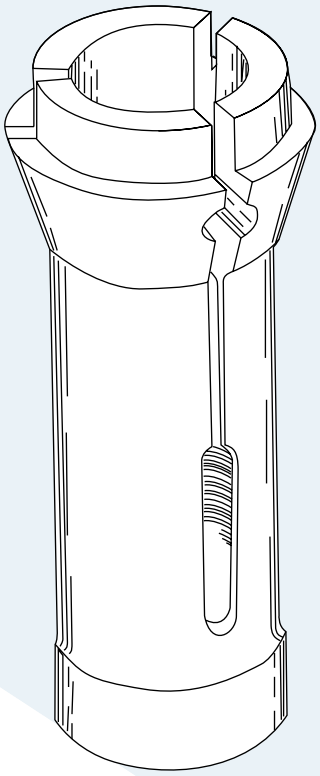
① 

② 

Spindle Tooling for Automatics

HARDINGE

Customary Use of Collets and Feed Fingers With Brown & Sharpe Machines



#00 and #00G Automatic:

#00 Collet
#00 Finger for 5/16" Capacity Tube
#00A Finger for 3/8" Capacity Tube

#10 Collet
#10 Finger for 3/8" Capacity Tube
#10A Finger for 1/2" Capacity Tube

NOTE: With Chuck Nut for Taper-Nose Collets, use #00B Collets.

#00 Automatic with 3/4" Capacity:

#11C Collet
#10AA Finger for 3/4" Capacity Tube
With Alternate Chuck Sleeves:
#11 Collet
With Alternate Adapters:
#10 or 10A Fingers

#0 and #0G Automatic:

#11 Collet
#11 Finger for 1/2" Capacity Tube
#11A Finger for 5/8" Capacity Tube
#11B Finger

When using Outside Feeding Attachment:

#11C Collet
#21A Finger for 3/4" Capacity Tube

NOTE: With Chuck Nut for Taper-Nose Collets, use #11B Collets.

#2 and #2G Automatic:

#22 Collet
#22 Finger for 1" Capacity Tube
#22B Collet
#22A Finger for 1 1/8" Capacity Tube

When using Outside Feeding Attachment:

#22A Collet for 1 5/16" Spindle
#22B Collet for 1 7/16" Spindle
#22B Finger for 1 3/8" Capacity Tube
#22C Collet
#22H Finger for 1 1/4" Capacity Tube
#22D Collet
#22D Finger for 1 1/2" Capacity Tube

#2 Ultramatic With 1 5/8" Capacity:

#22D Collet
#22DD Finger for 1 5/8" Capacity Tube
With Alternate Chuck Sleeves:
#11, #11C, #22, or #22C Collets
With Alternate Adapters:
#10, #11AA, #22, #22H, or #22D Fingers

#3 Ultramatic With 2 3/8" Capacity:

#23 Collet or #23A Collet
#23 Finger for 2" Capacity Tube*
#23M Master Collet and Pads
#23M Master Finger and Pads*

With Alternate Chuck Sleeves:
#22, #22C, or #22D Collets

With Alternate Adapters:
#10, #11AA, #22, #22H, or #22D Fingers

* From sizes 2" to 2 3/8" inclusive, an Outside Feeding Attachment and Stock Loader are used.

#4 Automatic With 1 7/8" Capacity:

#24 Collet
#24 Finger
#24M Master Collet and Pads
#24M Master Finger and Pads

#6 Automatic and #4 Automatic With 2 3/8" Capacity:

#26 Collet
#26 Finger
#26M Master Collet and Pads
#26M Master Finger and Pads

#0 Wire Feed Screw Machine:

#10 Collet
#10 Finger for 3/8" Capacity Tube

#10B Collet
#11A Finger for 5/8" Capacity Tube

#1 Wire Feed Screw Machine:

#11 Collet
#11 Finger for 1/2" Capacity Tube

#21 Collet
#21 Finger for 5/8" Capacity Tube
#21A Finger for 3/4" Capacity Tube

#21 Collet
#12 Finger for 7/8" Capacity Tube

#2 Wire Feed Screw Machine:

#22 Collet
#22 Finger for 1" Capacity Tube

#22B Collet
#22A Finger for 1 1/8" Capacity Tube

#22C Collet
#22H Finger for 1 1/4" Capacity Tube

STYLE "B" PADS

B&S Style	Hardinge© Style	Hardinge Part Number
00M	B1	6601
10M	B10	6643
10AM	B10AM	6649
11M	B3	6611
11AM	B11	6653

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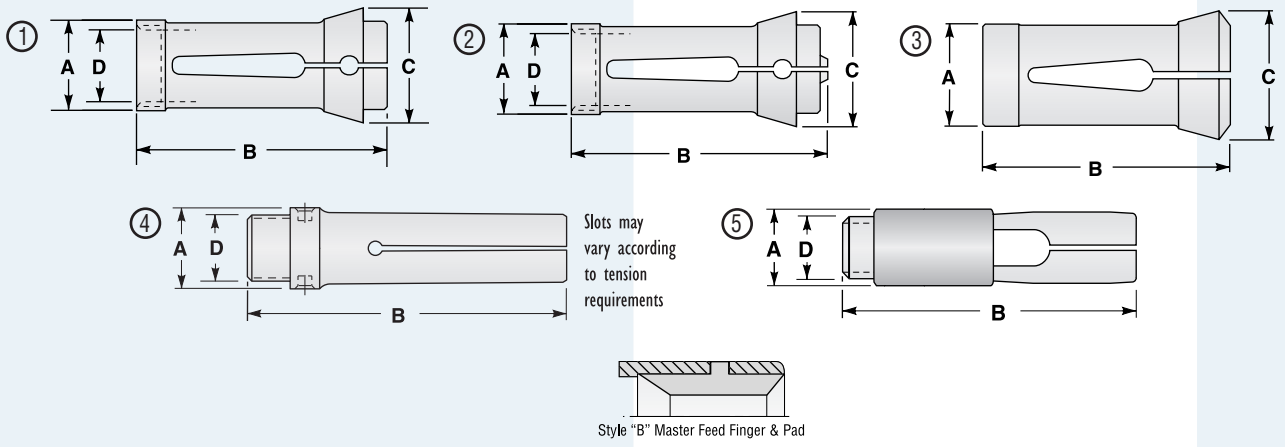
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity: Round	Hexagon	Square
BROWN & SHARPE: 3/8" Capacity – #00, #00G (Larger Capacity Solid Collets Available up to [00: 1/2" Round, 7/16" Hex, 19/64" Square], [00B: 17/32" R, 15/32" H, 3/8" S])											
Collet, Solid	3003	1	00		.686" (17.42)	2.000" (50.80)	.872" (22.15)	—	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
Collet, Solid	3001	2	00Y		.686" (17.42)	2.062" (52.37)	.872" (22.15)	—	3/16" (4.76)	5/32" (3.96)	1/8" (3.17)
Collet, Solid	MP1124	3	00B		.686" (17.42)	2.000" (50.80)	.895" (22.73)	—	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
Collet, Burring	See page 48										
Feed Finger, Solid	3011	4	00A		.550" (13.97)	2.500" (63.50)	— —	.498" x 32 LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
Feed Finger, Solid	3009	4	00		.485" (12.32)	2.500" (63.50)	— —	.415" x 32 LH	5/16" (7.94)	17/64" (6.75)	7/32" (5.56)
Feed Finger, Solid	3007	4	00Y		.485" (12.32)	2.500" (63.50)	— —	.415" x 32 LH	15/64" (5.95)	13/64" (5.16)	5/32" (3.97)
Feed Finger, Style "B" Master	6011	4	00 B1	6601	.535" (13.59)	2.500" (63.50)	— —	.415" x 32 LH	5/16" (7.94)	17/64" (6.75)	7/32" (5.56)
Feed Finger, Style "B" Master	6019	4	00A B1	6601	.550" (13.97)	2.500" (63.50)	— —	.498" x 32 LH	5/16" (7.94)	17/64" (6.75)	7/32" (5.56)
Feed Finger, Style "B" Master Adjustable Tension	6013	5	00 B1X	6601	.553" (14.05s)	2.500" (63.50)	— —	.415" x 32 LH	5/16" (7.94)	17/64" (6.75)	7/32" (5.56)

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



Style "B" Master Feed Finger & Pad

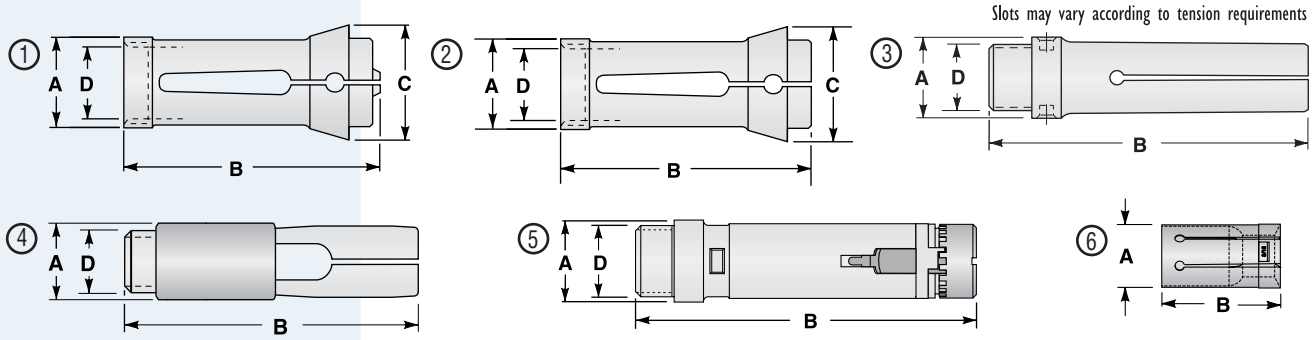
Spindle Tooling for Automatics

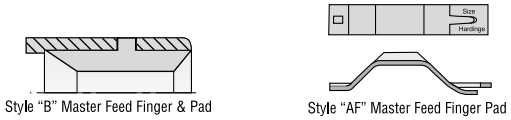
HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
BROWN & SHARPE: 3/8" Capacity – #2G (Larger Capacity Solid Collets Available up to [22: 1¼" Round, 1 1/16" Hex, 7/8" Square], [22SC: 1¼" R, 1 5/64" H, 7/8" S])											
Collet, Solid	3111	2	22		1.498" (38.05)	4.250" (107.95)	1.925" (48.90)	—	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, Solid	3109	1	22Y		1.498" (38.05)	4.312" (109.53)	1.925" (48.90)	—	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, Solid Stop Collet	3227	2	22SC		1.498" (38.05)	4.250" (107.95)	1.925" (48.90)	1.291" x 24 RH	1¼" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Collet, Burring	See page 48										
Feed Finger, Solid	3035	3	10		.630" (16.00)	2.938" (74.63)	— —	.560" x 20 LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
Feed Finger, Style "B" Master	6021	3	10 B10	6643	.630" (16.00)	2.938" (74.63)	— —	.560" x 20 LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
Feed Finger, Style "B" Master Adjustable Tension	6023	4	10 B10X	6643	.673" (17.09)	2.938" (74.63)	— —	.560" x 20 LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7005	5	10 AF10	7321[1] 7323[2]	.635" (16.13)	2.781" (70.64)	— —	.560" x 20 LH	1/16" (1.59)	3/8" (9.53)	1/8" (3.18)	5/16" (7.94)
Bushing, Style "AF"	7365	6	10 AF10		.395" (10.03)	.906" (23.01)	— —	—	1/16" (1.59)	9/32" (7.14)	1/8" (3.18)	1/4" (6.35)

1 - Round
2 - Hexagon

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.





Style "B" Master Feed Finger & Pad

Style "AF" Master Feed Finger Pad

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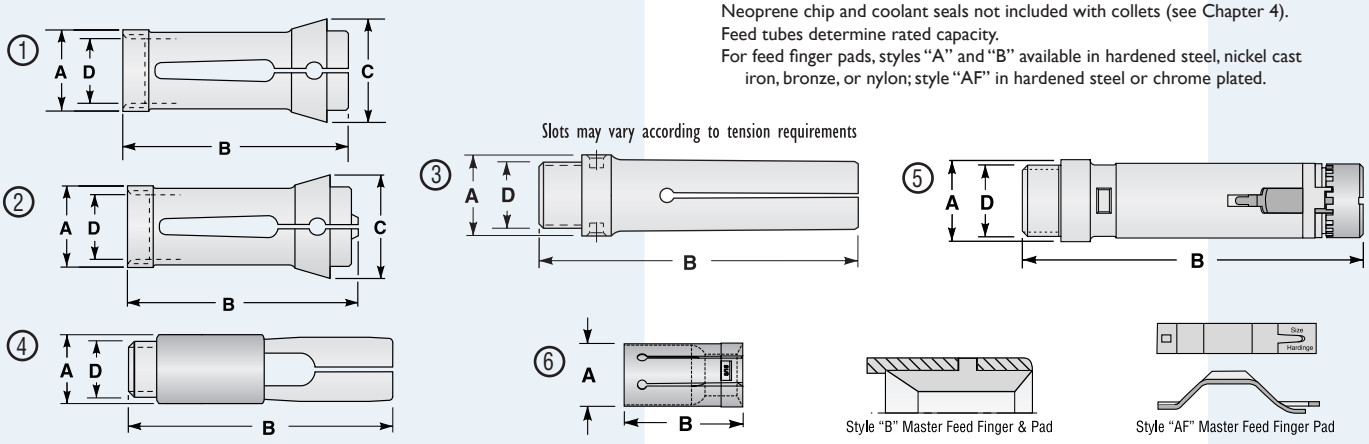
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
BROWN & SHARPE: ½" Capacity – #00, #00B, #00C, #00G (Larger Capacity Solid Collets Available up to 10: 1 1/16" Round, 9/16" Hex, 31/64" Square)											
Collet, Solid	3033	1	10		.936" (23.77)	2.500" (63.50)	1.115" (28.32)	—	½" (12.70)	27/64" (10.72)	11/32" (8.73)
Collet, Solid	3031	2	10Y		.936" (23.77)	2.562" (65.07)	1.115" (28.32)	—	½" (12.70)	27/64" (10.72)	11/32" (8.73)
Collet, Solid Stop Collet	3213	1	10SC		.936" (23.77)	2.500" (63.50)	1.115" (28.32)	.635" x 24 RH	9/16" (14.29)	31/64" (12.30)	25/64" (9.92)
Collet, Solid Stop Collet	3211	2	10SCY		.936" (23.77)	2.562" (65.07)	1.115" (28.32)	.635" x 24 RH	9/16" (14.29)	31/64" (12.30)	25/64" (9.92)
Collet, Burring	See page 48										
Feed Finger, Solid	3035	3	10		.630" (16.00)	2.938" (74.63)	— —	.560" x 20 LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
Feed Finger, Solid	3037	3	10A		.675" (17.15)	2.938" (74.63)	— —	.622" x 32 LH	½" (12.70)	27/64" (10.72)	11/32" (8.73)
Feed Finger, Style "B" Master	6021	3	10 B10	6643	.630" (16.00)	2.938" (74.63)	— —	.560" x 20 LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
Feed Finger, Style "B" Master	6029	3	10A B10	6643	.675" (17.15)	2.938" (74.63)	— —	.622" x 32 LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
Feed Finger, Style "B" Master	6031	3	10A B10AM	6649	.675" (17.15)	2.938" (74.63)	— —	.622" x 32 LH	7/16" (11.11)	3/8" (9.53)	19/64" (7.54)
Feed Finger, Style "B" Master Adjustable Tension	6023	4	10 B10X	6643	.673" (17.09)	2.938" (74.63)	— —	.560" x 20 LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7005	5	10 AF10	7321[1] 7323[2]	.630" (16.00)	2.781" (70.64)	— —	.560" x 20 LH	1/16" (1.59)	3/8" (9.53)	1/8" (3.18)	5/16" (7.94)
Bushing, Style "AF"	7365	6	10 AF10		.395" (10.03)	.906" (23.01)	— —	—	1/16" (1.59)	9/32" (7.14)	1/8" (3.18)	1/4" (6.35)
Feed Finger, Style "AF" Master Adjustable Tension	7007	5	10 AF10A	7321[1] 7323[2]	.675" (17.15)	2.781" (70.64)	— —	.622" x 32 LH	1/16" (1.59)	3/8" (9.53)	1/8" (3.18)	5/16" (7.94)
Bushing, Style "AF"	7367	6	10 AF10A		.492" (12.50)	1.156" (29.36)	— —	—	1/16" (1.59)	3/8" (9.53)	1/8" (3.18)	5/16" (7.94)

1 - Round
2 - Hexagon

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.

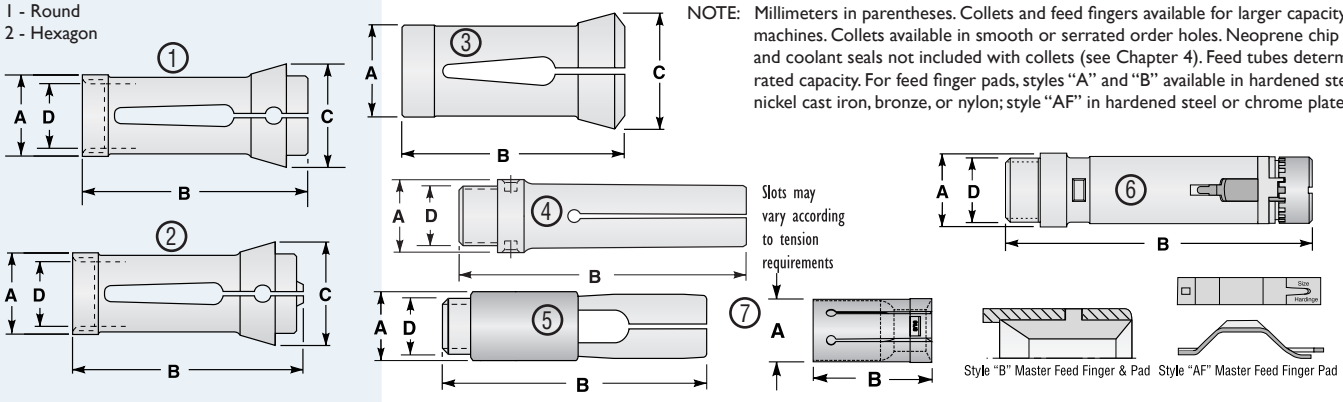


Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity: Round	Hexagon	Square
BROWN & SHARPE: 5/8" Capacity – #0, #0G (Larger Capacity Solid Collets Available up to [11: 7/8" Round, 3/4" Hex, 5/8" Square], [11SC, 11B: 55/64" R, 17/32" H, 9/16" S])											
Collet, Solid	3057	1	11		1.061" (26.95)	2.875" (73.03)	1.490" (37.85)	—	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
Collet, Solid	3055	2	11Y		1.061" (26.95)	2.937" (74.60)	1.490" (37.85)	—	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
Collet, Solid Stop Collet	3217	1	11SC		1.061" (26.95)	2.875" (73.03)	1.490" (37.85)	.916" x 24 RH	55/64" (21.83)	47/64" (18.65)	19/32" (15.08)
Collet, Solid Stop Collet	3215	2	11SCY		1.061" (26.95)	2.937" (74.60)	1.490" (37.85)	.916" x 24 RH	55/64" (21.83)	47/64" (18.65)	19/32" (15.08)
Collet, Solid	3067	3	11B		1.061" (26.95)	2.875" (73.03)	1.535" (38.99)	—	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
Collet, Burring	See page 48										
Feed Finger, Solid	3061	4	11		.800" (20.32)	3.438" (87.33)	— —	.685" x 20 LH	1/2" (12.70)	27/64" (10.72)	11/32" (8.73)
Feed Finger, Solid	3063	4	11A		.860" (21.84)	3.438" (87.33)	— —	.810" x 20 LH	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
Feed Finger, Solid	3065	4	11AA		.990" (25.15)	3.438" (87.33)	— —	.810" x 20 LH	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
Feed Finger, Style "B" Master	6035	4	11 B3	6611	.800" (20.32)	3.438" (87.33)	— —	.685" x 20 LH	1/2" (12.70)	27/64" (10.72)	11/32" (8.73)
Feed Finger, Style "B" Master	6043	4	11A B3	6611	.860" (21.84)	3.438" (87.33)	— —	.810" x 20 LH	1/2" (12.70)	27/64" (10.72)	11/32" (8.73)
Feed Finger, Style "B" Master	6045	4	11A B11	6653	.860" (21.84)	3.438" (87.33)	— —	.810" x 20 LH	9/16" (14.29)	31/64" (12.30)	25/64" (9.92)
Feed Finger, Style "B" Master Adjustable Tension	6037	5	11 B3X	6611	.828" (21.03)	3.438" (87.33)	— —	.685" x 20 LH	1/2" (12.70)	27/64" (10.72)	11/32" (8.73)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7009	6	11 AF3	7305[1] 7307[2]	.800" (20.32)	3.281" (83.34)	— —	.685" x 20 LH	3/16" (4.76)	1/2" (12.70)	3/16" (4.76)	7/16" (11.11)
Bushing, Style "AF"	7355	7	11 AF3		.575" (14.61)	1.031" (26.19)	— —	—	3/16" (4.76)	13/32" (10.32)	3/16" (4.76)	11/32" (8.73)
Feed Finger, Style "AF" Master Adjustable Tension	7011	6	11A AF3A	7305[1] 7307[2]	.865" (21.97)	3.281" (83.34)	— —	.810" x 20 LH	3/16" (4.76)	1/2" (12.70)	3/16" (4.76)	7/16" (11.11)
Bushing, Style "AF"	7357	7	11A AF3A		.638" (16.21)	1.250" (31.75)	— —	—	3/16" (4.76)	1/2" (12.70)	3/16" (4.76)	7/16" (11.11)

1 - Round
2 - Hexagon



NOTE: Millimeters in parentheses. Collets and feed fingers available for larger capacity machines. Collets available in smooth or serrated order holes. Neoprene chip and coolant seals not included with collets (see Chapter 4). Feed tubes determine rated capacity. For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.

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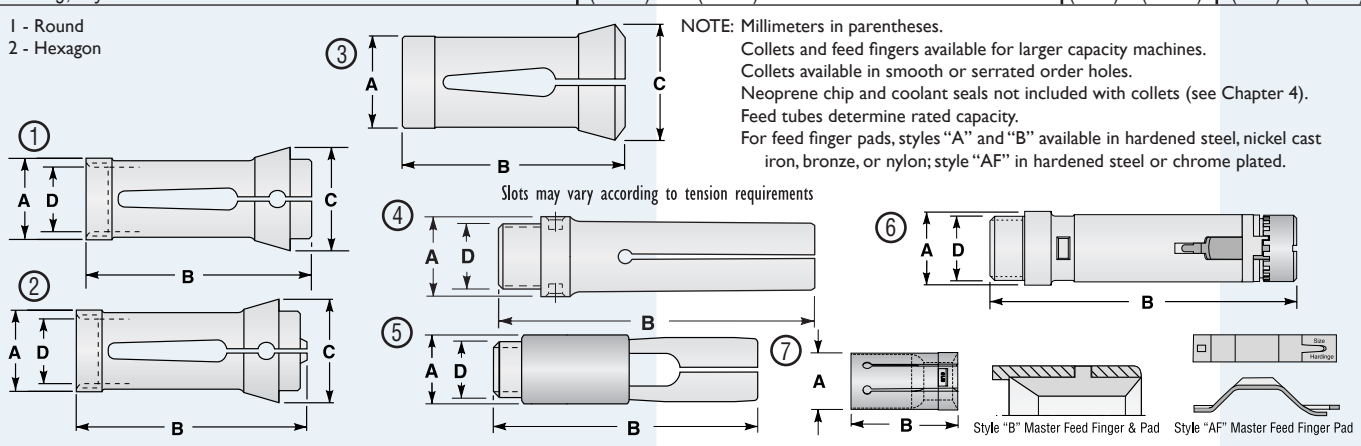
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
BROWN & SHARPE: 5/8" Capacity – #2G (Larger Capacity Solid Collets Available up to [22: 1¼" Round, 1⁵⁄₆₄" Hex, ⅞" Square], [22SC: 1¼" R, 1⁵⁄₆₄" H, ⅞" S])											
Collet, Solid	3111	1	22		1.498" (38.05)	4.250" (107.95)	1.925" (48.90)	—	1" (25.40)	55⁄64" (21.83)	45⁄64" (17.86)
Collet, Solid	3109	2	22Y		1.498" (38.05)	4.312" (109.53)	1.925" (48.90)	—	1" (25.40)	55⁄64" (21.83)	45⁄64" (17.86)
Collet, Solid Stop Collet	3227	1	22SC		1.498" (38.05)	4.250" (107.95)	1.925" (48.90)	1.291" x 24 RH	1¼" (31.75)	1⁵⁄64" (27.38)	⅞" (22.23)
Collet, Burring	See page 48										
Feed Finger, Solid	3065	4	11AA		.990" (25.15)	3.438" (87.33)	— —	.810" x 20 LH	⅝" (15.88)	17⁄32" (13.50)	7⁄16" (11.11)
BROWN & SHARPE: ¾" Capacity – #0, #0G, #00B, #2 (Larger Capacity Solid Collets Available up to [11: ⅞" Round, ¾" Hex, ⅝" Square], [11SC, 11B: 55⁄64" R, 17⁄32" H, 9⁄16" S], [11C: 1" R, 27⁄32" H, 45⁄64" S])											
Collet, Solid	3057	1	11		1.061" (26.95)	2.875" (73.03)	1.490" (37.85)	—	⅝" (15.88)	17⁄32" (13.50)	7⁄16" (11.11)
Collet, Solid	3055	2	11Y		1.061" (26.95)	2.938" (74.63)	1.490" (37.85)	—	⅝" (15.88)	17⁄32" (13.50)	7⁄16" (11.11)
Collet, Solid Stop Collet	3217	1	11SC		1.061" (26.95)	2.875" (73.03)	1.490" (37.85)	.916" x 24 RH	55⁄64" (21.83)	47⁄64" (18.65)	19⁄32" (15.08)
Collet, Solid Stop Collet	3215	2	11SCY		1.061" (26.95)	2.938" (74.63)	1.490" (37.85)	.916" x 24 RH	55⁄64" (21.83)	47⁄64" (18.65)	19⁄32" (15.08)
Collet, Solid	3071	1	11C		1.186" (30.12)	2.875" (73.03)	1.490" (37.85)	—	1" (25.40)	55⁄64" (21.83)	45⁄64" (17.86)
Collet, Solid	3067	3	11B		1.061" (26.95)	2.875" (73.03)	1.535" (38.99)	—	⅝" (15.88)	17⁄32" (13.50)	7⁄16" (11.11)
Collet, Burring	See page 48										
Feed Finger, Solid	3095	4	21A		.995" (25.27)	5.313" (134.95)	— —	.935" x 20 LH	¾" (19.05)	41⁄64" (16.27)	33⁄64" (13.10)
Feed Finger, Style "B" Master	6051	4	21A B4	6617	.985" (25.02)	5.250" (133.35)	— —	.935" x 20 LH	⅝" (15.88)	17⁄32" (13.50)	7⁄16" (11.11)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7013	6	21A AF4	7309[1] 7311[2]	.985" (25.02)	5.188" (131.78)	— —	.935" x 20 LH	¼" (6.35)	⅝" (15.88)	¼" (6.35)	17⁄32" (13.50)
Bushing, Style "AF"	7359	7	21A AF4		.771" (19.58)	1.438" (36.53)	— —	—	¼" (6.35)	⅝" (15.88)	¼" (6.35)	17⁄32" (13.50)

1 - Round
2 - Hexagon

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.

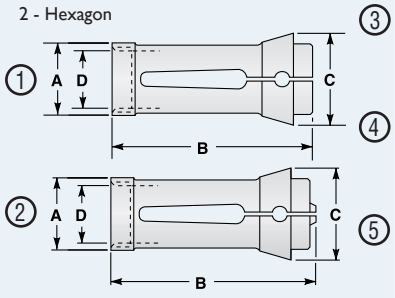


Spindle Tooling for Automatics

HARDINGE

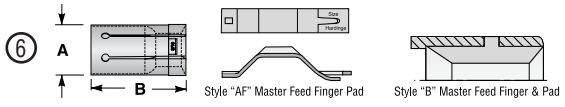
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
BROWN & SHARPE: ¾" Capacity – #00 (Larger Capacity Solid Collets Available up to [11: ⅞" Round, ¾" Hex, ⅝" Square], [11SC: 55/64" R, 17/32" H, 9/16" S], [11C: 1" R, 27/32" H, 45/64" S])											
Collet, Solid	3057	1	11		1.061" (26.95)	2.875" (73.03)	1.490" (37.85)	—	⅝" (15.88)	17/32" (13.50)	7/16" (11.11)
Collet, Solid	3071	1	11C		1.186" (30.12)	2.875" (73.03)	1.490" (37.85)	—	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, Solid Stop Collet	3217	1	11SC		1.061" (26.95)	2.875" (73.03)	1.490" (37.85)	.916" x 24 RH	55/64" (21.83)	47/64" (18.65)	19/32" (15.08)
Collet, Solid	3055	2	11Y		1.061" (26.95)	2.938" (74.63)	1.490" (37.85)	—	⅝" (15.88)	17/32" (13.50)	7/16" (11.11)
Collet, Solid Stop Collet	3215	2	11SCY		1.061" (26.95)	2.938" (74.63)	1.490" (37.85)	.916" x 24 RH	55/64" (21.83)	47/64" (18.65)	19/32" (15.08)
Collet, Burring	See page 48										
Feed Finger, Solid	3035	3	10		.630" (16.00)	2.938" (74.63)	—	.560" x 20 LH	⅜" (9.53)	5/16" (7.94)	17/64" (6.75)
Feed Finger, Solid	3037	3	10A		.675" (17.15)	2.938" (74.63)	—	.622" x 32 LH	½" (12.70)	27/64" (10.72)	11/32" (8.73)
Feed Finger, Solid	3039	3	10AA		.930" (23.62)	4.313" (109.55)	—	.873" x 32 LH	¾" (19.05)	41/64" (16.27)	33/64" (13.10)
Feed Finger, Style "B" Master	6021	3	10 B10	6643	.630" (16.00)	2.938" (74.63)	—	.560" x 20 LH	⅜" (9.53)	5/16" (7.94)	17/64" (6.75)
Feed Finger, Style "B" Master	6029	3	10A B10	6643	.675" (17.15)	2.938" (74.63)	—	.622" x 32 LH	⅜" (9.53)	5/16" (7.94)	17/64" (6.75)
Feed Finger, Style "B" Master	6031	3	10A B10AM	6649	.675" (17.15)	2.938" (74.63)	—	.622" x 32 LH	7/16" (11.11)	⅜" (9.53)	19/64" (7.54)
Feed Finger, Style "B" Master	6033	3	10AA B4	6617	.930" (23.88)	4.313" (109.55)	—	.873" x 32 LH	⅝" (15.88)	17/32" (13.50)	7/16" (11.11)
Feed Finger, Style "B" Master Adjustable Tension	6023	4	10 B10X	6643	.673" (17.09)	2.938" (74.63)	—	.560" x 20 LH	⅜" (9.53)	5/16" (7.94)	17/64" (6.75)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7005	5	10 AF10	7321[1] 7323[2]	.630" (16.00)	2.781" (70.64)	—	.560" x 20 LH	1/16" (1.59)	⅜" (9.53)	⅛" (3.18)	5/16" (7.94)
Bushing, Style "AF"	7365	6	10 AF10		.395" (10.03)	.906" (23.01)	—	—	1/16" (1.59)	9/32" (7.14)	⅛" (3.18)	¼" (6.35)
Feed Finger, Style "AF" Master Adjustable Tension	7007	5	10A AF10A	7321[1] 7323[2]	.675" (17.15)	2.781" (70.64)	—	.622" x 32 LH	1/16" (1.59)	⅜" (9.53)	⅛" (3.18)	5/16" (7.94)
Bushing, Style "AF"	7367	6	10A AF10A		.492" (12.50)	1.156" (29.36)	—	—	1/16" (1.59)	⅜" (9.53)	⅛" (3.18)	5/16" (7.94)

1 - Round
2 - Hexagon



Slots may vary according to tension requirements

NOTE:
Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



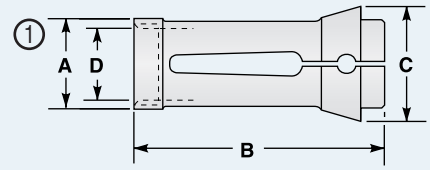
Spindle Tooling for Automatics

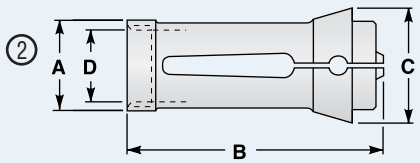
HARDINGE

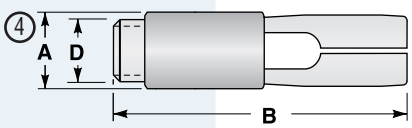
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
BROWN & SHARPE: 1" Capacity – #2, #2G (Larger Capacity Solid Collets Available up to [22: 1¼" Round, 1⁹⁄₆₄" Hex, ⅞" Square], [22SC: 1¼" R, 1⁹⁄₆₄" H, ⅞" S])											
Collet, Solid	3111	1	22		1.498" (38.05)	4.250" (107.95)	1.925" (48.90)	—	1" (25.40)	⁵⁵⁄₆₄" (21.83)	⁴⁵⁄₆₄" (17.86)
Collet, Solid	3109	2	22Y		1.498" (38.05)	4.312" (109.53)	1.925" (48.90)	—	1" (25.40)	⁵⁵⁄₆₄" (21.83)	⁴⁵⁄₆₄" (17.86)
Collet, Solid Stop Collet	3227	1	22SC		1.498" (38.05)	4.250" (107.95)	1.925" (48.90)	1.291" x 24 RH	1¼" (31.75)	1⁹⁄₆₄" (27.38)	⅞" (22.23)
Collet, Burring	See page 48										
Feed Finger, Solid	3035	3	10		.630" (16.00)	2.938" (74.63)	— —	.560" x 20 LH	⅜" (9.53)	⁵⁄₁₆" (7.94)	¹⁷⁄₆₄" (6.75)
Feed Finger, Solid	3065	3	11AA		.990" (25.15)	3.438" (87.33)	— —	.810" x 20 LH	⅝" (15.88)	¹⁷⁄₃₂" (13.50)	⁷⁄₁₆" (11.11)
Feed Finger, Solid	3115	3	22		1.300" (33.02)	6.000" (152.40)	— —	1.185" x 20 LH	1" (25.40)	⁵⁵⁄₆₄" (21.83)	⁴⁵⁄₆₄" (17.86)
Feed Finger, Style "B" Master	6021	3	10 B10	6643	.630" (16.00)	2.938" (74.63)	— —	.560" x 20 LH	⅜" (9.53)	⁵⁄₁₆" (7.94)	¹⁷⁄₆₄" (6.75)
Feed Finger, Style "B" Master	6053	3	22 B6	6625	1.300" (33.02)	6.000" (152.40)	— —	1.185" x 20 LH	⅞" (22.23)	¾" (19.05)	³⁹⁄₆₄" (15.48)
Feed Finger, Style "B" Master Adjustable Tension	6023	4	10 B10X	6643	.560" (14.22)	2.938" (74.63)	— —	.560" x 20 LH	⅜" (9.53)	⁵⁄₁₆" (7.94)	¹⁷⁄₆₄" (6.75)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7005	5	10 AF10	7321[1] 7323[2]	.630" (16.00)	2.781" (70.64)	— —	.560" x 20 LH	1⁄16" (1.59)	⅜" (9.53)	⅛" (3.18)	⁵⁄₁₆" (7.94)
Bushing, Style "AF"	7365	6	10 AF10		.395" (10.03)	.906" (23.01)	— —	—	1⁄16" (1.59)	⁹⁄₃₂" (7.14)	⅛" (3.18)	¼" (6.35)
Feed Finger, Style "AF" Master Adjustable Tension	7015	5	22 AF6	7313[1] 7315[2]	1.300" (33.02)	5.750" (146.05)	— —	1.185" x 20 LH	⅜" (9.53)	⅞" (22.23)	⅜" (9.53)	¾" (19.05)
Bushing, Style "AF"	7361	6	22 AF6		.990" (25.15)	1.688" (42.88)	— —	—	⅜" (9.53)	⅞" (22.23)	⅜" (9.53)	¾" (19.05)

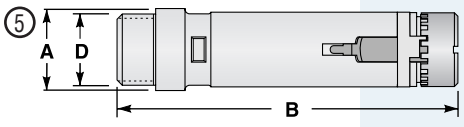
1 - Round
2 - Hexagon

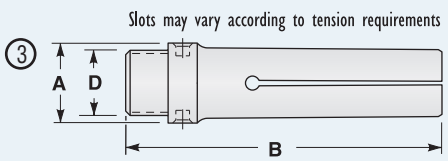
NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.

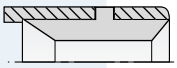


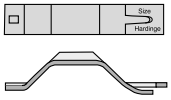


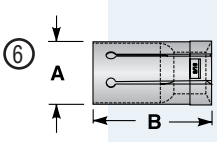







Style "B" Master Feed Finger & Pad


Style "AF" Master Feed Finger Pad



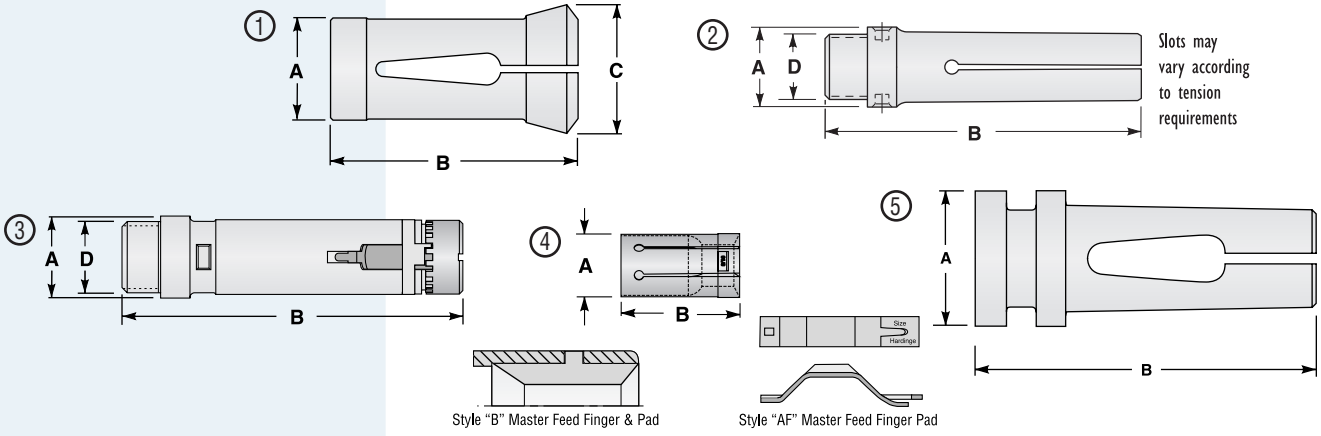
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
BROWN & SHARPE: 1⅛" Capacity – #2, #2G (Larger Capacity Solid Collet Available up to 1 13/32" Round, 17/32" Hex, 1" Square)											
Collet, Solid	3121	1	22B		1.623" (41.22)	4.250" (107.95)	2.035" (51.69)	—	1⅛" (28.58)	31/32" (24.61)	25/32" (19.85)
Collet, Burring	See page 48										
Feed Finger, Solid	3119	2	22A		1.425" (36.20)	6.500" (165.10)	— —	1.310" x 20 LH	1⅛" (28.58)	31/32" (24.61)	25/32" (19.85)
Feed Finger, Style "B" Master	6055	2	22A B6	6625	1.425" (36.20)	6.500" (165.10)	— —	1.310" x 20 LH	7/8" (22.23)	¾" (19.05)	39/64" (15.48)
BROWN & SHARPE: 1¼" Capacity – #2, #2G (Larger Capacity Solid Collet Available up to 1 9/16" Round, 1 1/32" Hex, 13/32" Square)											
Collet, Solid	3125	1	22C		1.748" (44.40)	4.250" (107.95)	2.160" (54.86)	—	1¼" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Collet, Burring	See page 48										
Feed Finger, Solid	3133	2	22H		1.515" (38.48)	6.000" (152.40)	— —	1.435" x 20 LH	1¼" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Feed Finger, Style "B" Master	6061	2	22H B7	6631	1.515" (38.48)	6.000" (152.40)	— —	1.435" x 20 LH	1⅛" (28.58)	31/32" (24.61)	25/32" (19.85)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7019	3	22H AF7	7317[1] 7319[2]	1.515" (38.48)	5.750" (146.05)	— —	1.435" x 20 LH	½" (12.70)	1⅛" (28.58)	½" (12.70)	15/16" (23.81)
Bushing, Style "AF"	7363	4	22H AF7		1.235" (31.37)	1.938" (49.23)	— —	—	½" (12.70)	1⅛" (28.58)	½" (12.70)	15/16" (23.81)
BROWN & SHARPE: 1⅜" Capacity – #2, #2G (Larger Capacity Solid Collets Available up to [22A: 1 5/16" Round, 1⅛" Hex, 59/64" Square], [22B: 1 13/32" S, 1 7/32" H, 1" S])											
Collet, Solid [With 1-5/16" Spindle]	3117	1	22A		1.498" (38.05)	4.250" (107.95)	2.035" (51.69)	—	1 5/16" (33.34)	1⅛" (28.58)	59/64" (23.42)
Collet, Solid [With 1-7/16" Spindle]	3121	1	22B		1.623" (41.22)	4.250" (107.95)	2.035" (51.69)	—	1⅜" (34.93)	1 3/16" (30.16)	31/32" (24.61)
Feed Finger, Solid	3123	5	22B		2.235" (56.77)	5.875" (149.23)	— —	—	1⅜" (34.93)	1 3/16" (30.16)	31/32" (24.61)

1 - Round
2 - Hexagon

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



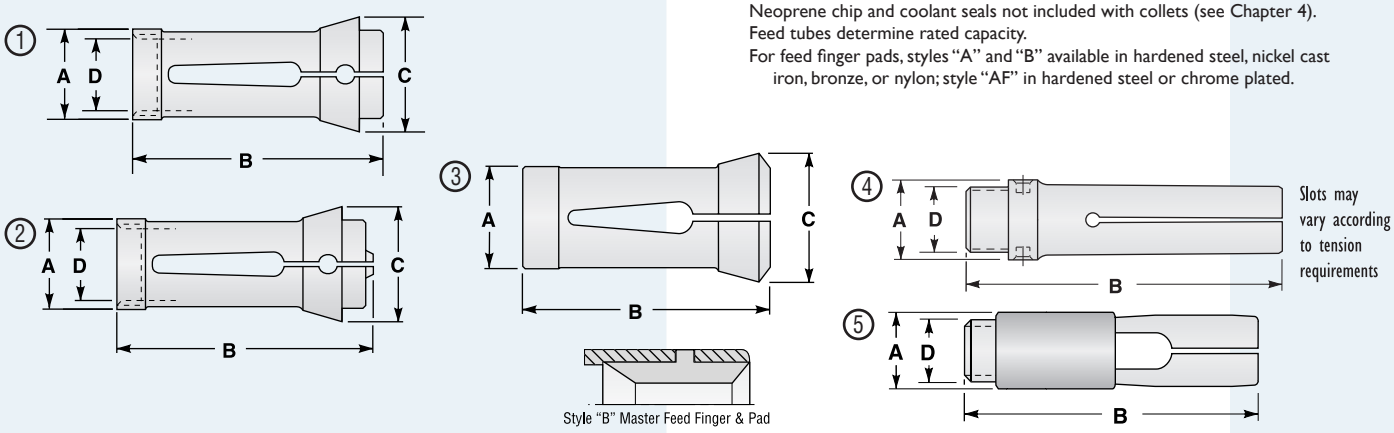
To Order Contact: Exact Tooling / www.exacttooling.com / sales@exacttooling.com / 888-988-8820

Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
BROWN & SHARPE: 1½" Capacity – #2, #2G (Larger Capacity Solid Collets Available up to [22: 1¼" Round, 1⁵⁄₆₄" Hex, ⅞" Square], [22SC: 1¼" R, 1⁵⁄₆₄" H, ⅞" S], [22C: 1⁹⁄₁₆" R, 1¹¹⁄₃₂" H, ¹³⁄₃₂" S], [22D: 1⅞" R, 1¹⁹⁄₃₂" H, 1⁵⁄₁₆" S])											
Collet, Solid	3111	1	22		1.498" (38.05)	4.250" (107.95)	1.925" (48.90)	—	1" (25.40)	55⁄64" (21.83)	45⁄64" (17.86)
Collet, Solid	3109	2	22Y		1.498" (38.05)	4.312" (109.53)	1.925" (48.90)	—	1" (25.40)	55⁄64" (21.83)	45⁄64" (17.86)
Collet, Solid Stop Collet	3227	1	22SC		1.498" (38.05)	4.250" (107.95)	1.925" (48.90)	1.291" x 24 RH	1¼" (31.75)	1⁵⁄64" (27.38)	⅞" (22.23)
Collet, Solid	3125	3	22C		1.748" (44.40)	4.250" (107.95)	2.160" (54.86)	—	1¼" (31.75)	1⁵⁄64" (27.38)	⅞" (22.23)
Collet, Solid	3127	3	22D		2.123" (53.92)	4.219" (107.16)	2.440" (61.98)	—	1⅝" (41.28)	1¹³⁄₃₂" (35.72)	1⁹⁄64" (28.97)
Collet, Burring	See page 48										
Feed Finger, Solid	3035	4	10		.630" (16.00)	2.938" (74.63)	— —	.560" x 20 LH	⅜" (9.53)	5⁄16" (7.94)	17⁄64" (6.75)
Feed Finger, Solid	3065	4	11AA		.990" (25.15)	3.438" (87.33)	— —	.810" x 20 LH	⅝" (15.88)	17⁄32" (13.50)	7⁄16" (11.11)
Feed Finger, Solid	3115	4	22		1.300" (33.02)	6.000" (152.40)	— —	1.185" x 20 LH	1" (25.40)	55⁄64" (21.83)	45⁄64" (17.86)
Feed Finger, Solid	3133	4	22H		1.515" (38.48)	6.000" (152.40)	— —	1.435" x 20 LH	1¼" (31.75)	1⁵⁄64" (27.38)	⅞" (22.23)
Feed Finger, Solid	3129	4	22D		1.795" (45.59)	6.000" (152.40)	— —	1.685" x 20 LH	1½" (38.10)	1¹⁹⁄64" (32.94)	1³⁄64" (26.59)
Feed Finger, Style "B" Master	6021	4	10 B10	6643	.630" (16.00)	2.938" (74.63)	— —	.560" x 20 LH	⅜" (9.53)	5⁄16" (7.94)	17⁄64" (6.75)
Feed Finger, Style "B" Master	6053	4	22 B6	6625	1.300" (33.02)	6.000" (152.40)	— —	1.185" x 20 LH	⅞" (22.23)	¾" (19.05)	39⁄64" (15.48)
Feed Finger, Style "B" Master	6061	4	22H B7	6631	1.515" (38.48)	6.000" (152.40)	— —	1.435" x 20 LH	1⅛" (28.58)	31⁄32" (24.61)	25⁄32" (19.85)
Feed Finger, Style "B" Master	6057	4	22D B8	6635	1.795" (45.59)	6.000" (152.40)	— —	1.685" x 20 LH	1⅜" (34.93)	1³⁄16" (30.16)	31⁄32" (24.61)
Feed Finger, Style "B" Master Adjustable Tension	6023	5	10 B10X	6643	.673" (17.09)	2.938" (74.63)	— —	.560" x 20 LH	⅜" (9.53)	5⁄16" (7.94)	17⁄64" (6.75)

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



Spindle Tooling for Automatics

HARDINGE

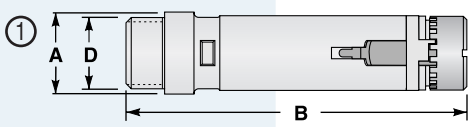
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square

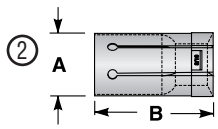
BROWN & SHARPE: 1½" Capacity – #2, #2G (continued)

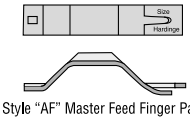
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7005	1	10 AF10	7321[1] 7323[2]	.630" (16.00)	2.781" (70.64)	— —	.560" x 20 LH	1/16" (1.59)	3/8" (9.53)	1/8" (3.18)	5/16" (7.94)
Bushing, Style "AF"	7365	2	10 AF10		.395" (10.03)	.906" (23.01)	— —	—	1/16" (1.59)	9/32" (7.14)	1/8" (3.18)	1/4" (6.35)
Feed Finger, Style "AF" Master Adjustable Tension	7015	1	22 AF6	7313[1] 7315[2]	1.300" (33.02)	5.375" (136.53)	— —	1.185" x 20 LH	3/8" (9.53)	7/8" (22.23)	3/8" (9.53)	3/4" (19.05)
Bushing, Style "AF"	7361	2	22 AF6		.990" (25.15)	1.688" (42.88)	— —	—	3/8" (9.53)	7/8" (22.23)	3/8" (9.53)	3/4" (19.05)
Feed Finger, Style "AF" Master Adjustable Tension	7019	1	22H AF7	7317[1] 7319[2]	1.515" (38.48)	5.750" (146.05)	— —	1.435" x 20 LH	1/2" (12.70)	1 1/8" (28.58)	1/2" (12.70)	15/16" (23.81)
Bushing, Style "AF"	7363	2	22H AF7		1.235" (31.37)	1.938" (49.23)	— —	—	1/2" (12.70)	1 1/8" (28.58)	1/2" (12.70)	15/16" (23.81)
Feed Finger, Style "AF" Master Adjustable Tension	7017	1	22D AF7	7317[1] 7319[2]	1.795" (45.59)	5.750" (146.05)	— —	1.685" x 20 LH	1/2" (12.70)	1 1/8" (28.58)	1/2" (12.70)	15/16" (23.81)
Bushing, Style "AF"	7363	2	22D AF7		1.235" (31.37)	1.938" (49.23)	— —	—	1/2" (12.70)	1 1/8" (28.58)	1/2" (12.70)	15/16" (23.81)

1 - Round
2 - Hexagon

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.







Style "AF" Master Feed Finger Pad

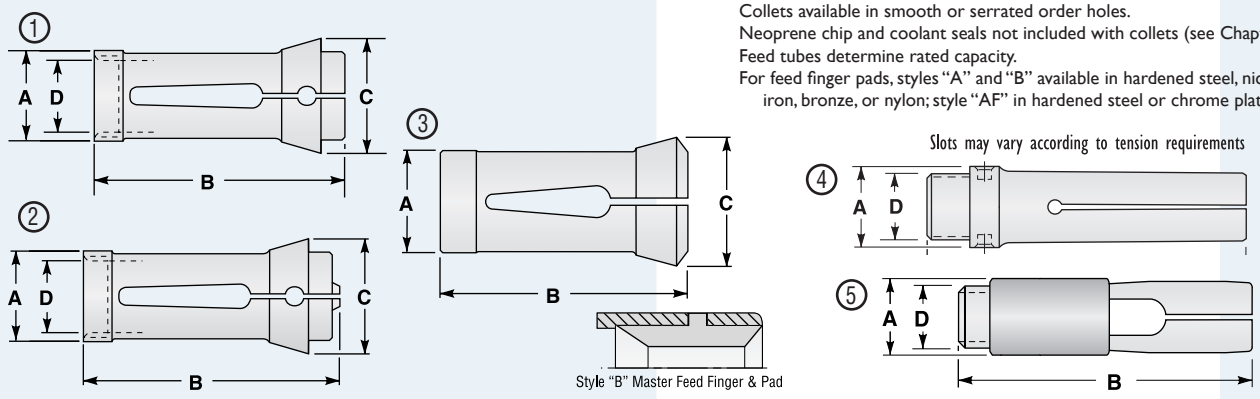
To Order Contact: Exact Tooling / www.exacttooling.com / sales@exacttooling.com / 888-988-8820

Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
BROWN & SHARPE: 1⅝" Capacity – #2 Ultramatic (Larger Capacity Solid Collets Available up to [22: 1¼" Round, 1⁵⁄₆₄" Hex, ⅞" Square], [22SC: 1¼" R, 1⁵⁄₆₄" H, ⅞" S], [22D: 1⅞" R, 1¹⁹⁄₃₂" H, 1⁵⁄₁₆" S])											
Collet, Solid	3111	1	22		1.498" (38.05)	4.250" (107.95)	1.925" (48.90)	—	1" (25.40)	⁵⁵⁄₆₄" (21.83)	⁴⁵⁄₆₄" (17.86)
Collet, Solid	3109	2	22Y		1.498" (38.05)	4.312" (109.53)	1.925" (48.90)	—	1" (25.40)	⁵⁵⁄₆₄" (21.83)	⁴⁵⁄₆₄" (17.86)
Collet, Solid Stop Collet	3227	1	22SC		1.498" (38.05)	4.250" (107.95)	1.925" (48.90)	1.291" x 24 RH	1¼" (31.75)	1⁵⁄₆₄" (27.38)	⅞" (22.23)
Collet, Solid	3127	3	22D		2.123" (53.92)	4.219" (107.95)	2.440" (61.98)	—	1⅝" (41.28)	1¹³⁄₃₂" (35.72)	1⁹⁄₆₄" (28.97)
Collet, Burring	See page 48										
Feed Finger, Solid	3035	4	10		.630" (16.00)	2.938" (74.63)	— —	.560" x 20 LH	⅜" (9.53)	⁵⁄₁₆" (7.94)	¹⁷⁄₆₄" (6.75)
Feed Finger, Solid	3065	4	11AA		.990" (25.15)	3.438" (87.33)	— —	.810" x 20 LH	⅝" (15.88)	¹⁷⁄₃₂" (13.50)	⁷⁄₁₆" (11.11)
Feed Finger, Solid	3115	4	22		1.300" (33.02)	6.000" (152.40)	— —	1.185" x 20 LH	1" (25.40)	⁵⁵⁄₆₄" (21.83)	⁴⁵⁄₆₄" (17.86)
Feed Finger, Solid	3133	4	22H		1.515" (38.48)	6.000" (152.40)	— —	1.435" x 20 LH	1¼" (31.75)	1⁵⁄₆₄" (27.38)	⅞" (22.23)
Feed Finger, Solid	3129	4	22D		1.795" (45.59)	6.000" (152.40)	— —	1.685" x 20 LH	1½" (38.10)	1⁹⁄₆₄" (32.94)	1³⁄₆₄" (26.59)
Feed Finger, Solid	3131	4	22DD		1.865" (47.37)	7.375" (187.33)	— —	1.810" x 20 LH	1⅝" (41.28)	1¹³⁄₃₂" (35.72)	1⁹⁄₆₄" (28.97)
Feed Finger, Style "B" Master	6021	4	10 B10	6643	.630" (16.00)	2.938" (74.63)	— —	.560" x 20 LH	⅜" (9.53)	⁵⁄₁₆" (7.94)	¹⁷⁄₆₄" (6.75)
Feed Finger, Style "B" Master	6053	4	22 B6	6625	1.300" (33.02)	6.000" (152.40)	— —	1.185" x 20 LH	⅞" (22.23)	¾" (19.05)	³⁹⁄₆₄" (15.48)
Feed Finger, Style "B" Master	6061	4	22H B7	6631	1.515" (38.48)	6.000" (152.40)	— —	1.435" x 20 LH	1⅛" (28.58)	³¹⁄₃₂" (24.61)	²⁵⁄₃₂" (19.85)
Feed Finger, Style "B" Master	6057	4	22D B8	6635	1.795" (45.59)	6.000" (152.40)	— —	1.685" x 20 LH	1⅜" (34.93)	1³⁄₁₆" (30.16)	³¹⁄₃₂" (24.61)
Feed Finger, Style "B" Master	6059	4	22DD B8	6635	1.865" (47.37)	7.375" (187.33)	— —	1.810" x 20 LH	1⅜" (34.93)	1³⁄₁₆" (30.16)	³¹⁄₃₂" (24.61)
Feed Finger, Style "B" Master Adjustable Tension	6023	5	10 B10X	6643	.673" (17.09)	2.938" (74.63)	— —	.560" x 20 LH	⅜" (9.53)	⁵⁄₁₆" (7.94)	¹⁷⁄₆₄" (6.75)

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



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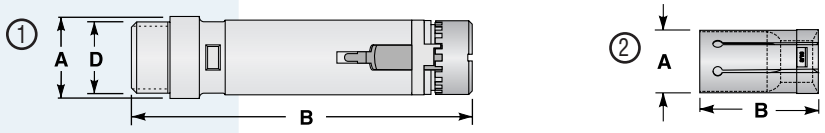
Spindle Tooling for Automatics

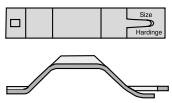
HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Machine Tool Builder's Rated Capacity Hexagon
BROWN & SHARPE: 1⅝" Capacity – #2 Ultramatic (Continued)										
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7005	1	10 AF10	7321[1] 7323[2]	.630" (16.00)	2.781" (70.64)	— —	.560" x 20 LH	1/16" (1.59)	3/8" (9.53)	1/8" (3.18)	5/16" (7.94)
Bushing, Style "AF"	7365	2	10 AF10		.395" (10.03)	.906" (23.01)	— —	—	1/16" (1.59)	9/32" (7.14)	1/8" (3.18)	1/4" (6.35)
Feed Finger, Style "AF" Master Adjustable Tension	7015	1	22 AF6	7313[1] 7315[2]	1.300" (33.02)	5.750" (146.05)	— —	1.185" x 20 LH	3/8" (9.53)	7/8" (22.23)	3/8" (9.53)	3/4" (19.05)
Bushing, Style "AF"	7361	2	22 AF6		.990" (25.15)	1.688" (42.88)	— —	—	3/8" (9.53)	7/8" (22.23)	3/8" (9.53)	3/4" (19.05)
Feed Finger, Style "AF" Master Adjustable Tension	7017	1	22D AF7	7317[1] 7319[2]	1.795" (45.59)	5.750" (146.05)	— —	1.685" x 20 LH	1/2" (12.70)	1 1/8" (28.58)	1/2" (12.70)	15/16" (23.81)
Bushing, Style "AF"	7363	2	22D AF7		1.235" (31.37)	1.938" (49.23)	— —	—	1/2" (12.70)	1 1/8" (28.58)	1/2" (12.70)	15/16" (23.81)
Feed Finger, Style "AF" Master Adjustable Tension	7019	1	22H AF7	7317[1] 7319[2]	1.515" (38.48)	5.750" (146.05)	— —	1.435" x 20 LH	1/2" (12.70)	1 1/8" (28.58)	1/2" (12.70)	15/16" (23.81)
Bushing, Style "AF"	7363	2	22H AF7		1.235" (31.37)	1.938" (49.23)	— —	—	1/2" (12.70)	1 1/8" (28.58)	1/2" (12.70)	15/16" (23.81)

1 - Round
2 - Hexagon

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.





Style "AF" Master Feed Finger Pad

To Order Contact: Exact Tooling / www.exacttooling.com / sales@exacttooling.com / 888-988-8820

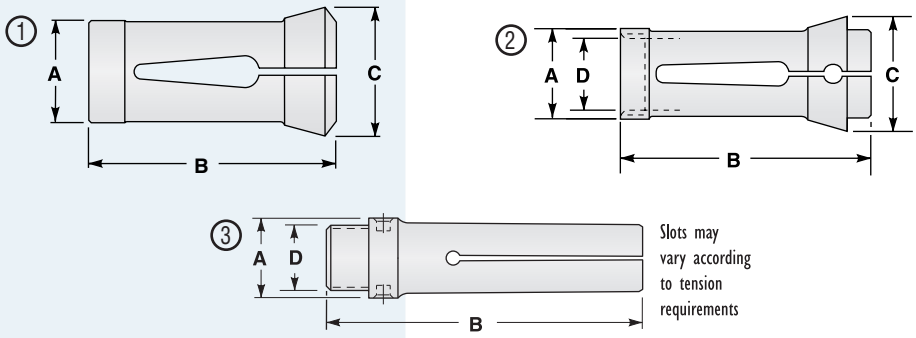
Spindle Tooling for Automatics

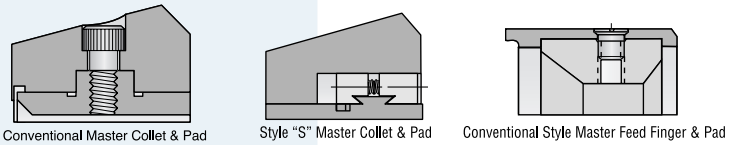
HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
BROWN & SHARPE: 1⅞" Capacity – #4 Automatic (Larger Capacity Solid Collet Available up to 1⅞" Round, 1⅝" Hex, 1⁵⁄₁₆" Square)											
Collet, Solid	3167	1	24		2.310" (58.67)	5.000" (127.00)	2.880" (73.15)	—	1⅞" (47.63)	1³⁹⁄₆₄" (40.88)	1⁵⁄₁₆" (33.34)
Collet, Burring	See page 48										
Collet, Conventional Style Master[5]	3171	1	24M	5701	2.310" (58.67)	5.000" (127.00)	2.880" (73.15)	—	1½" (38.10)	1¹⁹⁄₆₄" (32.94)	1³⁄₆₄" (26.59)
Feed Finger, Solid	3169	3	24		1.970" (50.04)	7.000" (177.80)	— —	1.872" x 16 RH	1½" (38.10)	1¹⁹⁄₆₄" (32.94)	1³⁄₆₄" (26.59)
Feed Finger, Conventional Style Master[5]	3173	3	24M	MP2203	1.965" (49.91)	7.000" (177.80)	— —	1.872" x 16 RH	1¼" (31.75)	1⁵⁄₆₄" (27.38)	⅞" (22.23)
BROWN & SHARPE: 2⅜" Capacity – #3 Ultramatic (Larger Capacity Solid Collet Available up to [23, 23A: 2⅜" Round, 2¹⁄₁₆" Hex, 1¹¹⁄₁₆" Square])											
Collet, Solid	3725	2	23		2.596" (65.94)	4.328" (109.93)	3.290" (83.57)	—	2⅜" (60.33)	2³⁄₆₄" (51.99)	1⁴³⁄₆₄" (42.47)
Collet, Solid	3147	3	23A		2.596" (65.94)	4.344" (110.34)	3.320" (84.33)	—	2⅜" (60.33)	2³⁄₆₄" (51.99)	1⁴³⁄₆₄" (42.47)
Collet, Burring	See page 48										
Collet, Style "S" Master	5207	2	S16	5607	2.596" (65.94)	4.328" (109.93)	3.290" (83.57)	—	1⅝" (41.28)	1¹³⁄₃₂" (35.72)	1⁹⁄₆₄" (28.97)
Collet, Conventional Style Master[5]	3151	1	23AM	5703	2.596" (65.94)	4.344" (110.34)	3.320" (84.33)	—	2" (50.80)	1²³⁄₃₂" (43.66)	1¹³⁄₃₂" (35.72)
Collet, Conventional Style Master[5]	3149	1	23M	5703	2.596" (65.94)	4.328" (109.93)	3.290" (83.57)	—	2" (50.80)	1²³⁄₃₂" (43.66)	1¹³⁄₃₂" (35.72)

5 - Specify three splits or four splits.

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.




Conventional Master Collet & Pad

Style "S" Master Collet & Pad

Conventional Style Master Feed Finger & Pad

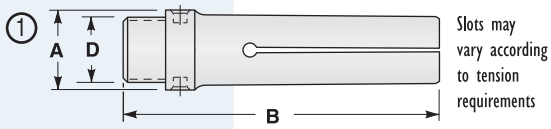
Spindle Tooling for Automatics

HARDINGE

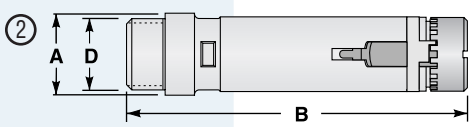
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
BROWN & SHARPE: 2⅜" Capacity – #3 Ultramatic (Continued)											
Feed Finger, Solid	3115	1	22		1.300" (33.02)	6.000" (152.40)	—	1.185" x 20 LH	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Feed Finger, Solid	3133	1	22H		1.515" (38.48)	6.000" (152.40)	—	1.435" x 20 LH	1¼" (31.75)	1 5/64" (27.38)	⅞" (22.23)
Feed Finger, Solid	3129	1	22D		1.795" (45.59)	6.000" (152.40)	—	1.685" x 20 LH	1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
Feed Finger, Solid	3131	1	22DD		1.865" (47.37)	7.375" (187.33)	—	1.810" x 20 LH	1⅝" (41.28)	1 13/32" (35.72)	1 9/64" (28.97)
Feed Finger, Solid	3153	1	23		2.362" (59.99)	5.500" (139.70)	—	2.247" x 20 LH	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
Feed Finger, Solid Outside	3729	1	23		2.952" (74.98)	5.438" (138.13)	—	2.674" x 1.5mm RH	2 13/32" (61.12)	2 5/64" (52.78)	1 11/16" (42.86)
Feed Finger, Style "B" Master	6053	1	22 B6	6625	1.300" (33.02)	6.000" (152.40)	—	1.185" x 20 LH	⅞" (22.23)	¾" (19.05)	39/64" (15.48)
Feed Finger, Style "B" Master	6061	1	22H B7	6631	1.515" (38.48)	6.000" (152.40)	—	1.435" x 20 LH	1⅛" (28.58)	31/32" (24.61)	25/32" (19.85)
Feed Finger, Style "B" Master	6057	1	22D B8	6635	1.795" (45.59)	6.000" (152.40)	—	1.685" x 20 LH	1⅜" (34.93)	1 3/16" (30.16)	31/32" (24.61)
Feed Finger, Style "B" Master	6059	1	22DD B8	6635	1.865" (47.37)	7.375" (187.33)	—	1.810" x 20 LH	1⅜" (34.93)	1 3/16" (30.16)	31/32" (24.61)
Feed Finger, Style "B" Master	6063	1	23 B20	6661	2.362" (59.99)	5.500" (139.70)	—	2.247" x 20 LH	1¾" (44.45)	1 33/64" (38.50)	1 15/64" (31.35)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7015	2	22 AF6	7313[1] 7315[2]	1.300" (33.02)	5.750" (146.05)	—	1.185" x 20 LH	⅜" (9.53)	⅞" (22.23)	⅜" (9.53)	¾" (19.05)
Bushing, Style "AF"	7361	3	22 AF6		.990" (25.15)	1.688" (42.88)	—	—	⅜" (9.53)	⅞" (22.23)	⅜" (9.53)	¾" (19.05)
Feed Finger, Style "AF" Master Adjustable Tension	7019	2	22H AF7	7317[1] 7319[2]	1.515" (38.48)	5.750" (146.05)	—	1.435" x 20 LH	½" (12.70)	1⅛" (28.58)	½" (12.70)	15/16" (23.81)
Bushing, Style "AF"	7363	3	22H AF7		1.235" (31.37)	1.938" (49.23)	—	—	½" (12.70)	1⅛" (28.58)	½" (12.70)	15/16" (23.81)
Feed Finger, Style "AF" Master Adjustable Tension	7017	2	22D AF7	7317[1] 7319[2]	1.795" (45.59)	5.750" (146.05)	—	1.685" x 20 LH	½" (12.70)	1⅛" (28.58)	½" (12.70)	15/16" (23.81)
Bushing, Style "AF"	7363	3	22D AF7		1.235" (31.37)	1.938" (49.23)	—	—	½" (12.70)	1⅛" (28.58)	½" (12.70)	15/16" (23.81)

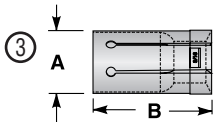
1 - Round
2 - Hexagon

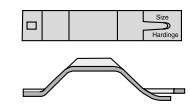
NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



Slots may vary according to tension requirements







Style "AF" Master Feed Finger Pad

To Order Contact: Exact Tooling / www.exacttooling.com / sales@exacttooling.com / 888-988-8820

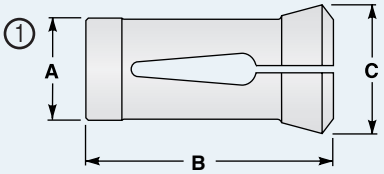
Spindle Tooling for Automatics

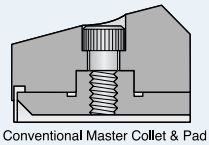
HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
BROWN & SHARPE: 2⅜" Capacity – #3 Ultramatic With Outside Feeding Arrangement (Larger Capacity Solid Collet Available up to 2⅜" Round, 2 1/16" Hex, 1 11/16" Square)											
Collet, Solid	3147	1	23A		2.596" (65.94)	4.344" (110.34)	3.320" (84.33)	—	2⅜" (60.33)	2 3/64" (51.99)	1 43/64" (42.47)
Feed Finger, Solid Outside	3729	2	23		2.952" (74.98)	5.438" (138.13)	— —	2.674" x 1.5 mm RH	2 13/32" (61.12)	2 5/64" (52.78)	1 11/16" (42.86)
Collet, Burring	See page 48										
BROWN & SHARPE: 2⅜" Capacity – #4, #6 Automatic (Larger Capacity Solid Collet Available up to 2½" Round, 2 5/32" Hex, 1 25/32" Square)											
Collet, Solid	3187	1	26		2.809" (71.35)	5.875" (149.23)	3.380" (85.85)	—	2⅜" (60.33)	2 3/64" (51.99)	1 43/64" (42.47)
Collet, Burring	See page 48										
Collet, Conventional Style Master[5]	3193	1	26M	5703	2.809" (71.35)	5.875" (149.23)	3.380" (85.85)	—	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
Feed Finger, Solid	3191	2	26		2.465" (62.61)	8.000" (203.20)	— —	2.370" x 16 RH	2 1/16" (52.39)	1 25/32" (45.25)	1 29/64" (36.91)
Feed Finger, Style "B" Master	6067	2	26 B20	6661	2.465" (62.61)	8.000" (203.20)	— —	2.370" x 16 RH	1¾" (44.45)	1 33/64" (38.50)	1 15/64" (31.35)
Feed Finger, Conventional Style Master 3-Split Style Master 4-Split	3193-00-10 3193-00-30	2	26M	6803	2.465" (62.61)	8.000" (203.20)	— —	2.370" x 16 RH	1¾" (44.45)	1 33/64" (38.50)	1 15/64" (31.35

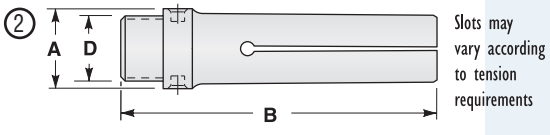
5 - Specify three splits or four splits

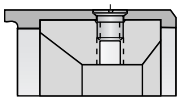
NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.





Conventional Master Collet & Pad





Conventional Style Master Feed Finger & Pad

To Order Contact: Exact Tooling / www.exacttooling.com / sales@exacttooling.com / 888-988-8820

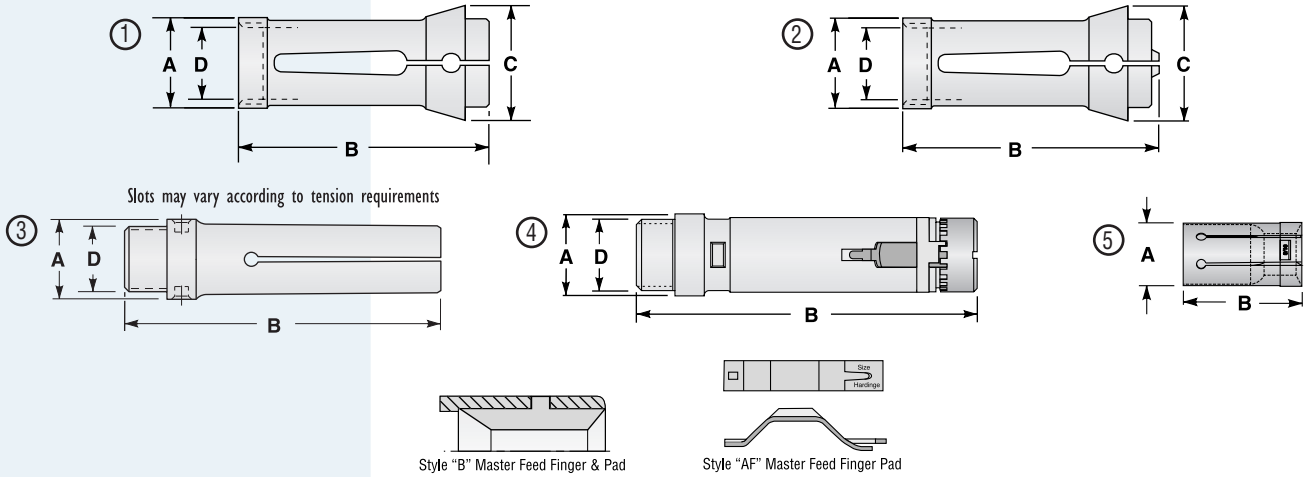
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
BROWN & SHARPE: 3/8" Capacity – #0 Wire (Larger Capacity Solid Collet Available up to [10: 11/16" Round, 9/16" Hex, 31/64" Square], [10SC: 9/16" R, 31/64" H, 25/64" S])											
Collet, Solid	3033	1	10		.936" (23.77)	2.500" (63.50)	1.115" (28.32)	—	1/2" (12.70)	27/64" (10.72)	11/32" (8.73)
Collet, Solid	3031	2	10Y		.936" (23.77)	2.562" (65.07)	1.115" (28.32)	—	1/2" (12.70)	27/64" (10.72)	11/32" (8.73)
Collet, Solid Stop Collet	3213	1	10SC		.936" (23.77)	2.500" (63.50)	1.115" (28.32)	.635" x 24 RH	9/16" (14.29)	31/64" (12.30)	25/64" (9.92)
Collet, Solid Stop Collet	3211	2	10SCY		.936" (23.77)	2.562" (65.07)	1.115" (28.32)	.635" x 24 RH	9/16" (14.29)	31/64" (12.30)	25/64" (9.92)
Collet, Burring	See page 48										
Feed Finger, Solid	3035	3	10		.630" (16.00)	2.938" (74.63)	—	.560" x 20 LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
Feed Finger, Style "B" Master	6021	3	10 B10	6643	.630" (16.00)	2.938" (74.63)	—	.560" x 20 LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7005	4	10 AF10	7321[1] 7323[2]	.630" (16.00)	2.781" (70.64)	—	.560" x 20 LH	1/16" (1.59)	3/8" (9.53)	1/8" (3.18)	5/16" (7.94)
Bushing, Style "AF"	7365	5	10 AF10		.395" (10.03)	.906" (23.01)	—	—	1/16" (1.59)	9/32" (7.14)	1/8" (3.18)	1/4" (6.35)

1 - Round
2 - Hexagon

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



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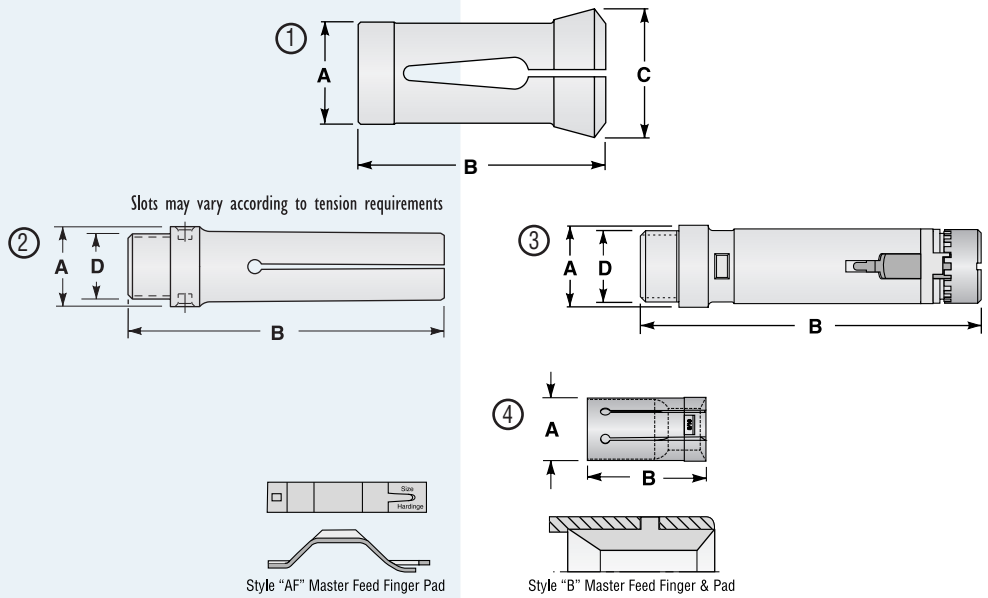
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
BROWN & SHARPE: 5/8" Capacity – #0 Wire (Larger Capacity Solid Collet Available up to 23/32" Round, 5/8" Hex, 1/2" Square)											
Collet, Solid	3041	1	10B		.936" (23.77)	2.500" (63.50)	1.190" (30.23)	—	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
Collet, Burring	See page 48										
Feed Finger, Solid	3063	2	11A		.860" (21.84)	3.438" (87.33)	— —	.810" x 20 LH	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
Feed Finger, Style "B" Master	6043	2	11A B3	6611	.860" (21.84)	3.438" (87.33)	— —	.810" x 20 LH	1/2" (12.70)	27/64" (10.72)	11/32" (8.73)
Feed Finger, Style "B" Master	6045	2	11A B11	6653	.860" (21.84)	3.438" (87.33)	— —	.810" x 20 LH	9/16" (14.29)	31/64" (12.30)	25/64" (9.92)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7011	3	11A AF3A	7305[1] 7307[2]	.860" (21.84)	3.281" (83.34)	— —	.810" x 20 LH	3/16" (4.76)	1/2" (12.70)	3/16" (4.76)	7/16" (11.11)
Bushing, Style "AF"	7357	4	11A AF3A		.638" (16.21)	1.250" (31.75)	— —	—	3/16" (4.76)	1/2" (12.70)	3/16" (4.76)	7/16" (11.11)

1 - Round
2 - Hexagon

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



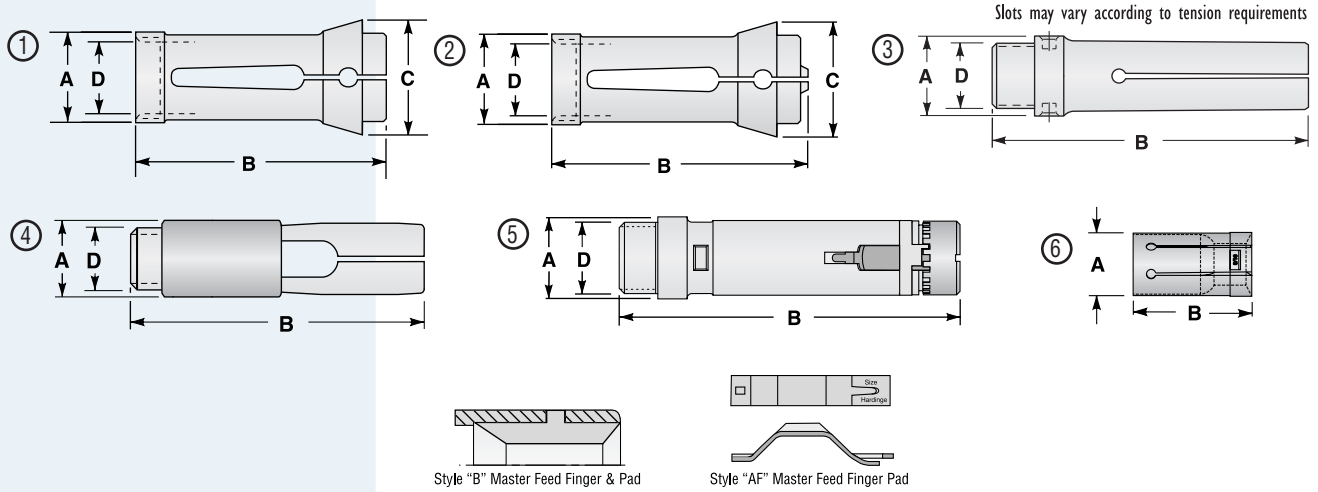
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
BROWN & SHARPE: 3/8" Capacity – #1 Wire (Larger Capacity Solid Collet Available up to [21: 1 1/16" Round, 15/16" Hex, 3/4" Square], [21SC: 1 1/16" R, 29/32" H, 3/4" S])											
Collet, Solid	3089	1	21		1.248" (31.70)	2.813" (71.45)	1.675" (42.55)	—	3/4" (19.05)	41/64" (16.27)	33/64" (13.10)
Collet, Solid	3087	2	21Y		1.248" (31.70)	2.875" (73.03)	1.675" (42.55)	—	3/4" (19.05)	41/64" (16.27)	33/64" (13.10)
Collet, Solid Stop Collet	3221	1	21SC		1.248" (31.70)	2.813" (71.45)	1.675" (42.55)	1.041" x 24 RH	1 1/16" (26.99)	29/32" (23.02)	3/4" (19.05)
Collet, Solid Stop Collet	3219	2	21SCY		1.248" (31.70)	2.875" (73.03)	1.675" (42.55)	1.041" x 24 RH	1 1/16" (26.99)	29/32" (23.02)	3/4" (19.05)
Collet, Burring	See page 48										
Feed Finger, Solid	3035	3	10		.630" (16.00)	2.938" (74.63)	— —	.560" x 20 LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
Feed Finger, Style "B" Master	6021	3	10 B10	6643	.630" (16.00)	2.938" (74.63)	— —	.560" x 20 LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
Feed Finger, Style "B" Master Adjustable Tension	6023	4	10 B10X	6643	.673" (17.09)	2.938" (74.63)	— —	.560" x 20 LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7005	5	10 AF10	7321[1] 7323[2]	.630" (16.00)	2.781" (70.64)	— —	.560" x 20 LH	1/16" (1.59)	3/8" (9.53)	1/8" (3.18)	5/16" (7.94)
Bushing, Style "AF"	7365	6	10 AF10		.395" (10.03)	.906" (23.01)	— —	—	1/16" (1.59)	9/32" (7.14)	1/8" (3.18)	1/4" (6.35)

1 - Round
2 - Hexagon

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



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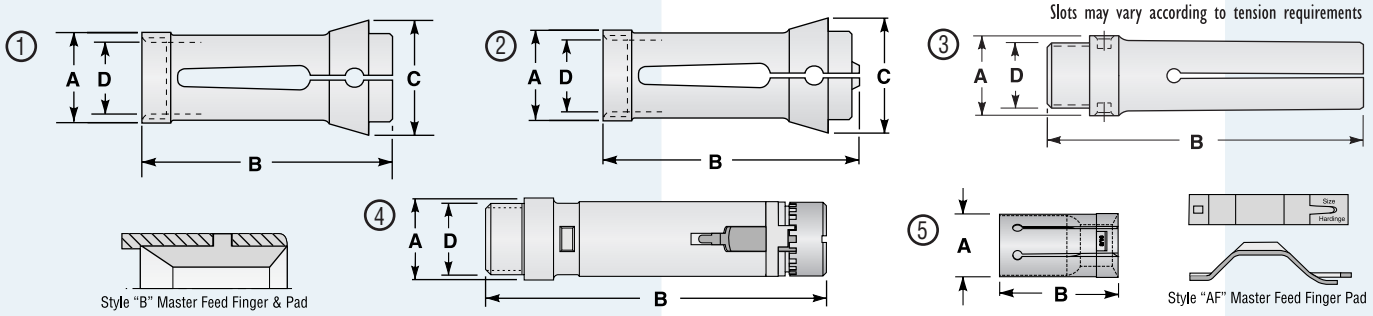
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
BROWN & SHARPE: 5/8" Capacity – #1 Wire (Larger Capacity Solid Collets Available up to [21: 1 1/16" Round, 15/16" Hex, 3/4" Square], [21SC: 1 1/16" R, 29/32" H, 3/4" S])											
Collet, Solid	3089	1	21		1.248" (31.70)	2.813" (71.45)	1.675" (42.55)	—	3/4" (19.05)	41/64" (16.27)	33/64" (13.10)
Collet, Solid	3087	2	21Y		1.248" (31.70)	2.875" (73.03)	1.675" (42.55)	—	3/4" (19.05)	41/64" (16.27)	33/64" (13.10)
Collet, Solid Stop Collet	3221	1	21SC		1.248" (31.70)	2.813" (71.45)	1.675" (42.55)	1.041" x 24 RH	1 1/16" (26.99)	29/32" (23.02)	3/4" (19.05)
Collet, Solid Stop Collet	3219	2	21SCY		1.248" (31.70)	2.875" (73.03)	1.675" (42.55)	1.041" x 24 RH	1 1/16" (26.99)	29/32" (23.02)	3/4" (19.05)
Collet, Burring	See page 48										
Feed Finger, Solid	3063	3	11A		.860" (21.84)	3.438" (87.33)	— —	.810" x 20 LH	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
Feed Finger, Solid	3065	3	11AA		.990" (25.15)	3.438" (87.33)	— —	.810" x 20 LH	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
Feed Finger, Solid	3093	3	21		.910" (23.11)	4.375" (111.13)	— —	.810" x 20 LH	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
Feed Finger, Style "B" Master	6043	3	11A B3	6611	.860" (21.84)	3.438" (87.33)	— —	.810" x 20 LH	1/2" (12.70)	27/64" (10.72)	11/32" (8.73)
Feed Finger, Style "B" Master	6049	3	21 B4	6617	.985" (25.02)	4.375" (111.13)	— —	.810" x 20 LH	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
Feed Finger, Style "B" Master	6045	3	11A B11	6653	.860" (21.84)	3.438" (87.33)	— —	.810" x 20 LH	9/16" (14.29)	31/64" (12.30)	25/64" (9.92)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7011	4	11A AF3A	7305[1] 7307[2]	.860" (21.84)	3.281" (83.34)	— —	.810" x 20 LH	3/16" (4.76)	1/2" (12.70)	3/16" (4.76)	7/16" (11.11)
Bushing, Style "AF"	7357	5	11A AF3A		.638" (16.21)	1.250" (31.75)	— —	—	3/16" (4.76)	1/2" (12.70)	3/16" (4.76)	7/16" (11.11)

1 - Round
2 - Hexagon

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



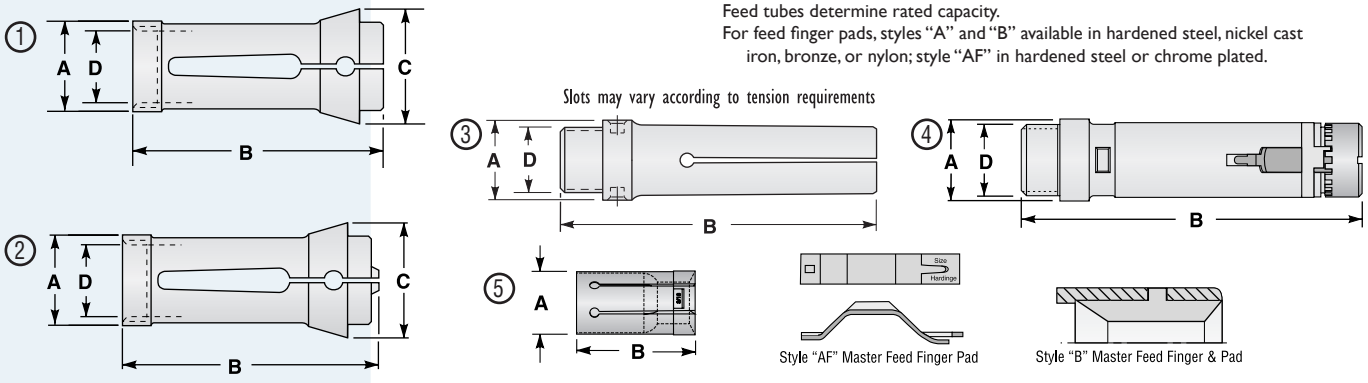
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
BROWN & SHARPE: ¾" Capacity – #1 Wire (Larger Capacity Solid Collets Available up to [21: 1 1/16" Round, 15/16" Hex, ¾" Square], [21SC: 1 1/16" R, 29/32" H, ¾" S])											
Collet, Solid	3089	1	21		1.248" (31.70)	2.813" (71.45)	1.675" (42.55)	—	¾" (19.05)	41/64" (16.27)	33/64" (13.10)
Collet, Solid	3087	2	21Y		1.248" (31.70)	2.875" (73.03)	1.675" (42.55)	—	¾" (19.05)	41/64" (16.27)	33/64" (13.10)
Collet, Solid Stop Collet	3221	1	21SC		1.248" (31.70)	2.813" (71.45)	1.675" (42.55)	1.041" x 24 RH	1 1/16" (26.99)	29/32" (23.02)	¾" (19.05)
Collet, Solid Stop Collet	3219	2	21SCY		1.248" (31.70)	2.875" (73.03)	1.675" (42.55)	1.041" x 24 RH	1 1/16" (26.99)	29/32" (23.02)	¾" (19.05)
Collet, Burring	See page 48										
Feed Finger, Solid	3095	3	21A		.995" (25.27)	5.313" (134.95)	—	.935" x 20 LH	¾" (19.05)	41/64" (16.27)	33/64" (13.10)
Feed Finger, Style "B" Master	6051	3	21A B4	6617	.995" (25.27)	5.313" (134.95)	—	.935" x 20 LH	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7013	4	21A AF4	7309[1] 7311[2]	.995" (25.27)	5.188" (131.78)	—	.935" x 20 LH	1/4" (6.35)	5/8" (15.88)	1/4" (6.35)	17/32" (13.50)
Bushing, Style "AF"	7359	5	21A AF4		.771" (19.58)	1.438" (36.53)	—	—	1/4" (6.35)	5/8" (15.88)	1/4" (6.35)	17/32" (13.50)
BROWN & SHARPE: 7/8" Capacity – #1 Wire (Larger Capacity Solid Collets Available up to [21: 1 1/16" Round, 15/16" Hex, ¾" Square], [21SC: 1 1/16" R, 29/32" H, ¾" S])											
Collet, Solid	3089	1	21		1.248" (31.70)	2.813" (71.45)	1.675" (42.55)	—	¾" (19.05)	41/64" (16.27)	33/64" (13.10)
Collet, Solid	3087	2	21Y		1.248" (31.70)	2.875" (73.03)	1.675" (42.55)	—	¾" (19.05)	41/64" (16.27)	33/64" (13.10)
Collet, Solid Stop Collet	3221	1	21SC		1.248" (31.70)	2.813" (71.45)	1.675" (42.55)	1.041" x 24 RH	1 1/16" (26.99)	29/32" (23.02)	¾" (19.05)
Collet, Solid Stop Collet	3219	2	21SCY		1.248" (31.70)	2.875" (73.03)	1.675" (42.55)	1.041" x 24 RH	1 1/16" (26.99)	29/32" (23.02)	¾" (19.05)
Collet, Burring	See page 48										
Feed Finger, Solid	3073	3	#12		1.170" (29.72)	4.000" (101.60)	—	1.060" x 20 LH	7/8" (22.23)	¾" (19.05)	39/64" (15.48)
Feed Finger, Style "B" Master	6047	3	#12 B5	6621	1.170" (29.72)	4.000" (101.60)	—	1.060" x 20 LH	¾" (19.05)	41/64" (16.27)	33/64" (13.10)

1 - Round
2 - Hexagon

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



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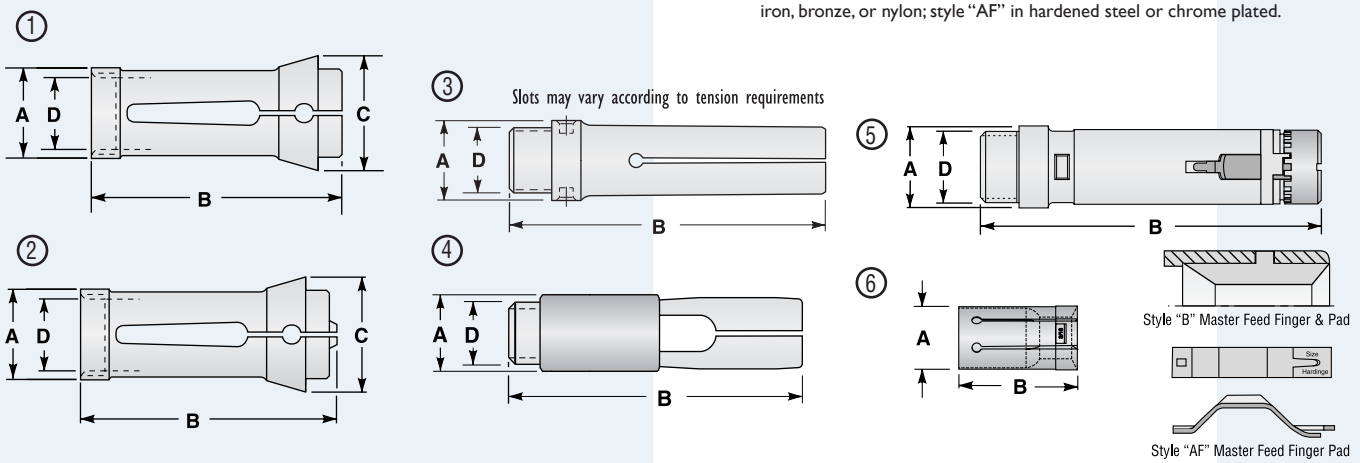
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
BROWN & SHARPE: 3/8" Capacity – #2 Wire (Larger Capacity Solid Collets Available up to [22: 1 1/4" Round, 1 1/16" Hex, 7/8" Square], [22SC: 1 1/4" R, 1 5/64" H, 7/8" S])											
Collet, Solid	3111	1	22		1.498" (38.05)	4.250" (107.95)	1.925" (48.90)	—	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, Solid	3109	2	22Y		1.498" (38.05)	4.312" (109.53)	1.925" (48.90)	—	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, Solid Stop Collet	3227	1	22SC		1.498" (38.05)	4.250" (107.95)	1.925" (48.90)	1.291" x 24 RH	1 1/4" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Collet, Burring	See page 48										
Feed Finger, Solid	3035	3	10		.630" (16.00)	2.938" (74.63)	— —	.560" x 20 LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
Feed Finger, Style "B" Master	6021	3	10 B10	6643	.630" (16.00)	2.938" (74.63)	— —	.560" x 20 LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
Feed Finger, Style "B" Master Adjustable Tension	6023	4	10 B10X	6643	.673" (17.09)	2.938" (74.63)	— —	.560" x 20 LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
									Round Min.	Round Max.	Hexagon Min. / Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7005	5	10 AF10	7321[1] 7323[2]	.630" (16.00)	2.781" (70.64)	— —	.560" x 20 LH	1/16" (1.59)	3/8" (9.53)	1/8" (3.18) / 5/16" (7.94)
Bushing, Style "AF"	7365	6	10 AF10		.395" (10.03)	.906" (23.01)	— —	—	1/16" (1.59)	9/32" (7.14)	1/8" (3.18) / 1/4" (6.35)
BROWN & SHARPE: 5/8" Capacity – #2 Wire (Larger Capacity Solid Collets Available up to [22: 1 1/4" Round, 1 1/16" Hex, 7/8" Square], [22SC: 1 1/4" R, 1 5/64" H, 7/8" S])											
Collet, Solid	3111	1	22		1.498" (38.05)	4.250" (107.95)	1.925" (48.90)	—	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, Solid	3109	2	22Y		1.498" (38.05)	4.312" (109.53)	1.925" (48.90)	—	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, Solid Stop Collet	3227	1	22SC		1.498" (38.05)	4.250" (107.95)	1.925" (48.90)	1.291" x 24 RH	1 1/4" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Collet, Burring	See page 48										
Feed Finger, Solid	3065	3	11AA		.990" (25.15)	3.438" (87.33)	— —	.810" x 20 LH	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)

1 - Round
2 - Hexagon

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



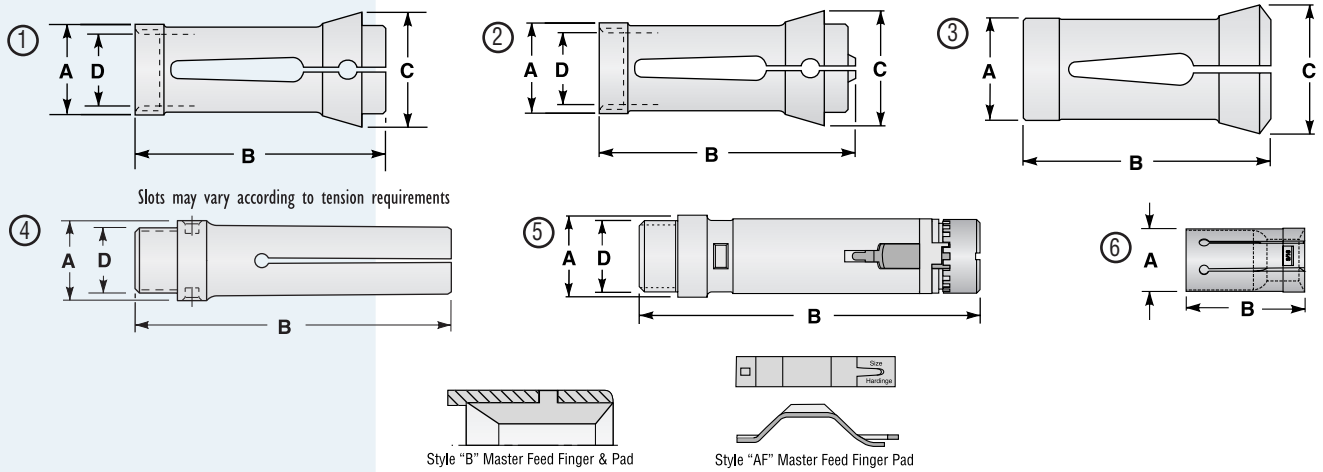
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
BROWN & SHARPE: 1" Capacity – #2 Wire (Larger Capacity Solid Collets Available up to [22: 1¼" Round, 1 1/16" Hex, ⅞" Square], [22SC: 1¼" R, 1 5/64" H, ⅞" S])											
Collet, Solid	3111	1	22		1.498" (38.05)	4.250" (107.95)	1.925" (48.90)	—	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, Solid	3109	2	22Y		1.498" (38.05)	4.312" (109.53)	1.925" (48.90)	—	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, Solid Stop Collet	3227	1	22SC		1.498" (38.05)	4.250" (107.95)	1.925" (48.90)	1.291" x 24 RH	1¼" (31.75)	1 5/64" (27.38)	⅞" (22.23)
Collet, Burring	See page 48										
Feed Finger, Solid	3115	4	22		1.300" (33.02)	6.000" (152.40)	— —	1.185" x 20 LH	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Feed Finger, Style "B" Master	6053	4	22 B6	6625	1.300" (33.02)	6.000" (152.40)	— —	1.185" x 20 LH	⅞" (22.23)	¾" (19.05)	39/64" (15.48)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7015	5	22 AF6	7313[1] 7315[2]	1.300" (33.02)	5.750" (146.05)	— —	1.185" x 20 LH	⅜" (9.53)	⅞" (22.23)	⅜" (9.53)	¾" (19.05)
Bushing, Style "AF"	7361	6	22 AF6		.990" (25.15)	1.688" (42.88)	— —	—	⅜" (9.53)	⅞" (22.23)	⅜" (9.53)	¾" (19.05)
BROWN & SHARPE: 1⅛" Capacity – #2 Wire (Larger Capacity Solid Collets Available up to 1 13/32" Round, 1 7/32" Hex, 1" Square)											
Collet, Solid	3121	3	22B		1.623" (41.22)	4.250" (107.95)	2.035" (51.69)	—	1⅛" (28.58)	31/32" (24.61)	25/32" (19.85)
Collet, Burring	See page 48										
Feed Finger, Solid	3119	4	22A		1.425" (36.20)	6.500" (165.10)	— —	1.310" x 20 LH	1⅛" (28.58)	31/32" (24.61)	25/32" (19.85)
Feed Finger, Style "B" Master	6055	4	22A B6	6625	1.425" (36.20)	6.500" (165.10)	— —	1.310" x 20 LH	⅞" (22.23)	¾" (19.05)	39/64" (15.48)

1 - Round
2 - Hexagon

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



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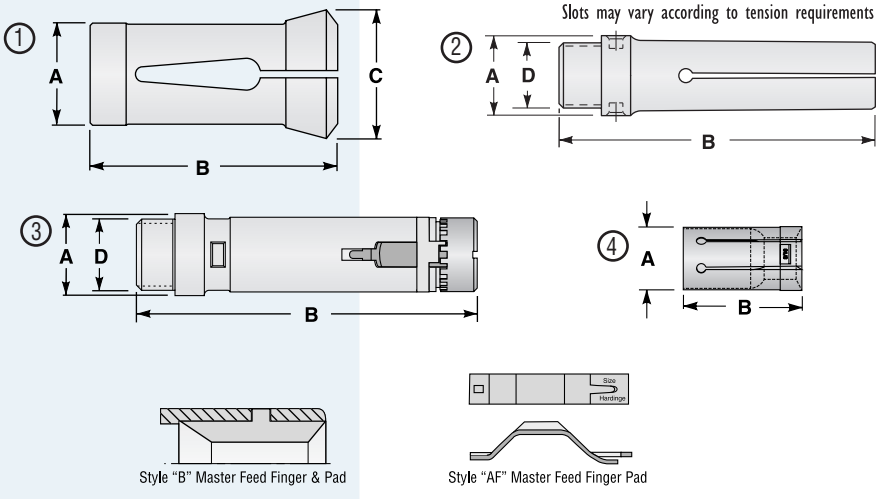
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
BROWN & SHARPE: 1¼" Capacity – #2 Wire (Larger Capacity Solid Collet Available up to 1 9/16" Round, 1 1/32" Hex, 1 3/32" Square)											
Collet, Solid	3125	1	22C		1.748" (44.40)	4.250" (107.95)	2.160" (54.86)	—	1¼" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Collet, Burring	See page 48										
Feed Finger, Solid	3133	2	22H		1.515" (38.48)	6.000" (152.40)	—	1.435" x 20 LH	1¼" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Feed Finger, Style "B" Master	6061	2	22H B7	6631	1.515" (38.48)	6.000" (152.40)	—	1.435" x 20 LH	1⅛" (28.58)	31/32" (24.61)	25/32" (19.85)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7019	3	22H AF7	7317[1] 7319[2]	1.515" (38.48)	5.750" (146.05)	—	1.435" x 20 LH	½" (12.70)	1⅛" (28.58)	½" (12.70)	15/16" (23.81)
Bushing, Style "AF"	7363	4	22H AF7		1.235" (31.37)	1.938" (49.23)	—	—	½" (12.70)	1⅛" (28.58)	½" (12.70)	15/16" (23.81)

1 - Round
2 - Hexagon

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



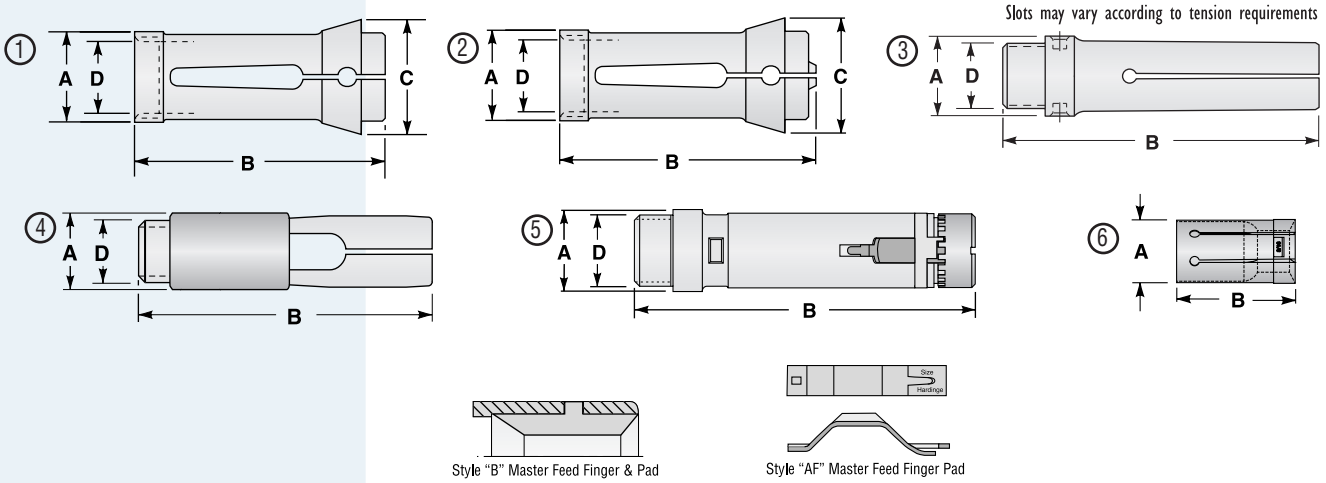
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
BROWN & SHARPE: 3/8" Capacity – #00 Hand (Larger Capacity Solid Collets Available up to [10: 11/16" Round, 9/16" Hex, 31/64" Square], [10SC: 9/16" R, 31/64" H, 25/64" S])											
Collet, Solid	3033	1	10		.936" (23.77)	2.500" (63.50)	1.115" (28.32)	—	1/2" (12.70)	27/64" (10.72)	11/32" (8.73)
Collet, Solid	3031	2	10Y		.936" (23.77)	2.562" (65.07)	1.115" (28.32)	—	1/2" (12.70)	27/64" (10.72)	11/32" (8.73)
Collet, Solid Stop Collet	3213	1	10SC		.936" (23.77)	2.500" (63.50)	1.115" (28.32)	.635" x 24 RH	9/16" (14.29)	31/64" (12.30)	25/64" (9.92)
Collet, Solid Stop Collet	3211	2	10SCY		.936" (23.77)	2.562" (65.07)	1.115" (28.32)	.635" x 24 RH	9/16" (14.29)	31/64" (12.30)	25/64" (9.92)
Collet, Burring	See page 48										
Feed Finger, Solid	3035	3	10		.630" (16.00)	2.938" (74.63)	—	.560" x 20 LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
Feed Finger, Style "B" Master	6021	3	10 B10	6643	.630" (16.00)	2.938" (74.63)	—	.560" x 20 LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
Feed Finger, Style "B" Master Adjustable Tension	6023	4	10 B10X	6643	.673" (17.09)	2.938" (74.63)	—	.560" x 20 LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7005	5	10 AF10	7321[1] 7323[2]	.630" (16.00)	2.781" (70.64)	—	.560" x 20 LH	1/16" (1.59)	3/8" (9.53)	1/8" (3.18)	5/16" (7.94)
Bushing, Style "AF"	7365	6	10 AF10		.395" (10.03)	.906" (23.01)	—	—	1/16" (1.59)	9/32" (7.14)	1/8" (3.18)	1/4" (6.35)

1 - Round
2 - Hexagon

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



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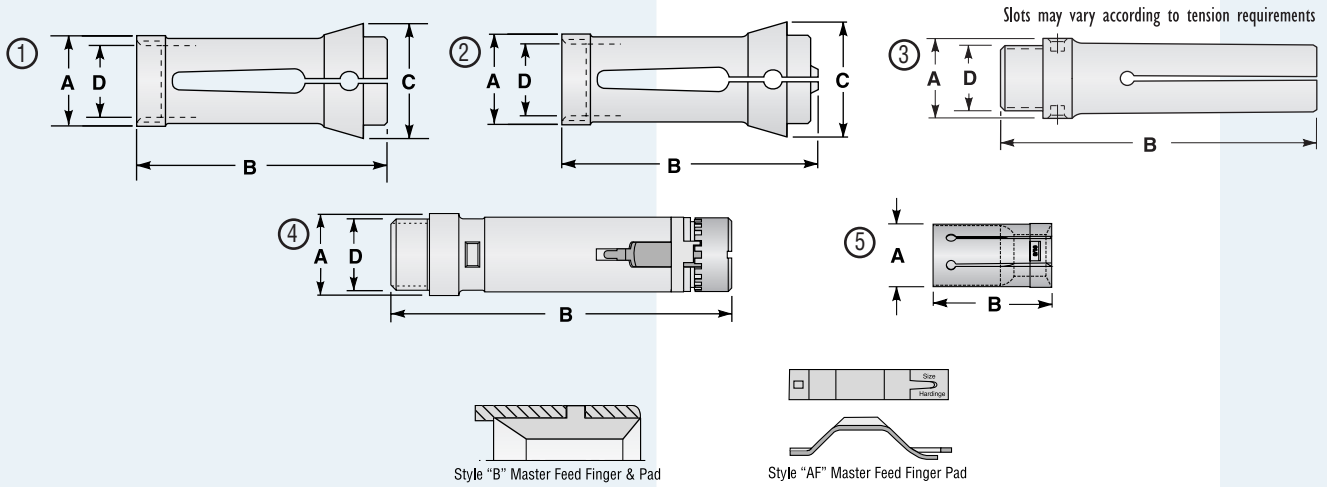
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
BROWN & SHARPE: ½" Capacity – #00 Hand (Larger Capacity Solid Collets Available up to [10: 11/16" Round, 9/16" Hex, 31/64" Square], [10SC: 9/16" R, 31/64" H, 25/64" S])											
Collet, Solid	3033	1	10		.936" (23.77)	2.500" (63.50)	1.115" (28.32)	—	½" (12.70)	27/64" (10.72)	11/32" (8.73)
Collet, Solid	3031	2	10Y		.936" (23.77)	2.562" (65.07)	1.115" (28.32)	—	½" (12.70)	27/64" (10.72)	11/32" (8.73)
Collet, Solid Stop Collet	3213	1	10SC		.936" (23.77)	2.500" (63.50)	1.115" (28.32)	.635" x 24 RH	9/16" (14.29)	31/64" (12.30)	25/64" (9.92)
Collet, Solid Stop Collet	3211	2	10SCY		.936" (23.77)	2.562" (65.07)	1.115" (28.32)	.635" x 24 RH	9/16" (14.29)	31/64" (12.30)	25/64" (9.92)
Collet, Burring	See page 48										
Feed Finger, Solid	3037	3	10A		.675" (17.15)	2.938" (74.63)	— —	.622" x 32 LH	½" (12.70)	27/64" (10.72)	11/32" (8.73)
Feed Finger, Style "B" Master	6029	3	10A B10	6643	.675" (17.15)	2.938" (74.63)	— —	.622" x 32 LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
Feed Finger, Style "B" Master	6031	3	10A B10AM	6649	.675" (17.15)	2.938" (74.63)	— —	.622" x 32 LH	7/16" (11.11)	3/8" (9.53)	19/64" (7.54)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7007	4	10A AF10A	7321[1] 7323[2]	.675" (17.15)	2.781" (70.64)	— —	.622" x 32 LH	1/16" (1.59)	3/8" (9.53)	1/8" (3.18)	5/16" (7.94)
Bushing, Style "AF"	7367	5	10 AF10A		.492" (12.50)	1.156" (29.36)	— —	—	1/16" (1.59)	3/8" (9.53)	1/8" (3.18)	5/16" (7.94)

1 - Round
2 - Hexagon

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



Style "B" Master Feed Finger & Pad

Style "AF" Master Feed Finger Pad

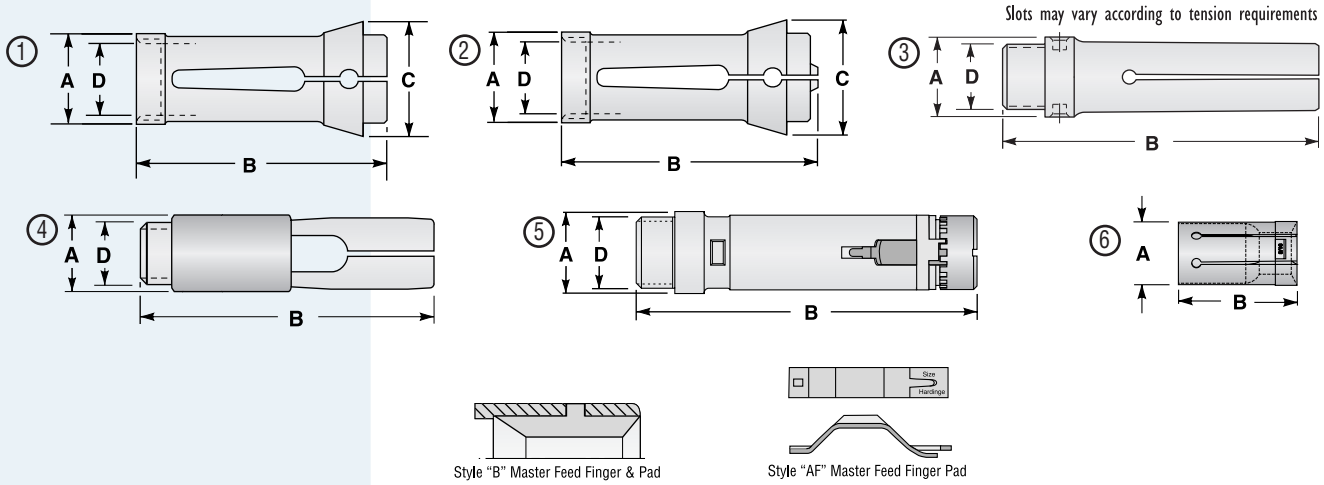
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
BROWN & SHARPE: 3/8" Capacity – #0 Hand (Larger Capacity Solid Collets Available up to [11: 7/8" Round, 3/4" Hex, 5/8" Square], [11SC: 55/64" R, 47/64" H, 19/32" S])											
Collet, Solid	3057	1	11		1.061" (26.95)	2.875" (73.03)	1.490" (37.85)	—	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
Collet, Solid	3055	2	11Y		1.061" (26.95)	2.938" (74.63)	1.490" (37.85)	—	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
Collet, Solid Stop Collet	3217	1	11SC		1.061" (26.95)	2.875" (73.03)	1.490" (37.85)	.916" x 24 RH	55/64" (21.83)	47/64" (18.65)	19/32" (15.08)
Collet, Solid Stop Collet	3215	2	11SCY		1.061" (26.95)	2.938" (74.63)	1.490" (37.85)	.916" x 24 RH	55/64" (21.83)	47/64" (18.65)	19/32" (15.08)
Collet, Burring	See page 48										
Feed Finger, Solid	3035	3	10		.630" (16.00)	2.938" (74.63)	—	.560" x 20 LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
Feed Finger, Style "B" Master	6021	3	10 B10	6643	.630" (16.00)	2.938" (74.63)	—	.560" x 20 LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
Feed Finger, Style "B" Master Adjustable Tension	6023	4	10 B10X	6643	.673" (17.09)	2.938" (74.63)	—	.560" x 20 LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7005	5	10 AF10	7321[1] 7323[2]	.630" (16.00)	2.781" (70.64)	—	.560" x 20 LH	1/16" (1.59)	3/8" (9.53)	1/8" (3.18)	5/16" (7.94)
Bushing, Style "AF"	7365	6	10 AF10		.395" (10.03)	.906" (23.01)	—	—	1/16" (1.59)	9/32" (7.14)	1/8" (3.18)	1/4" (6.35)

1 - Round
2 - Hexagon

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



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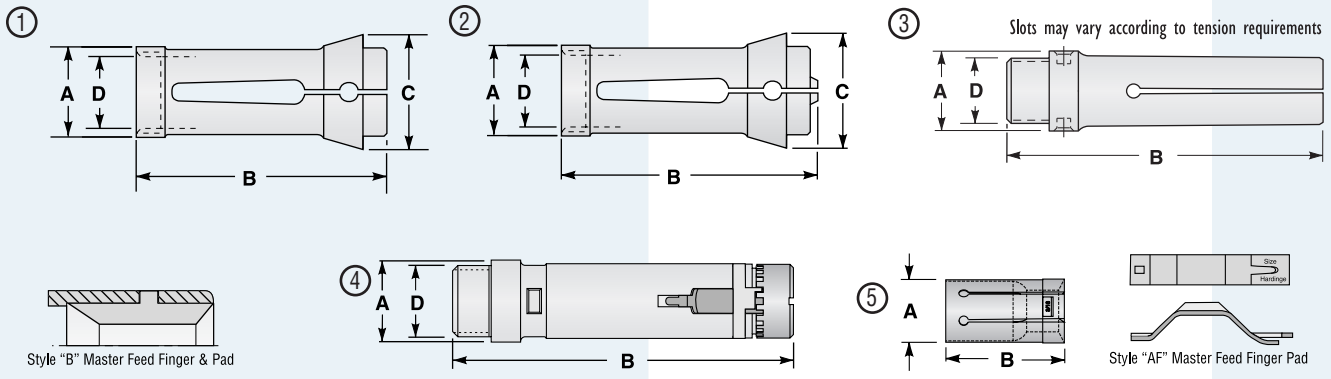
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
BROWN & SHARPE: 5/8" Capacity – #0 Hand (Larger Capacity Solid Collets Available up to [11: 7/8" Round, 3/4" Hex, 5/8" Square], [11SC: 55/64" R, 47/64" H, 19/32" S])											
Collet, Solid	3057	1	11		1.061" (26.95)	2.875" (73.03)	1.490" (37.85)	—	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
Collet, Solid	3055	2	11Y		1.061" (26.95)	2.938" (74.63)	1.490" (37.85)	—	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
Collet, Solid Stop Collet	3217	1	11SC		1.061" (26.95)	2.875" (73.03)	1.490" (37.85)	.916" x 24 RH	55/64" (21.83)	47/64" (18.65)	19/32" (15.08)
Collet, Solid Stop Collet	3215	2	11SCY		1.061" (26.95)	2.938" (74.63)	1.490" (37.85)	.916" x 24 RH	55/64" (21.83)	47/64" (18.65)	19/32" (15.08)
Collet, Burring	See page 48										
Feed Finger, Solid	3065	3	11AA		.990" (25.15)	3.438" (87.33)	— —	.810" x 20 LH	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
BROWN & SHARPE: 3/4" Capacity – #0 Hand (Larger Capacity Solid Collet Available up to 1" Round, 27/32" Hex, 45/64" Square)											
Collet, Solid	3071	1	11C		1.186" (30.12)	2.875" (73.03)	1.490" (37.85)	—	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, Burring	See page 48										
Feed Finger, Solid	3095	3	21A		.985" (25.02)	5.313" (134.95)	— —	.935" x 20 LH	3/4" (19.05)	41/64" (16.27)	33/64" (13.10)
Feed Finger, Style "B" Master	6051	3	21A B4	6617	.985" (25.02)	5.250" (133.35)	— —	.935" x 20 LH	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7013	4	21A AF4	7309[1] 7311[2]	.985" (25.02)	5.188" (131.78)	— —	.935" x 20 LH	1/4" (6.35)	5/8" (15.88)	1/4" (6.35)	17/32" (13.50)
Bushing, Style "AF"	7359	5	21A AF4		.771" (19.58)	1.438" (36.53)	— —	—	1/4" (6.35)	5/8" (15.88)	1/4" (6.35)	17/32" (13.50)

1 - Round
2 - Hexagon

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



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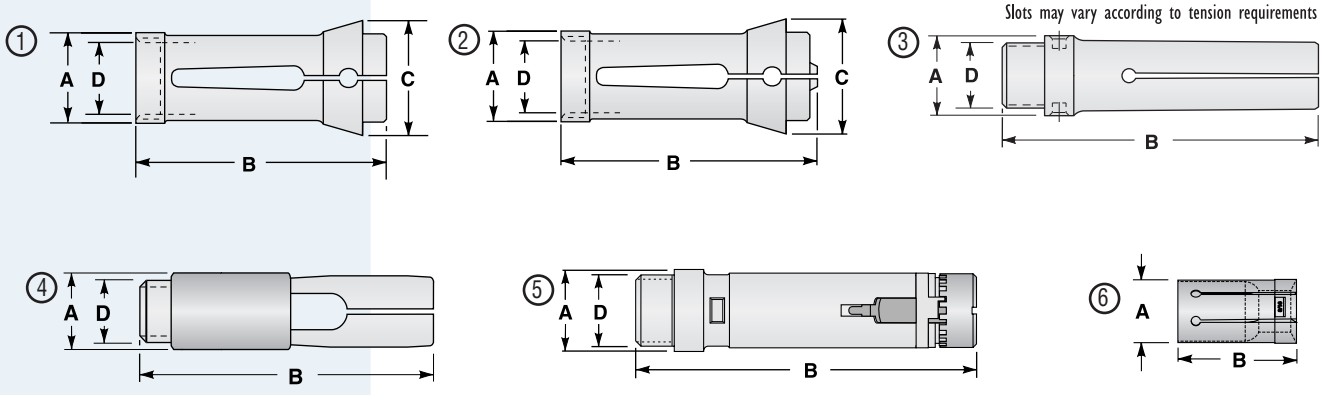
Spindle Tooling for Automatics

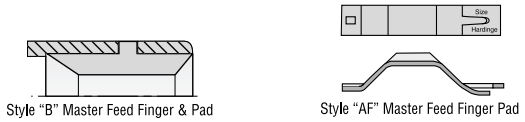
HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
BROWN & SHARPE: 3/8" Capacity – #2 Hand (Larger Capacity Solid Collets Available up to [22: 1¼" Round, 1 1/16" Hex, 7/8" Square], [22SC: 1¼" R, 1 5/64" H, 7/8" S])											
Collet, Solid	3111	1	22		1.498" (38.05)	4.250" (107.95)	1.925" (48.90)	—	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, Solid	3109	2	22Y		1.498" (38.05)	4.312" (109.53)	1.925" (48.90)	—	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, Solid Stop Collet	3227	1	22SC		1.498" (38.05)	4.250" (107.95)	1.95" (48.90)	1.291" x 24 RH	1¼" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Collet, Burring	See page 48										
Feed Finger, Solid	3035	3	10		.630" (16.00)	2.938" (74.63)	— —	.560" x 20 LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
Feed Finger, Style "B" Master	6021	3	10 B10	6643	.630" (16.00)	2.938" (74.63)	— —	.560" x 20 LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
Feed Finger, Style "B" Master Adjustable Tension	6023	4	10 B10X	6643	.673" (17.09)	2.938" (74.63)	— —	.560" x 20 LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7005	5	10 AF10	7321[1] 7323[2]	.630" (16.00)	2.781" (70.64)	— —	.560" x 20 LH	1/16" (1.59)	3/8" (9.53)	1/8" (3.18)	5/16" (7.94)
Bushing, Style "AF"	7365	6	10 AF10		.395" (10.03)	.906" (23.01)	— —	—	1/16" (1.59)	9/32" (7.14)	1/8" (3.18)	1/4" (6.35)

1 - Round
2 - Hexagon

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.





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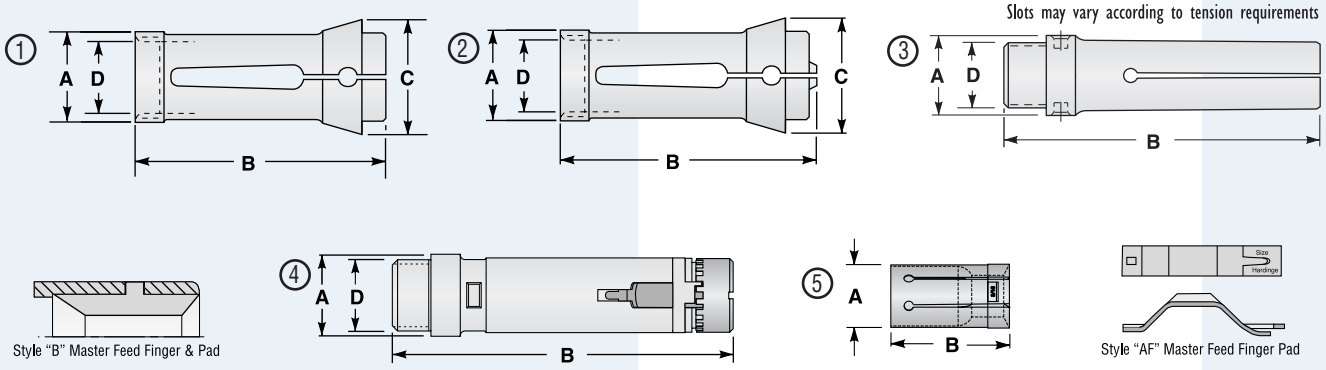
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
BROWN & SHARPE: 5/8" Capacity – #2 Hand (Larger Capacity Solid Collets Available up to [22: 1¼" Round, 1 1/16" Hex, 7/8" Square], [22SC: 1¼" R, 1 5/64" H, 7/8" S])											
Collet, Solid	3111	1	22		1.498" (38.05)	4.250" (107.95)	1.925" (48.90)	—	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, Solid	3109	2	22Y		1.498" (38.05)	4.312" (109.53)	1.925" (48.90)	—	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, Solid Stop Collet	3227	1	22SC		1.498" (38.05)	4.250" (107.95)	1.925" (48.90)	1.291" x 24 RH	1¼" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Collet, Burring	See page 48										
Feed Finger, Solid	3065	3	11AA		.990" (25.15)	3.438" (87.33)	— —	.810" x 20 LH	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
BROWN & SHARPE: 1" Capacity – #2 Hand (Larger Capacity Solid Collets Available up to [22: 1¼" Round, 1 1/16" Hex, 7/8" Square], [22SC: 1¼" R, 1 5/64" H, 7/8" S])											
Collet, Solid	3111	1	22		1.498" (38.05)	4.250" (107.95)	1.925" (48.90)	—	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, Solid	3109	2	22Y		1.498" (38.05)	4.312" (109.53)	1.925" (48.90)	—	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, Solid Stop Collet	3227	1	22SC		1.498" (38.05)	4.250" (107.95)	1.925" (48.90)	1.291" x 24 RH	1¼" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Collet, Burring	See page 48										
Feed Finger, Solid	3115	3	22		1.300" (33.02)	6.000" (152.40)	— —	1.185" x 20 LH	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Feed Finger, Style "B" Master	6053	3	22 B6	6625	1.300" (33.02)	6.000" (152.40)	— —	1.185" x 20 LH	7/8" (22.23)	3/4" (19.05)	39/64" (15.48)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7015	4	22 AF6	7313[1] 7315[2]	1.300" (33.02)	5.750" (146.05)	— —	1.185" x 20 LH	3/8" (9.53)	7/8" (22.23)	3/8" (9.53)	3/4" (19.05)
Bushing, Style "AF"	7361	5	22 AF6		.990" (25.15)	1.688" (42.88)	— —	—	3/8" (9.53)	7/8" (22.23)	3/8" (9.53)	3/4" (19.05)

1 - Round
2 - Hexagon

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



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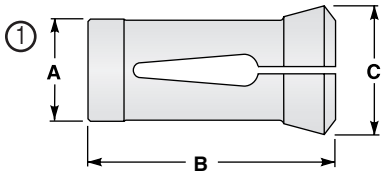
Spindle Tooling for Automatics

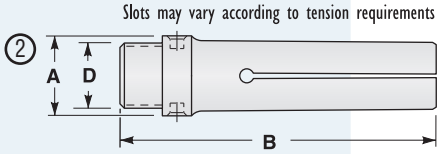
HARDINGE

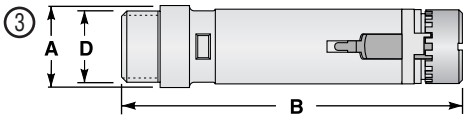
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
BROWN & SHARPE: 1¼" Capacity – #2 Hand (Larger Capacity Solid Collet Available up to 1 9/16" Round, 1 11/32" Hex, 1 3/32" Square)											
Collet, Solid	3125	1	22C		1.748" (44.40)	4.250" (107.95)	2.160" (54.86)	—	1¼" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Collet, Burring	See page 48										
Feed Finger, Solid	3133	2	22H		1.515" (38.48)	6.000" (152.40)	—	1.435" x 20 LH	1¼" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Feed Finger, Style "B" Master	6061	2	22H B7	6631	1.515" (38.48)	6.000" (152.40)	—	1.435" x 20 LH	1⅛" (28.58)	31/32" (24.61)	25/32" (19.85)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7019	3	22H AF7	7317[1] 7319[2]	1.515" (38.48)	5.750" (146.05)	—	1.435" x 20 LH	½" (12.70)	1⅛" (28.58)	½" (12.70)	15/16" (23.81)
Bushing, Style "AF"	7363	4	22H AF7		1.235" (31.37)	1.938" (49.23)	—	—	½" (12.70)	1⅛" (28.58)	½" (12.70)	15/16" (23.81)

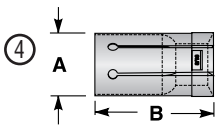
1 - Round
2 - Hexagon

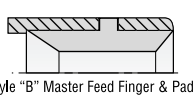
NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.

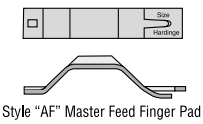









Style "B" Master Feed Finger & Pad


Style "AF" Master Feed Finger Pad

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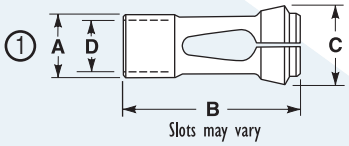
Spindle Tooling for Automatic Lathes

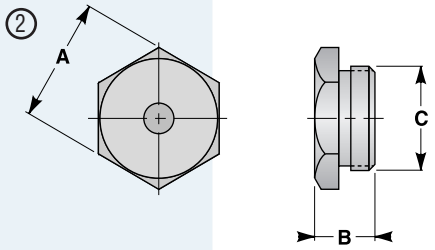
HARDINGE

Description	Hardinge Part Number	Figure	Style	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
BROWN & SHARPE: Burring Collets (Larger Capacity Solid Collets Available up to [00G: 3/8" Round, 21/64" Hex, 17/64" Square], [0G: 5/8" R, 35/64" H, 7/16" S], [2G: 1" R, 7/8" H, 11/16" S])										
Collet, Burring	3005	1	00G	.490" (12.45)	1.406" (35.71)	.625" (15.88)	.417" x 32 LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
Collet, Burring	3059	1	0G	.811" (20.60)	2.031" (51.59)	.940" (23.88)	.687" x 20 LH	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
Collet, Burring	3113	1	2G	1.186" (30.12)	2.469" (62.71)	1.380" (35.05)	1.062" x 20 LH	1" (25.40)	55/64" (21.83)	45/64" (17.86)

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
Neoprene chip and coolant seals not included with collets (see Chapter 4).
Feed tubes determine rated capacity.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



Description	Hardinge Part Number	Figure	Style	Dimensions A Hexagon Dimension	Dimensions B Overall Length	Dimensions C Thread
BROWN & SHARPE: Stop Nuts						
Nut, Burring	3005-36	2	00G	5/8" (15.88)	11/32" (8.73)	.414" x 32 LH
Nut, Burring	3059-36	2	0G	7/8" (22.23)	1/2" (12.70)	.685" x 20 LH
Nut, Burring	3113-36	2	2G	1 1/4" (31.75)	5/8" (15.88)	1.061" x 20 LH



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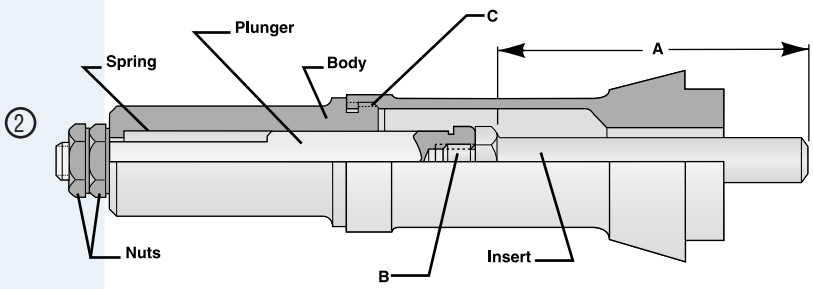
Spindle Tooling for Automatic Lathes

HARDINGE

Description	Hardinge Part Number	Figure	Collet Type	Dimensions A Maximum Stop Depth	B Stop Rod Thread	C Stop Body Thread
EJECTOR STOPS						
SE10 Assembly[6] including:	3249	2	10SC	2" (50.80)	#10 x 32 RH	.634" x 24 RH
— Body	3251					
— Plunger	3253					
— Insert	3255					
— Spring	3257					
— Nuts [2]	3-4835					
SE11 Assembly[6] including:	3265	2	11SC	2¼" (57.15)	5⁄16" x 24 RH	.915" x 24 RH
— Body	3267					
— Plunger	1061					
— Insert	1063					
— Spring	1065					
— Nuts [2]	U-4141-C					
SE21 Assembly[6] including:	1057	2	21SC	2¼" (57.15)	5⁄16" x 24 RH	1.033" x 24 RH
— Body	1059					
— Plunger	1061					
— Insert	1063					
— Spring	1065					
— Nuts [2]	U-4141-C					
SE22 Assembly[6] including:	3273	2	22SC	3 9⁄16" (90.49)	3⁄8" x 24 RH	1.288" x 24 RH
— Body	3275					
— Plunger	3277					
— Insert	3279					
— Spring	3281					
— Nuts [2]	UA-4034-C					

6 - Collet sold separately



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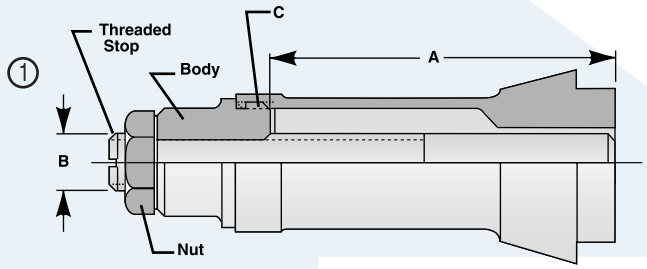
Spindle Tooling for Automatics

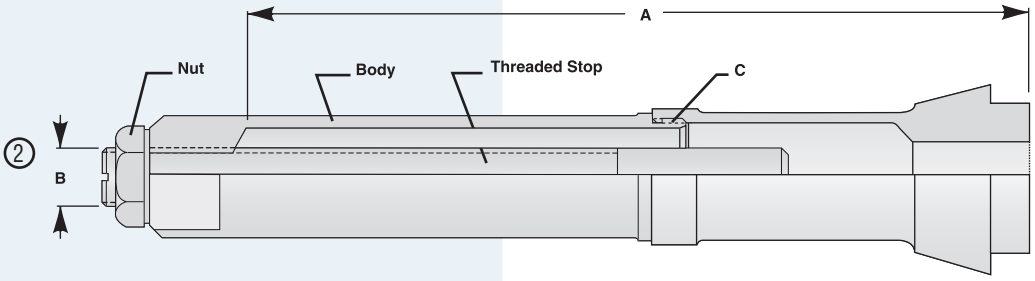
HARDINGE

Description	Hardinge Part Number	Figure	Collet Type	Dimensions A Maximum Stop Depth	B Stop Rod Thread	C Stop Body Thread
SOLID STOPS						
SS10 Assembly[6] including:	3241	1	10SC	2⅛" (53.98)	¼" x 28 RH	.634" x 24 RH
— Body	3243					
— Threaded Stop	3245					
— Nut	3-4835					
SS11 Assembly[6] including:	3259	1	11SC	2½" (63.50)	⅜" x 24 RH	.915" x 24 RH
— Body	3261					
— Threaded Stop	3263					
— Nut	U-4141-C					
SS21 Assembly[6] including:	1049	1	21SC	2⁷⁄₁₆" (61.91)	½" x 20 RH	1.033" x 24 RH
— Body	1051					
— Threaded Stop	1053					
— Nut	5-1466-B					
SS22 Assembly[6] including:	3269	1	22SC	3¾" (95.25)	½" x 20 RH	1.288" x 24 RH
— Body	3271					
— Threaded Stop	1071					
— Nut	5-1466-B					



LONG STOPS						
LS21 Assembly[6] including:	1067	2	21SC	7" (177.80)	½" x 20 RH	1.033" x 24 RH
— Body	1069					
— Threaded Stop	1071					
— Nut	5-1466-B					

6 - Collet sold separately



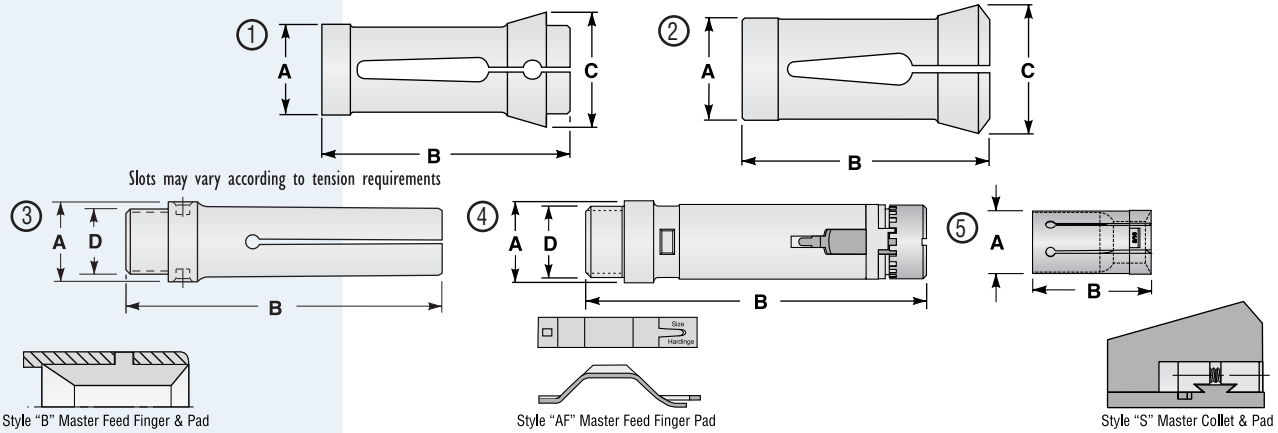
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
BROWN & WARD: 5/8" Capacity (Larger Capacity Solid Collet Available up to 21/32" Round, 9/16" Hex, 29/64" Square)											
Collet, Solid	MP3563	1			.874" (22.20)	2.812" (71.42)	1.255" (31.88)	—	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
BROWN & WARD: 3/4" Capacity (Larger Capacity Solid Collet Available up to 25/32" Round, 43/64" Hex, 35/64" Square)											
Collet, Solid	MP3463	1			1.062" (26.97)	2.250" (57.15)	1.380" (35.05)	—	3/4" (19.05)	41/64" (16.27)	33/64" (13.10)
BSA: 1 1/16" Capacity – #98 (Larger Capacity Solid Collet Available up to 1 13/32" Round, 1 7/32" Hex, 1" Square)											
Collet, Solid	3301	2			1.623" (41.22)	4.250" (107.95)	2.130" (54.10)	—	1 1/16" (26.99)	29/32" (23.02)	3/4" (19.05)
Feed Finger, Solid	3303	3			1.490" (37.85)	6.000" (152.40)	— —	1.310" x 16 LH	1 1/16" (26.99)	29/32" (23.02)	3/4" (19.05)
Feed Finger, Style "B" Master	MP3699	3	B6	6625	1.490" (37.85)	6.000" (152.40)	— —	1.310" x 16 LH	7/8" (22.23)	3/4" (19.05)	39/64" (15.48)
BSA: 1 1/2" Capacity – #138 (Larger Capacity Solid Collet Available up to 1 7/8" Round, 1 5/8" Hex, 1 21/64" Square)											
Collet, Solid	3305	2			2.374" (60.30)	4.500" (114.30)	2.815" (71.50)	—	1 1/2" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
Collet, Style "S" Master	5007	2	S15	5605[3]	2.374" (60.30)	4.344" (110.34)	2.815" (71.50)	—	1 1/2" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
Feed Finger, Solid	3307	3			2.030" (51.56)	6.000" (152.40)	— —	1.872" x 16 LH	1 1/2" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
Feed Finger, Solid Outside	MP3501	3			2.250" (57.15)	8.125" (206.38)	— —	2.247" x 14 RH	1 1/2" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
Feed Finger, Style "B" Master	6001	3	B16	6657	2.030" (51.56)	6.000" (152.40)	— —	1.872" x 16 LH	1 1/2" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7021	4	AF16	7325[1] 7327[2]	2.030" (51.56)	5.688" (144.45)	— —	1.872" x 16 LH	5/8" (15.88)	1 7/16" (36.51)	5/8" (15.88)	1 1/4" (31.75)
Bushing, Style "AF"	7369	5	AF16		1.610" (40.89)	2.375" (60.33)	— —	—	5/8" (15.88)	1 7/16" (36.51)	5/8" (15.88)	1 1/4" (31.75)

1 - Round
2 - Hexagon
3 - Master Collet Pads available in smooth or serrated order holes

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.



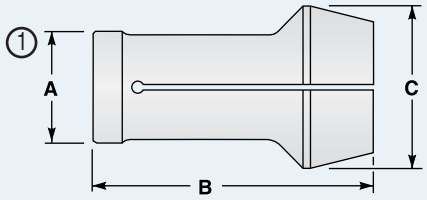
Spindle Tooling for Automatics

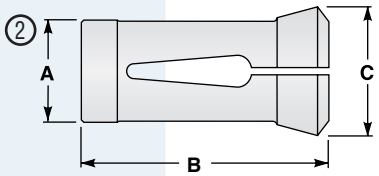
HARDINGE

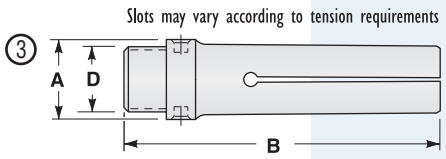
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity: Round	Hexagon	Square
BSA: 2" Capacity – #168 (Larger Capacity Solid Collet Available up to 2 9/16" Round, 2 7/32" Hex, 1 13/16" Square)											
Collet, Solid	3309	2			2.872" (72.95)	4.531" (115.09)	3.415" (86.74)	—	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
Collet, Style "S" Master	5009	2	S20	5609[3]	2.872" (72.95)	4.406" (111.91)	3.415" (86.74)	—	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
Feed Finger, Solid	3311	3			2.465" (62.61)	6.500" (165.10)	— —	2.309" x 16 LH	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
Feed Finger, Solid Outside	MP3885	3			2.936" (74.57)	9.093" (230.96)	— —	2.873" x 16 RH	2 15/32" (62.71)	2 9/64" (54.37)	1 3/4" (44.45)
Feed Finger, Style "B" Master	6003	3	B20	6661	2.465" (62.61)	6.500" (165.10)	— —	2.309" x 16 LH	1 3/4" (44.45)	1 33/64" (38.50)	1 15/64" (31.35)
CLEVELAND: 3/8" Capacity – Push Out (Larger Capacity Solid Collet Available up to 33/64" Round, 7/16" Hex, 23/64" Square)											
Collet, Solid	4097	1			.748" (19.00)	2.500" (63.50)	.845" (21.46)	—	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
Feed Finger, Solid	MP1265	3			.545" (13.84)	3.500" (88.90)	— —	.498" x 24 RH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
Feed Finger, Style "B" Master	6081	3	B1	6601	.545" (13.84)	3.500" (88.90)	— —	.498" x 24 RH	5/16" (7.94)	17/64" (6.75)	7/32" (5.56)
CLEVELAND: 1/2" Capacity – Push Out (Larger Capacity Solid Collet Available up to 5/8" Round, 17/32" Hex, 7/16" Square)											
Collet, Solid	MP1073	1			.936" (23.77)	2.750" (69.85)	.690" (17.53)	—	1/2" (12.70)	27/64" (10.72)	11/32" (8.73)
Feed Finger, Solid	4103	3			.765" (19.43)	3.500" (88.90)	— —	.685" x 24 RH	1/2" (12.70)	27/64" (10.72)	11/32" (8.73)
Feed Finger, Style "B" Master	MP3075	3	B2	6607	.765" (19.43)	3.500" (88.90)	— —	.685" x 24 RH	7/16" (11.11)	3/8" (9.53)	19/64" (7.54)
CLEVELAND: 9/16" Capacity – Push Out (Larger Capacity Solid Collet Available up to 11/16" Round, 19/32" Hex, 31/64" Square)											
Collet, Solid	MP2720	1			.996" (25.30)	2.750" (69.85)	.755" (19.18)	—	9/16" (14.29)	31/64" (12.30)	25/64" (9.92)
Feed Finger, Solid	MP2721	3			.835" (21.21)	4.000" (101.60)	— —	.748" x 24 RH	9/16" (14.29)	31/64" (12.30)	25/64" (9.92)
Feed Finger, Style "B" Master	6085	3	B3	6611	.835" (21.21)	4.000" (101.60)	— —	.748" x 24 RH	1/2" (12.70)	27/64" (10.72)	11/32" (8.73)

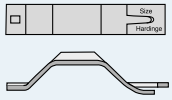
3 - Master Collet Pads available in smooth or serrated order holes

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.

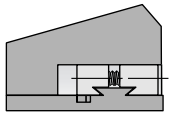







Style "AF" Master Feed Finger Pad

Style "B" Master Feed Finger & Pad

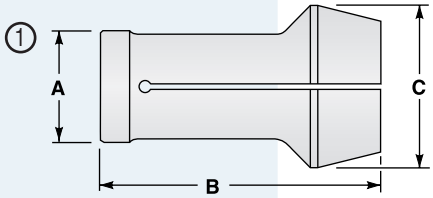

Style "S" Master Collet & Pad

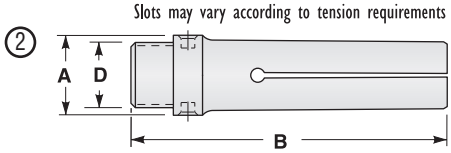
Spindle Tooling for Automatics

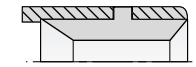
HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
CLEVELAND: 5/8" Capacity – Push Out (Larger Capacity Solid Collet Available up to 13/16" Round, 45/64" Hex, 37/64" Square)											
Collet, Solid	MP1074	1			1.090" (27.69)	3.000" (76.20)	.940" (23.88)	—	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
Feed Finger, Solid	MP1372	2			.835" (21.21)	4.000" (101.60)	— —	.750" x 24 RH	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
Feed Finger, Style "B" Master	6085	2	B3	6611	.835" (21.21)	4.000" (101.60)	— —	.750" x 24 RH	1/2" (12.70)	27/64" (10.72)	11/32" (8.73)
CLEVELAND: 7/8" Capacity – Push Out (Larger Capacity Solid Collet Available up to 1 1/16" Round, 59/64" Hex, 3/4" Square)											
Collet, Solid	4113	1			1.371" (34.82)	3.250" (82.55)	1.190" (30.23)	—	7/8" (22.23)	3/4" (19.05)	39/64" (15.48)
Feed Finger, Solid	4115	2			1.110" (28.19)	4.000" (101.60)	— —	1.029" x 24 RH	7/8" (22.23)	3/4" (19.05)	39/64" (15.48)
Feed Finger, Style "B" Master	MP3097	2	B5	6621	1.110" (28.19)	4.000" (101.60)	— —	1.029" x 24 RH	3/4" (19.05)	41/64" (16.27)	33/64" (13.10)
CLEVELAND: 1 1/16" Capacity – Push Out (Larger Capacity Solid Collet Available up to 1 1/4" Round, 1 5/64" Hex, 57/64" Square)											
Collet, Solid	4117	1			1.558" (39.57)	3.875" (98.43)	1.375" (34.93)	—	1 1/16" (26.99)	29/32" (23.02)	3/4" (19.05)
Feed Finger, Solid	4119	2			1.295" (32.89)	4.438" (112.73)	— —	1.216" x 24 RH	1 1/16" (26.99)	29/32" (23.02)	3/4" (19.05)
Feed Finger, Style "B" Master	MP3107	2	B6	6625	1.295" (32.89)	4.438" (112.73)	— —	1.216" x 24 RH	7/8" (22.23)	3/4" (19.05)	39/64" (15.48)
CLEVELAND: 1 1/4" Capacity – Push Out (Larger Capacity Solid Collet Available up to 1 1/2" Round, 1 19/64" Hex, 1 3/64" Square)											
Collet, Solid	4121	1			1.933" (49.10)	4.500" (114.30)	1.655" (42.04)	—	1 1/4" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Feed Finger, Solid	MP1375	2			1.610" (40.89)	4.688" (119.08)	— —	1.497" x 20 RH	1 1/4" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Feed Finger, Style "B" Master	MP3118	2	B7	6631	1.610" (40.89)	4.688" (119.08)	— —	1.497" x 20 RH	1 1/8" (28.58)	31/32" (24.61)	25/32" (19.85)
CLEVELAND: 1 3/8" Capacity – Push Out (Larger Capacity Solid Collet Available up to 1 1/2" Round, 1 19/64" Hex, 1 3/64" Square)											
Collet, Solid	4121	1			1.933" (49.10)	4.500" (114.30)	1.655" (42.04)	—	1 3/8" (34.93)	1 3/16" (30.16)	31/32" (24.61)
Feed Finger, Solid	4126	2			1.708" (43.38)	4.688" (119.08)	— —	1.590" x 20 RH	1 3/8" (34.93)	1 3/16" (30.16)	31/32" (24.61)
Feed Finger, Style "B" Master	6093	2	B7	6631	1.708" (43.38)	4.688" (119.08)	— —	1.590" x 20 RH	1 1/8" (28.58)	31/32" (24.61)	25/32" (19.85)

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.





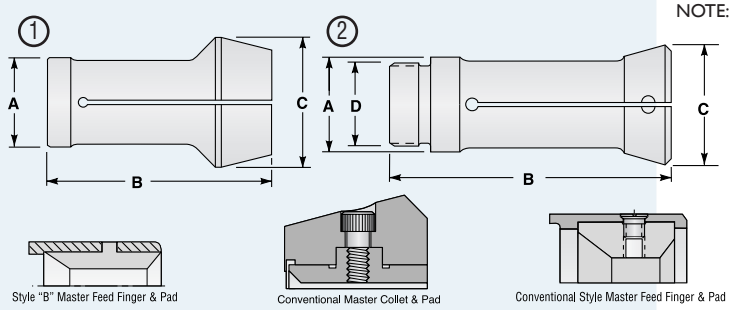

Style "B" Master Feed Finger & Pad

To Order Contact: Exact Tooling / www.exacttooling.com / sales@exacttooling.com / 888-988-8820

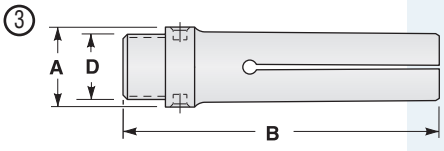
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
CLEVELAND: 1½" Capacity – Push Out (Larger Capacity Solid Collet Available up to 1½" Round, 1 19/64" Hex, 1 3/64" Square)											
Collet, Solid	4129	1			2.370" (60.20)	4.500" (114.30)	2.190" (55.63)	—	1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
Feed Finger, Solid	MP1377	3			2.045" (51.94)	5.063" (128.60)	— —	1.903" x 20 RH	1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
Feed Finger, Style "B" Master	6097	3	B16	6657	2.045" (51.94)	5.063" (128.60)	— —	1.903" x 20 RH	1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
CLEVELAND: 2" Capacity – Push Out (Larger Capacity Solid Collet Available up to 2 21/32" Round, 2 19/64" Hex, 1⅞" Square)											
Collet, Solid	MP1081	1			3.057" (77.65)	6.000" (152.40)	3.535" (89.79)	—	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
Feed Finger, Solid	MP1812	3			2.670" (67.82)	6.500" (165.10)	— —	2.496" x 20 RH	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
Feed Finger, Style "B" Master	6099	3	B22	6665	2.670" (67.82)	6.500" (165.10)	— —	2.496" x 20 RH	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
CLEVELAND: 2½" Capacity – AB – Draw In [10° Head Angle] (Larger Capacity Solid Collet Available up to 2 31/32" Round, 2 5/32" Hex, 1¾" Square)											
Collet, Solid	4133	2			3.493" (88.72)	6.500" (165.10)	4.505" (114.43)	3.246" x 16 RH	2½" (63.50)	2 5/32" (54.77)	1¾" (44.45)
CLEVELAND: 2½" Capacity – Draw In [15° Head Angle] (Larger Capacity Solid Collet Available up to 2 31/32" Round, 2 9/16" Hex, 2 3/32" Square)											
Collet, Solid	MP2709	2			3.493" (88.72)	6.500" (165.10)	4.505" (114.43)	3.246" x 16 RH	2½" (63.50)	2 5/32" (54.77)	1¾" (44.45)
Collet, Conventional Style Master	4135	2		MP2728	3.493" (88.72)	6.500" (165.10)	4.505" (114.43)	3.246" x 16 RH	2½" (63.50)	2 5/32" (54.77)	1¾" (44.45)
Feed Finger, Conventional Style Master	MP1508	3		MP1527	2.985" (75.82)	6.938" (176.23)	— —	2.808" x 16 RH	2¼" (57.15)	1 15/16" (49.21)	1 37/64" (40.08)
Feed Finger, Style "B" Master	6101	3	B25	6669	2.985" (75.82)	6.938" (176.23)	— —	2.808" x 16 RH	2¼" (57.15)	1 15/16" (49.21)	1 37/64" (40.08)
CLEVELAND: 2½" Capacity – Push Out (Larger Capacity Solid Collet Available up to 2 31/32" Round, 2 9/16" Hex, 2 3/32" Square)											
Collet, Solid	MP1082	1			3.369" (85.57)	6.250" (158.75)	4.085" (103.76)	—	2½" (63.50)	2 5/32" (54.77)	1¾" (44.45)
Collet, Conventional Style Master	MP1465	1		MP1433	3.369" (85.57)	6.250" (158.75)	3.250" (82.55)	—	2¼" (57.15)	1 15/16" (49.21)	1 37/64" (40.08)
Feed Finger, Solid	4137	2			2.985" (75.82)	6.938" (176.23)	— —	2.808" x 16 RH	2½" (63.50)	2 5/32" (54.77)	1¾" (44.45)
CLEVELAND: 3" Capacity – 3AB — Draw In (Larger Capacity Solid Collet Available up to 3 11/32" Round, 2 57/64" Hex, 2 23/64" Square)											
Collet, Solid	MP3727	2			3.866" (98.20)	6.500" (165.10)	5.000" (127.00)	3.617" x 16 RH	3" (76.20)	2 19/32" (65.88)	2 7/64" (53.58)
Feed Finger, Solid	MP3698	3			3.365" (85.47)	6.313" (160.35)	— —	3.248" x 16 RH	3" (63.50)	2 19/32" (65.88)	2 7/64" (53.58)



NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



Slots may vary according to tension requirements

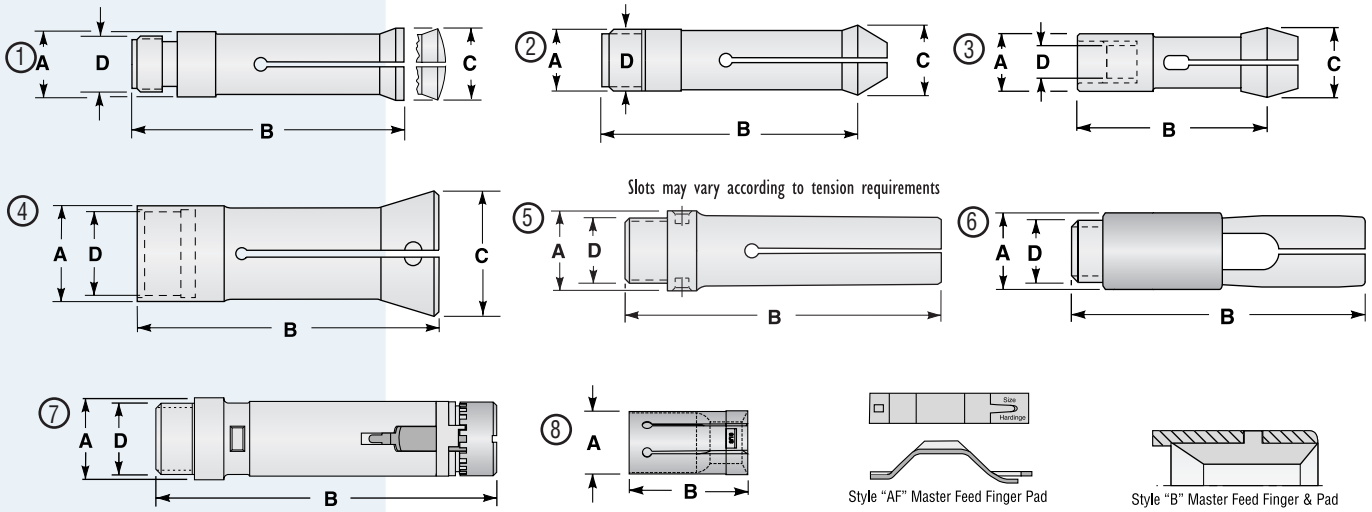
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
CONE: 9/16" Capacity (Larger Capacity Solid Collet Available up to 13/16" Round, 23/32" Hex, 9/16" Square)											
Collet, Solid	4243	1			1.060" (26.92)	4.500" (114.30)	1.190" (30.23)	1.043" x 16 RH	9/16" (14.29)	31/64" (12.30)	25/64" (9.92)
Collet, Solid Burring	4259	2	TK		1.060" (26.92)	4.875" (123.83)	1.190" (30.23)	1.048" x 16 LH	9/16" (14.29)	31/64" (12.30)	25/64" (9.92)
Collet, Solid Burring	4175	3	QE		.749" (19.02)	3.000" (76.20)	1.125" (28.58)	.625" x 24 LH	9/16" (14.29)	31/64" (12.30)	25/64" (9.92)
Feed Finger, Solid	4245	5			.815" (20.70)	3.438" (87.33)	—	.705" x 20 RH	9/16" (14.29)	31/64" (12.30)	25/64" (9.92)
Feed Finger, Solid Sweat-In	4247	5			.815" (20.70)	3.438" (87.33)	— —	—	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
Feed Finger, Style "B" Master	6161	5	B3	6611	.815" (20.70)	3.438" (87.33)	—	.705" x 20 RH	1/2" (12.70)	27/64" (10.72)	11/32" (8.73)
Feed Finger, Style "B" Master Adjustable Tension	6163	6	DA2X B3	6611	.828" (21.03)	3.438" (87.33)	—	.705" x 20 RH	1/2" (12.70)	27/64" (10.72)	11/32" (8.73)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7039	7	AF3	7305[1] 7307[2]	.815" (20.70)	3.188" (80.98)	— —	.705" x 20 RH	3/16" (4.76)	1/2" (12.70)	3/16" (4.76)	7/16" (11.11)
Bushing, Style "AF"	7355	8	AF3		.575" (14.61)	1.031" (26.19)	— —	—	3/16" (4.76)	13/32" (10.32)	3/16" (4.76)	11/32" (8.73)
CONE: 7/8" Capacity (Larger Capacity Solid Collet Available up to 1 1/8" Round, 31/32" Hex, 25/32" Square)											
Collet, Solid	4177	4			1.498" (38.05)	3.813" (96.85)	1.940" (49.28)	1.375" x 20 RH	7/8" (22.23)	3/4" (19.05)	39/64" (15.48)
Feed Finger, Solid	4179	5			1.120" (28.45)	4.125" (104.78)	— —	1.060" x 20 LH	7/8" (22.23)	3/4" (19.05)	39/64" (15.48)
Feed Finger, Style "B" Master	6121	5	B5	6621	1.120" (28.45)	4.125" (104.78)	— —	1.060" x 20 LH	3/4" (19.05)	41/64" (16.27)	33/64" (13.10)

1 - Round
2 - Hexagon

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



Style "AF" Master Feed Finger Pad

Style "B" Master Feed Finger & Pad

To Order Contact: Exact Tooling / www.exacttooling.com / sales@exacttooling.com / 888-988-8820

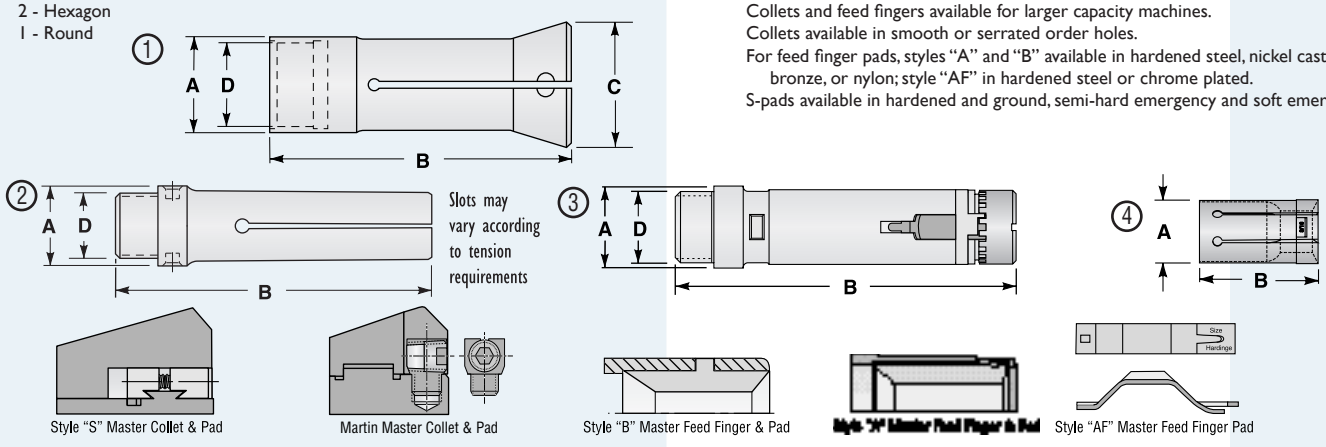
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
CONE: 1" Capacity – Four Spindle – Vertical – Old Style (Larger Capacity Solid Collets Available up to 1¼" Round, ⅞" Hex, 45⁄64" Square)											
Collet, Solid	4205	1			1.683" (42.75)	3.938" (100.03)	2.255" (57.28)	1.500" x 18 RH	1" (25.40)	55⁄64" (21.83)	45⁄64" (17.86)
Collet, Style "S" Master	5011	1	S10	5601[3]	1.683" (42.75)	3.938" (100.03)	2.255" (57.28)	1.500" x 18 RH	1" (25.40)	55⁄64" (21.83)	45⁄64" (17.86)
Feed Finger, Solid	4181	2			1.245" (31.62)	4.500" (114.30)	—	1.122" x 24 LH	1" (25.40)	55⁄64" (21.83)	45⁄64" (17.86)
Feed Finger, Style "B" Master	6123	2	B6	6625	1.245" (31.62)	4.500" (114.30)	—	1.122" x 24 LH	⅞" (22.23)	¾" (19.05)	39⁄64" (15.48)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7023	3	AF6	7313[1] 7315[2]	1.245" (31.62)	4.250" (107.95)	—	1.122" x 24 LH	⅜" (9.53)	⅞" (22.23)	⅜" (9.53)	¾" (19.05)
Bushing, Style "AF"	7361	4	AF6		.990" (25.15)	1.688" (42.88)	—	—	⅜" (9.53)	⅞" (22.23)	⅜" (9.53)	¾" (19.05)
CONE: 1" Capacity – Six Spindle – SK, SL, SW, TB, TC, TK, TS (Larger Capacity Solid Collets Available up to 1 9⁄32" Round, 1 3⁄32" Hex, 29⁄32" Square)											
Collet, Solid	4361	1			1.620" (41.15)	5.125" (130.18)	2.145" (54.48)	1.484" x 24 LH	1" (25.40)	55⁄64" (21.83)	45⁄64" (17.86)
Collet, HQC Quick-Change	See page 101										
Collet, Style "S" Master	5219	1	S10	5601[2]	1.620" (41.15)	5.125" (130.18)	2.145" (54.48)	1.484" x 24 LH	1" (25.40)	55⁄64" (21.83)	45⁄64" (17.86)
Collet, Martin Master	5445	1	M10	5901	1.620" (41.15)	5.125" (130.18)	2.145" (54.48)	1.484" x 24 LH	1" (25.40)	55⁄64" (21.83)	45⁄64" (17.86)
Feed Finger, Solid	4363	2			1.250" (31.75)	5.250" (133.35)	—	1.185" x 24 LH	1" (25.40)	55⁄64" (21.83)	45⁄64" (17.86)
Feed Finger, Squirrel Cage & Stock Saver	See page 62										
Feed Finger, Style "B" Master	6321	2	B6	6625	1.250" (31.75)	5.250" (133.35)	—	1.185" x 24 LH	⅞" (22.23)	¾" (19.05)	39⁄64" (15.48)
Feed Finger, Style "A" Master	6441	2	A10	6715	1.250" (31.75)	5.250" (133.35)	—	1.185" x 24 LH	15⁄16" (23.81)	51⁄64" (20.24)	21⁄32" (16.67)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7073	3	AF6	7313[1] 7315[2]	1.250" (31.75)	5.000" (127.00)	—	1.185" x 24 LH	⅜" (9.53)	⅞" (22.23)	⅜" (9.53)	¾" (19.05)
Bushing, Style "AF"	7361	4	AF6		.990" (25.15)	1.688" (42.88)	—	—	⅜" (9.53)	⅞" (22.23)	⅜" (9.53)	¾" (19.05)

3 - Master Collet Pads available in smooth or serrated order holes
2 - Hexagon
1 - Round

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.



Style "S" Master Collet & Pad

Martin Master Collet & Pad

Style "B" Master Feed Finger & Pad

Style "AF" Master Feed Finger Pad

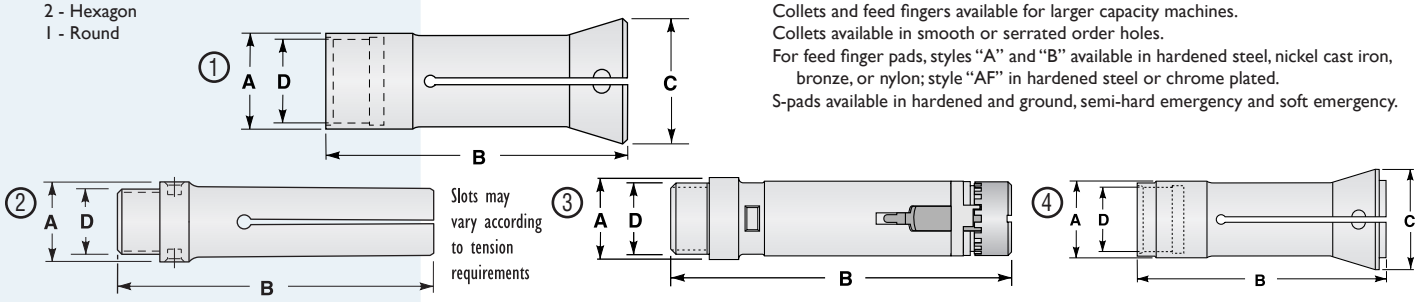
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
CONE: 1¼" Capacity (Larger Capacity Solid Collet Available up to 1 9/16" Round, 1 1/32" Hex, 1 3/32" Square)											
Collet, Solid	4183	1			1.995" (50.67)	4.313" (109.54)	2.505" (63.63)	1.812" x 18 RH	1¼" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Collet, Style "S" Master	5013	1	S12	5603[3]	1.995" (50.67)	4.313" (109.54)	2.505" (63.63)	1.812" x 18 RH	1¼" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Collet, Martin Master	5401	1	M12	5903[3]	1.995" (50.67)	4.313" (109.54)	2.505" (63.63)	1.812" x 18 RH	1¼" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Feed Finger, Solid	4185	2			1.535" (38.99)	4.750" (120.65)	—	1.434" x 24 LH	1¼" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Feed Finger, Squirrel Cage & Stock Saver See page 62											
Feed Finger, Style "B" Master	6125	2	B7	6631	1.535" (38.99)	4.750" (120.65)	—	1.434" x 24 LH	1 1/8" (28.58)	31/32" (24.61)	25/32" (19.85)
Feed Finger, Style "A" Master	6401	2	A12C	6721	1.535" (38.99)	4.750" (120.65)	—	1.434" x 24 LH	1 5/32" (29.37)	1" (25.40)	13/16" (20.64)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7025	3	AF7	7317[1] 7319[2]	1.535" (38.99)	4.500" (114.30)	—	1.434" x 24 LH	½" (12.70)	1 1/8" (28.58)	½" (12.70)	15/16" (23.81)
Bushing, Style "AF"	7363	5	AF7		1.235" (31.37)	1.938" (49.21)	—	—	½" (12.70)	1 1/8" (28.58)	½" (12.70)	15/16" (23.81)
CONE: 1½" Capacity (Larger Capacity Solid Collet Available up to 1 13/16" Round, 1 9/16" Hex, 1 9/32" Square)											
Collet, Solid	4187	1			2.245" (57.02)	4.438" (112.73)	2.755" (69.98)	2.062" x 18 RH	1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
Collet, Style "S" Master	5015	1	S15	5605[3]	2.245" (57.02)	4.438" (112.73)	2.755" (69.98)	2.062" x 18 RH	1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
Collet, Martin Master	5403	1	M15	5905[3]	2.245" (57.02)	4.438" (112.73)	2.755" (69.98)	2.062" x 18 RH	1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
Feed Finger, Solid	4189	2			1.815" (46.10)	5.250" (133.35)	—	1.684" x 24 LH	1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
Feed Finger, Squirrel Cage & Stock Saver See page 62											
Feed Finger, Style "B" Master	6127	2	B8	6635	1.815" (46.10)	5.250" (133.35)	—	1.684" x 24 LH	1 3/8" (34.93)	1 3/16" (30.16)	31/32" (24.61)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7027	3	AF7	7317[1] 7319[2]	1.815" (46.10)	5.000" (127.00)	—	1.684" x 24 LH	½" (12.70)	1 1/8" (28.58)	½" (12.70)	15/16" (23.81)
Bushing, Style "AF"	7363	5	AF7		1.235" (31.37)	1.938" (49.23)	—	—	½" (12.70)	1 1/8" (28.58)	½" (12.70)	15/16" (23.81)

3 - Master Collet Pads available in smooth or serrated order holes
2 - Hexagon
1 - Round

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.



To Order Contact: Exact Tooling / www.exacttooling.com / sales@exacttooling.com / 888-988-8820

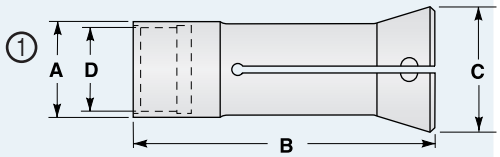
Spindle Tooling for Automatics

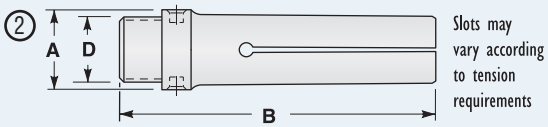
HARDINGE

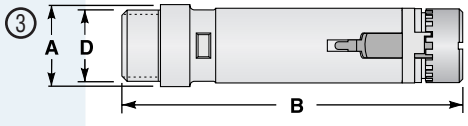
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
CONE: 1⅝" Capacity (Larger Capacity Solid Collet Available up to 1 15/16" Round, 1 1/16" Hex, 1⅜" Square)											
Collet, Solid	4191	1			2.433" (61.80)	6.000" (152.40)	3.055" (77.60)	2.218" x 20 LH	1⅝" (41.28)	1 13/32" (35.72)	1 9/64" (28.97)
Collet, HQC Quick-Change	See page 101										
Collet, Style "S" Master	5017	1	S16	5607[3]	2.433" (61.80)	6.000" (152.40)	3.055" (77.60)	2.218" x 20 LH	1⅝" (41.28)	1 13/32" (35.72)	1 9/64" (28.97)
Collet, Martin Master	5405	1	M16	5907[3]	2.433" (61.80)	6.000" (152.40)	3.055" (77.60)	2.218" x 20 LH	1⅝" (41.28)	1 13/32" (35.72)	1 9/64" (28.97)
Feed Finger, Solid	4369	2			1.940" (49.28)	6.000" (152.40)	— —	1.872" x 20 LH	1⅝" (41.28)	1 13/32" (35.72)	1 9/64" (28.97)
Feed Finger, Squirrel Cage & Stock Saver	See page 62										
Feed Finger, Style "B" Master	6129	2	B8	6635	1.940" (49.28)	6.000" (152.40)	— —	1.872" x 20 LH	1⅜" (34.93)	1 3/16" (30.16)	31/32" (24.61)
Feed Finger, Style "B" Master	6325	2	B16	6657	1.940" (49.28)	6.000" (152.40)	— —	1.872" x 20 LH	1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
Feed Finger, Style "A" Master	6445	2	A16	6727	1.940" (49.28)	6.000" (152.40)	— —	1.872" x 20 LH	1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7075	3	AF16	7325[1] 7327[2]	1.940" (49.28)	5.688" (144.48)	— —	1.872" x 20 LH	⅝" (15.88)	1 7/16" (36.51)	⅝" (15.88)	1¼" (31.75)
Bushing, Style "AF"	7369	4	AF16		1.610" (40.89)	2.375" (60.33)	— —	—	⅝" (15.88)	1 7/16" (36.51)	⅝" (15.88)	1¼" (31.75)
CONE: 1⅞" Capacity (Larger Capacity Solid Collet Available up to 2 9/32" Round, 1 63/64" Hex, 1 39/64" Square)											
Collet, Solid	4209	1			2.804" (71.22)	5.375" (136.53)	3.505" (89.03)	2.562" x 18 RH	1⅞" (47.63)	1 39/64" (40.88)	1 5/16" (33.34)
Collet, Style "S" Master	5019	1	S20	5609[3]	2.804" (71.22)	5.375" (136.53)	3.505" (89.03)	2.562" x 18 RH	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
Feed Finger, Solid	4193	2			2.235" (56.78)	5.875" (149.23)	— —	2.090" x 24 LH	1⅞" (47.63)	1 39/64" (40.88)	1 5/16" (33.34)
Feed Finger, Style "B" Master	6131	2	B20	6661	2.235" (56.78)	5.875" (149.23)	— —	2.090" x 24 LH	1¾" (44.45)	1 33/64" (38.50)	1 15/64" (31.35)

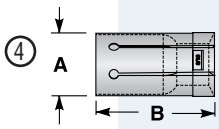
1 - Round
2 - Hexagon
3 - Master Collet Pads available in smooth or serrated order holes

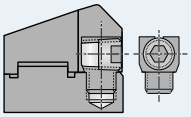
NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.

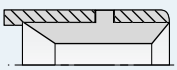


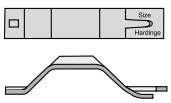


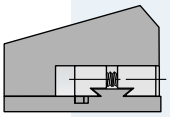





Martin Master Collet & Pad


Style "B" Master Feed Finger & Pad


Style "AF" Master Feed Finger Pad


Style "S" Master Collet & Pad

CONE

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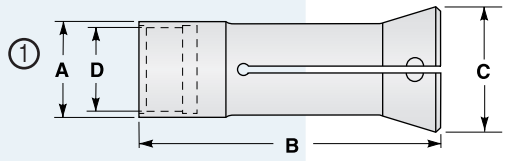
Spindle Tooling for Automatics

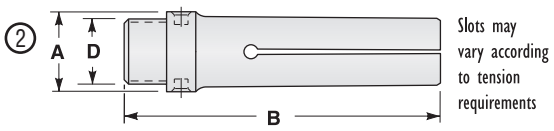
HARDINGE

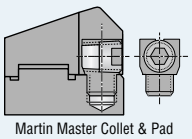
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
CONE: 2" Capacity (Larger Capacity Solid Collet Available up to $2^{13}/_{32}$" Round, $2^{3}/_{32}$" Hex, $1^{45}/_{64}$" Square)											
Collet, Solid	4211	1			2.866" (72.80)	5.625" (142.88)	3.505" (89.03)	2.687" x 16 RH	2" (50.80)	$1^{23}/_{32}$" (43.66)	$1^{13}/_{32}$" (35.72)
Collet, Style "S" Master	5021	1	S20	5609[3]	2.866" (72.80)	5.625" (142.88)	3.505" (89.03)	2.687" x 16 RH	2" (50.80)	$1^{23}/_{32}$" (43.66)	$1^{13}/_{32}$" (35.72)
Feed Finger, Solid	4195	2			2.285" (58.04)	5.500" (139.70)	— —	2.215" x 20 LH	2" (50.80)	$1^{23}/_{32}$" (43.66)	$1^{13}/_{32}$" (35.72)
Feed Finger, Style "B" Master	6133	2	B20	6661	2.285" (58.04)	5.500" (139.70)	— —	2.215" x 20 LH	$1^{3}/_{4}$" (44.45)	$1^{33}/_{64}$" (38.50)	$1^{15}/_{64}$" (31.35)
CONE: $2^{1}/_{4}$" Capacity (Larger Capacity Solid Collet Available up to $2^{21}/_{32}$" Round, $2^{5}/_{16}$" Hex, $1^{7}/_{8}$" Square)											
Collet, Solid	4207	1			3.113" (79.07)	6.000" (152.40)	4.005" (101.73)	2.937" x 18 RH	$2^{1}/_{4}$" (57.15)	$1^{15}/_{16}$" (49.21)	$1^{37}/_{64}$" (40.08)
Collet, Style "S" Master	5023	1	S22	5611[3]	3.113" (79.07)	6.000" (152.40)	4.005" (101.73)	2.937" x 18 RH	$2^{1}/_{4}$" (57.15)	$1^{15}/_{16}$" (49.21)	$1^{37}/_{64}$" (40.08)
Collet, Martin Master	5463	1	M22	MP3913[3]	3.113" (79.07)	6.000" (152.40)	4.005" (101.72)	2.937" x 18 RH	$2^{1}/_{4}$" (57.15)	$1^{15}/_{16}$" (49.21)	$1^{37}/_{64}$" (40.08)
Feed Finger, Solid	4197	2			2.555" (64.90)	6.750" (171.45)	— —	2.450" x 24 LH	$2^{1}/_{4}$" (57.15)	$1^{15}/_{16}$" (49.21)	$1^{37}/_{64}$" (40.08)
Feed Finger, Squirrel Cage & Stock Saver See page 62											
Feed Finger, Style "B" Master	6135	2	B22	6665	2.555" (64.90)	6.750" (171.45)	— —	2.450" x 24 LH	2" (50.80)	$1^{23}/_{32}$" (43.66)	$1^{13}/_{32}$" (35.72)

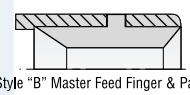
3 - Master Collet Pads available in smooth or serrated order holes

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.






Martin Master Collet & Pad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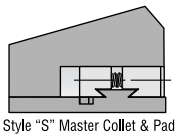
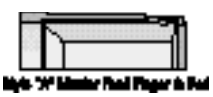

Style "S" Master Collet & Pad



To Order Contact: Exact Tooling / www.exacttooling.com / sales@exacttooling.com / 888-988-8820

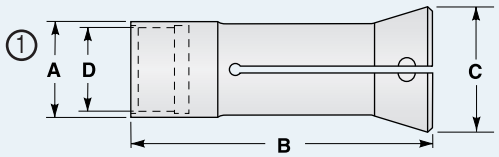
Spindle Tooling for Automatics

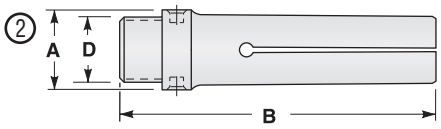
HARDINGE

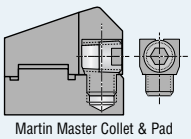
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
CONE: 2½", 2⅝" Capacities (Larger Capacity Solid Collet Available up to 3⅛" Round, 2 1/16" Hex, 2 3/16" Square)											
Collet, Solid	4199	1			3.613" (91.77)	6.250" (158.75)	4.380" (111.25)	3.375" x 18 RH	2⅝" (66.68)	2 17/64" (57.55)	1 27/32" (46.83)
Collet, Style "S" Master	5025	1	S26	5613[3]	3.613" (91.77)	6.250" (158.75)	4.380" (111.25)	3.375" x 18 RH	2⅝" (66.68)	2 17/64" (57.55)	1 27/32" (46.83)
Collet, HQC Quick-Change	See page 101										
Collet, Martin Master	5411	1	M26	5915[3]	3.613" (91.77)	6.250" (158.75)	4.380" (111.25)	3.375" x 18 RH	2⅝" (66.68)	2 17/64" (57.55)	1 27/32" (46.83)
Feed Finger, Solid	4201	2			2.995" (76.07)	7.000" (177.80)	— —	2.870" x 24 LH	2⅝" (66.68)	2 17/64" (57.55)	1 27/32" (46.83)
Feed Finger, Squirrel Cage & Stock Saver	See page 62										
Feed Finger, Style "B" Master	6137	2	B26	6673	2.995" (76.07)	7.000" (177.80)	— —	2.870" x 24 LH	2⅜" (60.33)	2 3/64" (51.99)	1 43/64" (42.47)
Feed Finger, Style "A" Master	6449	2	A26	6739	2.995" (76.07)	7.000" (177.80)	— —	2.870" x 24 LH	2 9/16" (65.09)	2 7/32" (56.36)	1 51/64" (45.64)
CONE: 3" Capacity (Larger Capacity Solid Collet Available up to 3 11/32" Round, 2⅞" Hex, 3⅜" Square)											
Collet, Solid	MP3163	1			3.808" (96.72)	6.375" (161.93)	4.645" (117.98)	3.625" x 20 LH	3" (76.20)	2 19/32" (65.88)	2 7/64" (53.58)
Collet, Style "S" Master	5027	1	S30	5615[3]	3.808" (96.72)	6.375" (161.93)	4.645" (117.98)	3.625" x 20 LH	3" (76.20)	2 19/32" (65.88)	2 7/64" (53.58)
Collet, Martin Master	5413	1	M30	5917[3]	3.808" (96.72)	6.375" (161.93)	4.645" (117.98)	3.625" x 20 LH	3" (76.20)	2 19/32" (65.88)	2 7/64" (53.58)
Feed Finger, Solid	MP3165	2			3.355" (85.22)	6.875" (174.63)	— —	3.233" x 20 LH	3" (76.20)	2 19/32" (65.88)	2 7/64" (53.58)
Feed Finger, Style "B" Master	6139	2	B30	6677	3.355" (85.22)	6.875" (174.63)	— —	3.233" x 20 LH	2⅝" (66.68)	2 17/64" (57.55)	1 27/32" (46.83)
Feed Finger, Style "A" Master	6413	2	A30	6745	3.355" (85.22)	6.875" (174.63)	— —	3.233" x 20 LH	2 13/16" (71.44)	2 27/64" (61.52)	1 63/64" (50.40)

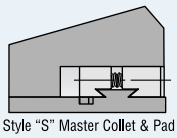
3 - Master Collet Pads available in smooth or serrated order holes

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.






Martin Master Collet & Pad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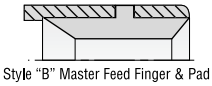
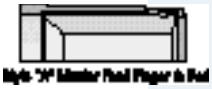

Style "B" Master Feed Finger & Pad



CONE

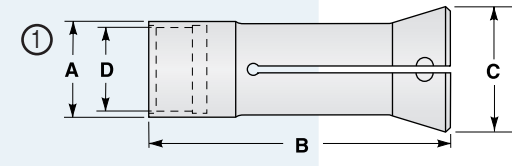
Spindle Tooling for Automatics

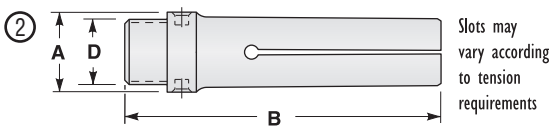
HARDINGE

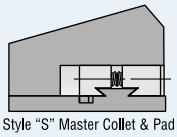
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
CONE: 3¼" Capacity (Larger Capacity Solid Collet Available up to 3⅝" Round, 3⅛" Hex, 2⁹⁄₁₆" Square)											
Collet, Solid	MP3758	1			4.121" (104.67)	6.500" (165.10)	5.000" (127.00)	3.937" x 18 LH	3¼" (82.55)	2¹³⁄₁₆" (71.44)	2¹⁹⁄₆₄" (58.34)
Collet, Style "S" Master	5029	1	S30	5615[3]	4.121" (104.67)	6.500" (165.10)	5.000" (127.00)	3.937" x 18 LH	3" (76.20)	2¹⁹⁄₃₂" (65.88)	2⁷⁄₆₄" (53.58)
Collet, Martin Master	5415	1	M32	5919[3]	4.121" (104.67)	6.500" (165.10)	5.000" (127.00)	3.937 x 18 LH	3⅜" (85.73)	2⁵⁹⁄₆₄" (74.22)	2⅜" (60.33)
Feed Finger, Solid	MP3756	2			3.670" (93.22)	6.875" (174.63)	— —	3.545" x 20 LH	3¼" (82.55)	2¹³⁄₁₆" (71.44)	2¹⁹⁄₆₄" (58.34)
Feed Finger, Style "B" Master	6143	2	B33	6679	3.670" (93.22)	6.875" (174.63)	— —	3.545" x 20 LH	3" (76.20)	2¹⁹⁄₃₂" (65.88)	2⁷⁄₆₄" (53.58)
CONE: 3½" Capacity (Larger Capacity Solid Collet Available up to 3²⁹⁄₃₂" Round, 3¹³⁄₃₂" Hex, 2²⁵⁄₃₂" Square)											
Collet, Solid	4217	1			4.363" (110.82)	6.250" (158.75)	5.315" (135.00)	4.187" x 18 RH	3½" (88.90)	3¹⁄₆₄" (76.60)	2¹⁵⁄₃₂" (62.71)
Collet, Style "S" Master	5031	1	S35	5617[3]	4.363" (110.82)	6.250" (158.75)	5.315" (135.00)	4.187" x 18 RH	3½" (88.90)	3¹⁄₆₄" (76.60)	2¹⁵⁄₃₂" (62.71)
Collet, Martin Master	5417	1	M35	5921[3]	4.363" (110.82)	6.250" (158.75)	5.315" (135.00)	4.187" x 18 RH	3½" (88.90)	3¹⁄₆₄" (76.60)	2¹⁵⁄₃₂" (62.71)
Feed Finger, Solid	MP1389	2			3.870" (98.30)	6.750" (171.45)	— —	3.765" x 24 LH	3½" (88.90)	3¹⁄₆₄" (76.60)	2¹⁵⁄₃₂" (62.71)
Feed Finger, Squirrel Cage & Stock Saver See page 62											
Feed Finger, Style "B" Master	6141	2	B35	6681	3.870" (98.30)	6.750" (171.45)	— —	3.765" x 24 LH	3⅛" (79.38)	2⁴⁵⁄₆₄" (68.66)	2¹³⁄₆₄" (55.96)
Feed Finger, Style "A" Master	6417	2	A35	6751	3.870" (98.30)	6.750" (171.45)	— —	3.765" x 24 LH	3¼" (82.55)	2¹³⁄₁₆" (71.44)	2¹⁹⁄₆₄" (58.34)
CONE: 4" Capacity (Larger Capacity Solid Collet Available up to 4¹⁷⁄₃₂" Round, 3⁵⁹⁄₆₄" Hex, 3³⁄₁₆" Square)											
Collet, Solid	MP1657	1			4.990" (126.75)	7.500" (190.50)	6.130" (155.70)	4.750" x 18 RH	4" (101.60)	3²⁹⁄₆₄" (87.71)	2⁵³⁄₆₄" (71.83)
Collet, Style "S" Master	5033	1	S40	5619[3]	4.990" (126.75)	7.500" (190.50)	6.130" (155.70)	4.750" x 18 RH	4" (101.60)	3²⁹⁄₆₄" (87.71)	2⁵³⁄₆₄" (71.83)
Feed Finger, Solid	4221	2			4.375" (111.13)	8.500" (215.90)	— —	4.215" x 24 LH	4" (101.60)	3²⁹⁄₆₄" (87.71)	2⁵³⁄₆₄" (71.83)
Feed Finger, Conventional Style Master	MP1832	2		MP1833	4.375" (111.13)	8.500" (215.90)	— —	4.215" x 24 LH	3⅝" (92.08)	3⅛" (79.38)	2⁹⁄₁₆" (65.09)

3 - Master Collet Pads available in smooth or serrated order holes

NOTE: Millimeters in parentheses. Collets and feed fingers available for larger capacity machines. Collets available in smooth or serrated order holes. For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated. S-pads available in hardened and ground, semi-hard emergency and soft emergency.



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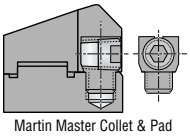
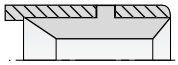

Martin Master Collet & Pad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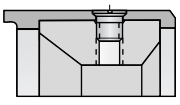
Conventional Style Master Feed Finger & Pad

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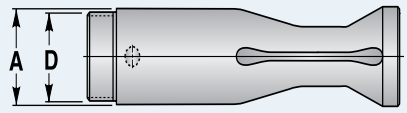
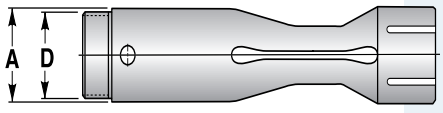
Spindle Tooling for Automatics

HARDINGE

Description		Hardinge Part Number	Figure	Dimensions A Back Bearing Diameter	B Overall Length	C Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
CONE: 1 " Capacity — 6SW, SL, TC, TS										
Feed Finger, Squirrel Cage	Steel	4363-88-	1	1.250"	—	—		1"	55/64"	45/64"
	Bronze	4363-90-	1	(31.75)	—	—	1.185" x 24 LH	(25.40)	(21.83)	(17.86)
Feed Finger, Stock Saver	Steel	4363-89-	2	1.250"	—	—		1"	55/64"	45/64"
	Bronze	4363-91-	2	(31.75)	—	—	1.185" x 24 LH	(25.40)	(21.83)	(17.86)
CONE: 1¼" Capacity										
Feed Finger, Squirrel Cage	Steel	4185-88-	1	1.535"	—	—		1¼"	1 5/64"	7/8"
	Bronze	4185-90-	1	(38.99)	—	—	1.434" x 24 LH	(31.75)	(27.38)	(22.23)
Feed Finger, Stock Saver	Steel	4185-89-	2	1.535"	—	—		1¼"	1 5/64"	7/8"
	Bronze	4185-91-	2	(38.99)	—	—	1.434" x 24 LH	(31.75)	(27.38)	(22.23)
CONE: 1½" Capacity										
Feed Finger, Squirrel Cage	Steel	4189-88-	1	1.815"	—	—		1½"	1 19/64"	1 3/64"
	Bronze	4189-90-	1	(46.10)	—	—	1.684" x 24 LH	(38.10)	(32.94)	(26.59)
Feed Finger, Stock Saver	Steel	4189-89-	2	1.815"	—	—		1½"	1 19/64"	1 3/64"
	Bronze	4189-91-	2	(46.10)	—	—	1.684" x 24 LH	(38.10)	(32.94)	(26.59)
CONE: 1⅝" Capacity										
Feed Finger, Squirrel Cage	Steel	4369-88-	1	1.940"	—	—		1⅝"	1 13/32"	1 9/64"
	Bronze	4369-90-	1	(49.28)	—	—	1.872" x 20 LH	(41.28)	(35.72)	(28.97)
Feed Finger, Stock Saver	Steel	4369-89-	2	1.940"	—	—		1⅝"	1 13/32"	1 9/64"
	Bronze	4369-91-	2	(49.28)	—	—	1.872" x 20 LH	(41.28)	(35.72)	(28.97)
CONE: 2¼" Capacity										
Feed Finger, Squirrel Cage	Steel	4197-88-	1	2.555"	—	—		2¼"	1 15/16"	1 37/64"
	Bronze	4197-90-	1	(64.90)	—	—	2.450" x 24 LH	(57.15)	(49.21)	(40.08)
Feed Finger, Stock Saver	Steel	4197-89-	2	2.555"	—	—				
	Bronze	4197-91-	2	(64.90)	—	—	2.450" x 24 LH	(57.15)	(49.21)	(40.08)
CONE: 2½" & 2⅝" Capacity										
Feed Finger, Squirrel Cage	Steel	4201-88-	1	2.995"	—	—		2⅝"	2 17/64"	1 27/32"
	Bronze	4201-90-	1	(76.07)	—	—	2.870" x 24 LH	(66.68)	(57.55)	(46.83)
Feed Finger, Stock Saver	Steel	4201-89-	2	2.995"	—	—		2⅝"	2 17/64"	1 27/32"
	Bronze	4201-91-	2	(76.07)	—	—	2.870" x 24 LH	(66.68)	(57.55)	(46.83)
CONE: 3½" Capacity										
Feed Finger, Squirrel Cage	Steel	4203-88-	1	3.870"	—	—		3½"	3 1/64"	2 15/32"
	Bronze	4203-90-	1	(98.30)	—	—	3.765" x 24 LH	(88.90)	(76.60)	(62.71)
Feed Finger, Stock Saver	Steel	4203-89-	2	3.870"	—	—		3½"	3 1/64"	2 15/32"
	Bronze	4203-91-	2	(98.30)	—	—	3.765" x 24 LH	(88.90)	(76.60)	(62.71)

NOTE: 3¼" Feed Finger available on application.

① 

② 

CONE

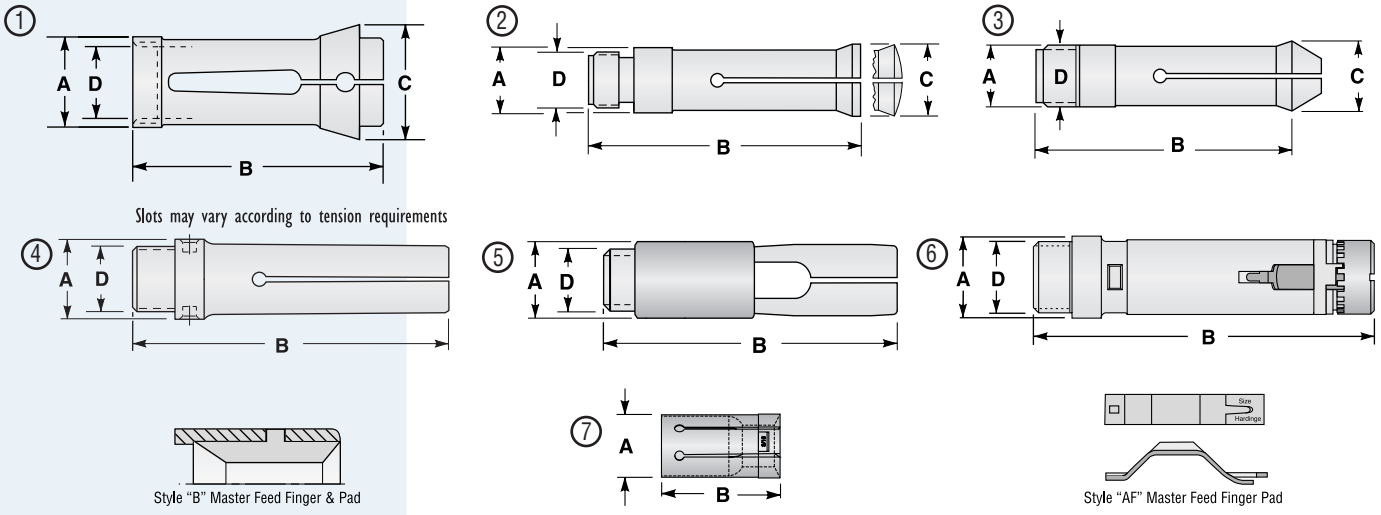
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
CVA: #33 (Larger Capacity Solid Collet Available up to 37/64" Round, 1/2" Hex, 13/32" Square)											
Collet, Solid	MP3672	1			.786" (19.96)	2.359" (59.92)	1.068" (27.13)	—	9/16" (14.29)	31/64" (12.30)	25/64" (9.92)
DAVENPORT: 1/2" Capacity – Standard (Larger Capacity Solid Collet Available up to 13/16" Round, 23/32" Hex, 9/16" Square)											
Collet, Solid	4243	2			1.060" (26.92)	4.380" (111.25)	1.190" (30.23)	1.043" x 16 RH	1/2" (12.70)	27/64" (10.72)	11/32" (8.73)
Collet, Solid Extended Nose	8281	2			1.060" (26.92)	4.687" (119.05)	1.190" (30.23)	1.043" x 16 RH	9/16" (14.29)	31/64" (12.30	25/64" (9.92)
Collet, Solid Burring	4259	3			1.060" (26.92)	4.875" (123.83)	1.190" (30.23)	1.048" x 16 LH	3/4" (19.05)	41/64" (16.27)	33/64" (13.10)
Collet, Solid Burring Quick Closing	4263	3			1.060" (26.92)	4.875" (123.83)	1.190" (30.23)	1.048" x 16 LH	3/4" (19.05)	41/64" (16.27)	33/64" (13.10)
Collet, Master Burring	8107	3		8109[7]	1.060" (26.92)	4.875" (123.83)	1.190" (30.23)	1.048" x 16 LH	1/2" (12.70)	27/64" (10.72)	11/32" (8.73)
Feed Finger, Solid	4245	4			.815" (20.70)	3.438" (87.33)	— —	.705" x 20 RH	1/2" (12.70)	27/64" (10.72)	11/32" (8.73)
Feed Finger, Squirrel Cage & Stock Saver See page 65											
Feed Finger, Solid Sweat-In	4247	4			.815" (20.70)	3.438" (87.33)	— —	—	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
Feed Finger, Style "B" Master	6161	4	B3	6611	.815" (20.70)	3.438" (87.33)	— —	.705" x 20 RH	1/2" (12.70)	27/64" (10.72)	11/32" (8.73)
Feed Finger, Style "B" Master Adjustable Tension	6163	5	DA2X B3	6611	.828" (21.03)	3.438" (87.33)	— —	.705" x 20 RH	1/2" (12.70)	27/64" (10.72)	11/32" (8.73)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7039	6	AF3	7305[1] 7307[2]	.815" (20.70)	3.188" (80.98)	— —	.705" x 20 RH	3/16" (4.76)	1/2" (12.70)	3/16" (4.76)	7/16" (11.11)
Bushing, Style "AF"	7355	7	AF3		.575" (14.61)	1.031" (26.19)	— —	—	3/16" (4.76)	13/32" (10.32)	3/16" (4.76)	11/32" (8.73)

1 - Round
2 - Hexagon
7 - Semi-finished nylon pad

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



Style "B" Master Feed Finger & Pad

Style "AF" Master Feed Finger Pad

To Order Contact: Exact Tooling / www.exacttooling.com / sales@exacttooling.com / 888-988-8820

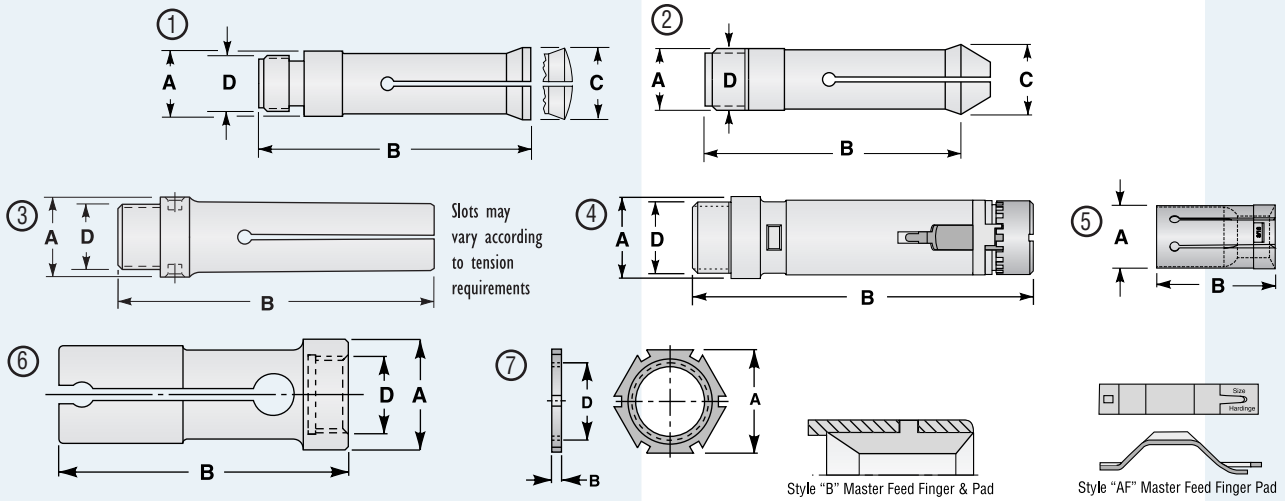
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
DAVENPORT: ¾" Capacity – Oversize (Larger Capacity Solid Collet Available up to 59⁄64" Round, 13⁄16" Hex, 21⁄32" Square)											
Collet, Solid	4251	1			1.218" (30.94)	4.380" (111.25)	1.500" (38.10)	1.143" x 16 RH	¾" (19.05)	41⁄64" (16.27)	33⁄64" (13.10)
Collet, Solid Burring	4259	2			1.060" (26.92)	4.875" (123.83)	1.190" (30.23)	1.048" x 16 LH	¾" (19.05)	41⁄64" (16.27)	33⁄64" (13.10)
Collet, Solid Burring Quick Closing	7796A	2			1.060" (26.92)	4.875" (123.83)	1.190" (30.23)	1.048" x 16 LH	¾" (19.05)	41⁄64" (16.27)	33⁄64" (13.10)
Collet, Master Burring	8107	2		8109-21[7]	1.060" (26.92)	4.875" (123.83)	1.190" (30.23)	1.048" x 16 LH	½" (12.70)	27⁄64" (10.72)	11⁄32" (8.73)
Feed Finger, Solid	4255	3			.988" (25.10)	3.750" (95.25)	— —	.938" x 32 RH	13⁄16" (20.63)	11⁄16" (17.46)	9⁄16" (14.28)
Feed Finger, Squirrel Cage & Stock Saver	See page 65										
Feed Finger, Style "B" Master	6169	3	B4	6617	.988" (25.10)	3.750" (95.25)	— —	.938" x 32 RH	5⁄8" (15.88)	17⁄32" (13.50)	7⁄16" (11.11)
Feed Finger, Style "B" Master Rear Booster[8]	8091	6	B6	6625	1.375" (34.93)	3.688" (93.68)	— —	1.000" x 32 LH	7⁄8" (22.23)	¾" (19.05)	39⁄64" (15.48)
Nut, Jam	8093	7			1.250" (31.75)	.156" (3.96)	— —	1.000" x 32 LH	—	—	—
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7041	4	AF4	7309[1] 7311[2]	.988" (25.10)	3.625" (92.08)	— —	.938" x 32 RH	¼" (6.35)	5⁄8" (15.88)	¼" (6.35)	17⁄32" (13.50)
Bushing, Style "AF"	7359	5	AF4		.776" (19.71)	1.438" (36.53)	— —	—	¼" (6.35)	5⁄8" (15.88)	¼" (6.35)	17⁄32" (13.50)

1 - Round
2 - Hexagon
7 - Semi-finished nylon pads
8 - Jam Nut (Hardinge part #8093) required for initial setup

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



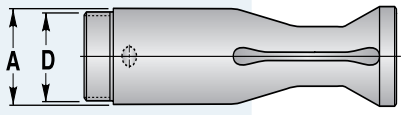
To Order Contact: Exact Tooling / www.exacttooling.com / sales@exacttooling.com / 888-988-8820

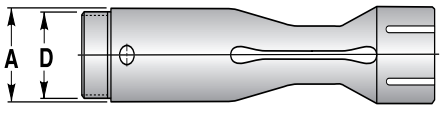
Spindle Tooling for Automatics

HARDINGE

		Hardinge Part Number	Figure	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
DAVENPORT: ½" & ⅝" Capacity										
Feed Finger, Squirrel Cage	Steel	4245-88-	1	.815"	—	—		½"	27/64"	11/32"
	Bronze	4245-90-	1	(20.70)	—	—	.705" x 20 RH	(12.70)	(10.72)	(8.73)
Feed Finger, Stock Saver	Steel	4245-89-	2	.815"	—	—		½"	27/64"	11/32"
	Bronze	4245-91-	2	(20.70)	—	—	.705" x 20 RH	(12.70)	(10.72)	(8.73)
DAVENPORT: ¾" Capacity — Oversize										
Feed Finger, Squirrel Cage	Steel	4255-88-	1	.988"	—	—		¾"	41/64"	33/64"
	Bronze	4255-90-	1	(25.10)	—	—	.938" x 32 RH	(19.05)	(16.27)	(13.10)
Feed Finger, Stock Saver	Steel	4255-89-	2	.988"	—	—		¾"	41/64"	33/64"
	Bronze	4255-91-	2	(25.10)	—	—	.938" x 32 RH	(19.05)	(16.27)	(13.10)

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.

① 

② 

To Order Contact: Exact Tooling / www.exacttooling.com / sales@exacttooling.com / 888-988-8820

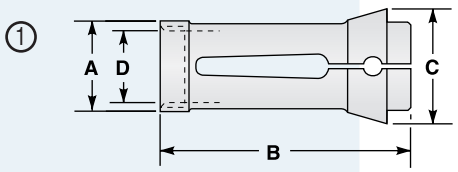
Spindle Tooling for Automatics

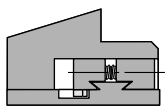
HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Collet's Rated Capacity Round	Collet's Rated Capacity Hexagon	Collet's Rated Capacity Square
DIN 6343 COLLETS											
Collet, Solid Special	7708E	1			.687" (17.45)	2.016" (51.21)	.875" (22.23)	—	35/64" (13.89)	15/32" (11.90)	25/64" (9.92)
Collet, Solid #12 Index	3701	1			.864" (21.95)	2.172" (55.17)	1.186" (30.12)	—	21/32" (16.66)	9/16" (14.28)	15/32" (11.90)
Collet, Solid #18 Index	3705	1			1.100" (27.94)	2.750" (69.85)	1.500" (38.10)	—	7/8" (22.22)	3/4" (19.05)	5/8" (15.87)
Collet, Solid #20 Index	3731	1			1.257" (31.93)	2.938" (74.63)	1.767" (44.88)	—	1" (25.40)	7/8" (22.22)	11/16" (17.46)
Collet, Solid B30 Index	3713	1			1.376" (34.95)	3.156" (80.16)	1.895" (48.13)	—	1 3/16" (30.16)	1 1/32" (26.19)	27/32" (21.43)
Collet, Solid Special	5115C	1			1.653" (41.99)	3.703" (94.06)	2.210" (56.13)	—	1 25/64" (35.32)	1 13/64" (30.55)	63/64" (25.00)
Collet, Solid B42 Index	3719	1			1.887" (47.93)	3.688" (93.68)	2.355" (59.82)	M43 x 1	1 21/32" (42.07)	1 13/32" (35.71)	1 5/32" (29.37)
Collet, Style "S" Master B42 Index	5205	1	S10	5601[3]	1.887" (47.93)	3.688" (93.68)	2.355" (59.82)	M43 x 1	1" (25.40)	7/8" (22.20)	45/64" (17.86)
Collet, Solid Special	7709E	1			2.204" (55.98)	3.700" (93.98)	2.677" (68.00)	—	1 59/64" (48.81)	1 21/32" (42.07)	1 11/32" (34.13)
Collet, Solid B60 Index	3725	1			2.596" (65.94)	4.328" (109.93)	3.290" (83.57)	M43 x 1	2 3/8" (60.33)	2 1/16" (26.98)	1 11/16" (42.86)
Collet, Style "S" Master B60 Index	5207	1	S16	5607[3]	2.596" (65.94)	4.328" (109.93)	3.290" (83.57)	—	1 5/8" (41.28)	1 13/32" (35.72)	1 5/32" (29.52)
Collet, Solid Special	3662E	1			3.543" (89.99)	5.125" (130.18)	4.220" (107.19)	M82 x 1	3 5/32" (80.17)	2 23/32" (69.06)	2 15/64" (56.75)
Collet, Style "S" Master	5211	1	S26	5613[3]	3.543" (89.99)	5.125" (130.18)	4.220" (107.19)	M82 x 1	2 5/8" (66.68)	2 17/64" (57.55)	1 27/32" (46.83)

3 - Master Collet Pads available in smooth or serrated order holes

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.




Style "S" Master Stationary Collet & Pad

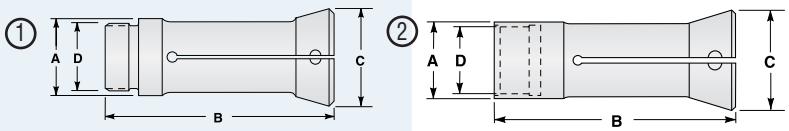
Spindle Tooling for Automatics

HARDINGE

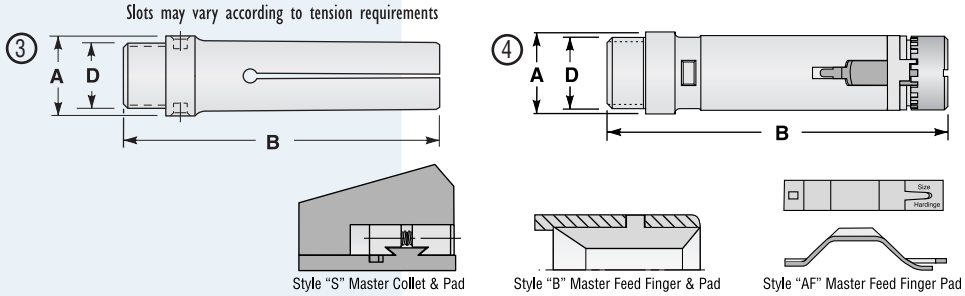
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
Euroturn: 1" Capacity – SAY 6/25											
Collet, Solid	4361	2			1.620" (41.15)	5.125" (130.18)	2.145" (54.48)	1.484" x 24 LH	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, Style "S" Master	5219	2	S10	5601	1.620" (41.15)	5.125" (130.18)	2.145" (54.48)	1.484" x 24 LH	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Feed Finger, Solid	4363	3			1.250" (31.75)	5.250" (133.35)	— —	1.185" x 24 LH	1" (25.40)	57/64" (22.62)	45/64" (17.86)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7073	4	AF6	7313[1] 7315[2]	1.250" (31.75)	5.000" (127.00)	— —	1.185" x 24 LH	3/8" (9.53)	7/8" (22.23)	3/8" (9.53)	3/4" (19.05)
Euroturn: 1-1/4" Capacity – SAY 6/32 and 8/32											
Collet, Solid	4043	1			2.058" (52.27)	6.000" (152.40)	2.550" (64.77)	1.810" x 20 LH	1 1/4" (38.90)	1 5/64" (33.34)	7/8" (26.99)
Collet, Style "S" Master	5103	1	S12	5603[3]	2.058" (52.27)	6.000" (152.40)	2.550" (64.77)	1.810" x 20 LH	1 1/4" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Feed Finger, Solid	4047	3			1.545" (39.24)	6.625" (168.28)	— —	1.435" x 20 LH	1 1/4" (31.75)	1 5/64" (27.38)	7/8" (22.23)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7061	4	AF7	7317[1] 7319[2]	1.545" (39.24)	6.375" (161.93)	— —	1.435" x 20 LH	1/2" (12.70)	1 1/8" (28.58)	1/2" (12.70)	15/16" (23.81)
Euroturn: Burring Collets											
Collet, Burring	94Z-1260-00-8833P*		SAY 6/20		1.101" (27.96)	2.520" (64.00)	1.260" (32.00)	M24 x 1.5 LH	—	—	—
Collet, Burring	94Z-1580-00-8499M*		SAY 6/25 6/32, 6/32M, 8/32		1.397" (35.48)	3.150" (80.01)	1.575" (40.00)	—	—	—	—
Collet, Burring	94Z-2067-00-2443P*		42mm SAY 8/32M		1.847" (46.91)	2.860" (72.64)	2.067" (52.50)	—	—	—	—
Collet, Burring	94Z-2370-00-1546S*		SAY 6/42		2.203" (55.95)	3.720" (94.48)	2.370" (60.19)	M51 x 1 LH	—	—	—

1 - Round; 2 - Hexagon; 3 - Master Collet Pads available in smooth or serrated order holes
* - On Application

NOTE: Millimeters in parentheses. Collets available in smooth or serrated order holes. Style "AF" feed finger pads available in hardened steel or chrome plated. S-pads available in hardened and ground, semi-hard emergency and soft emergency.



* Expanding collet assemblies available on application for internal gripping of the workpiece in the machines OD pickoff attachment.



Call if your newer machine is not listed. Hardinge continuously builds new collets to meet industry requirements.

EUROTURN

Spindle Tooling for Automatics

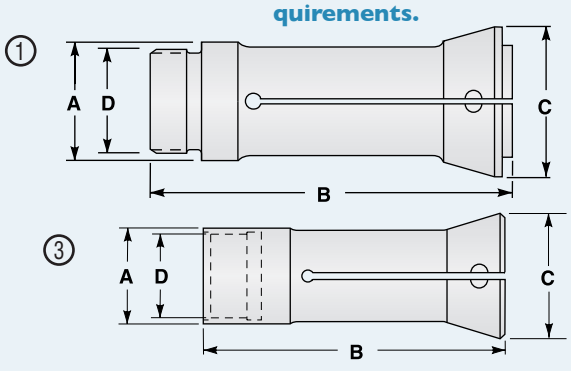
HARDINGE

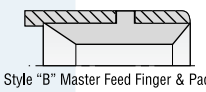
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
Gildemeister: AS16, AS20, GS20, GM16, GM20 (Larger Capacity Solid Collets Available up to 63/64" Round, 27/32" Hex, 11/16" Square)											
Collet, Solid	4427	1			1.338 (33.98)	3.543" (89.99)	1.652" (41.96)	M30 x 1 L.H. Ext.	.787" (20.00)	.688" (17.47)	.563" (14.30)
Feed Finger, Solid	4429	4			.984" (24.99)	3.543" (90.00)	—	M24 x 1 R.H. Ext.	.787" (20.00)	.688" (17.47)	.563" (14.30)
Feed Finger, Style "B" Master	6365	4	B4	6617	.984" (24.99)	3.543" (90.00)	—	M24 x 1 R.H. Ext.	5/8" (15.87)	1/2" (12.70)	7/16" (11.11)
Gildemeister: AS20, AS25, GS20, GS25 Oversize Spindle (Larger Capacity Solid Collets Available up to 1 7/32" Round, 1 3/64" Hex, 55/64" Square)											
Collet, Solid	4431	2			1.495" (37.97)	3.543" (90.00)	1.790" (45.46)	M34.5 x .75 L.H. Int.	.984" (25.00)	.852" (21.64)	.695" (17.65)
Feed Finger, Solid	4433	4			1.200" (30.48)	3.543" (90.00)	—	M28.5 x .75 R.H. Ext.	.984" (25.00)	.852" (21.64)	.695" (17.65)
Feed Finger, Style "B" Master	6367	4	B6	6625	1.200" (30.48)	3.543" (90.00)	—	M28.5 x .75 R.H. Ext.	7/8" (22.22)	3/4" (19.05)	5/8" (15.87)
Gildemeister: AS20-25, GS20-25 (Larger Capacity Solid Collets Available up to 1 7/32" Round, 1 3/64" Hex, 55/64" Square)											
Collet, Solid	4431	2			1.495" (37.97)	3.543" (90.00)	1.790" (45.46)	M34.5 x 75 L.H. Int.	.984" (25.00)	.852" (21.64)	.695" (17.65)
Feed Finger, Solid	4433	4			1.200" (30.48)	3.543" (90.00)	—	M28.5 x .75 R.H. Ext.	.984" (25.00)	.852" (21.64)	.695" (17.65)
Feed Finger, Style "B" Master	6367	4	B6	6625	1.200" (30.48)	3.543" (90.00)	—	M28.5 x .75 R.H. Ext.	7/8" (22.22)	3/4" (19.05)	5/8" (15.87)
Gildemeister: AS-25											
Collet, Solid	9215M	3			1.771" (44.98)	6.260" (159.00)	2.378" (60.40)	1.575" x 1 mm L.H. Int.	—	—	—
Feed Finger, Solid	—	4			1.299 (33.00)	5.512 (140.00)	—	1.181" x 1mm L.H. Ext	—	—	—
Gildemeister: GS28											
Collet, Solid	—	3			1.811" (46.00)	6.400" 162.56)	2.377" (60.37)	1.614" x 1mm L.H. Int.	1 3/32" (27.78)	15/16" (23.81)	3/4" (19.05)
Collet, Style "S" Master	5737E	3	S10	5601[3]	1.811" (46.00)	6.400" (162.56)	2.377" (60.37)	1.614" x 1mm L.H. Int.	1" (25.40)	55/64" 21.83)	45/64" (17.85)
Feed Finger, Solid	5735E	4			1.362" (39.98)	5.515" (140.08)	—	1.259" x 1 mm L.H. Ext.	1 3/32" (27.78)	15/16" (23.81)	3/4" (19.05)
Feed Finger, Style "B" Master	5738E	4	B4	6617	1.362" (39.98)	5.515" (140.08)	—	1.259" x 1mm L.H. Ext.	7/8" (22.22)	3/4" (19.05)	39/64" (15.47)

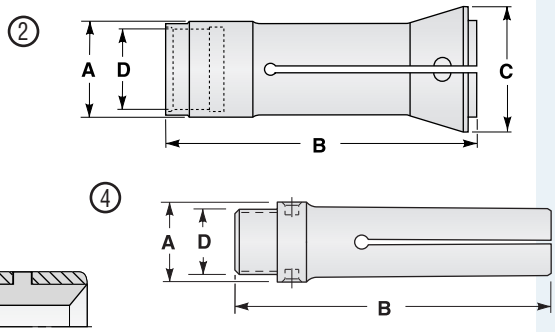
3 - Master Collet Pads available in smooth or serrated order holes

NOTE: Millimeters in parentheses. Collets and feed fingers available for larger capacity machines. Collets available in smooth or serrated order holes. For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.

Call if your newer machine is not listed. Hardinge continuously builds new collets to meet industry requirements.




Style "B" Master Feed Finger & Pad



Spindle Tooling for Automatics

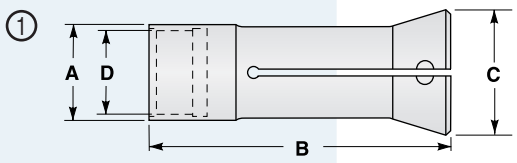
HARDINGE

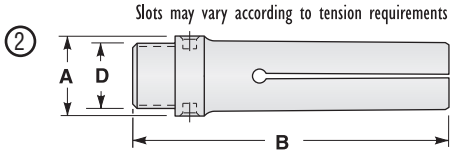
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
Gildemeister: GM32, GM35, GS32, AS32, AV32 (Larger Capacity Solid Collets Available up to 1 39/64" Round, 1 25/64" Hex, 1 1/8" Square)											
Collet, Solid	4435	1			2.085" (52.96)	5.275" (133.98)	2.732" (69.39)	M48 x 1.5 L.H. Int.	1.260" (32.00)	1.091" (27.71)	.891" (22.63)
Collet, Style "S" Master	5313	1	S12	5603[3]	2.085" (52.96)	5.275" (133.98)	2.732" (69.39)	M48 x 1.5 L.H. Int.	1 1/4" (31.75)	1 1/16" (26.98)	7/8" (22.22)
Collet, Style "S" Master	8583A	1	S15	5605[3]	2.085" (52.96)	5.275" (133.98)	2.735" (69.46)	1.889" x 1.5mm L.H. Int.	1 1/4" (31.75)	1 5/64" (27.38)	7/8" (22.22)
Feed Finger, Solid	4437	2			1.574" (39.98)	5.354" (135.99)	— —	M38 x 1.5 L.H. Ext.	1.260" (32.00)	1.091" (27.71)	.891" (22.63)
Feed Finger, Style "B" Master	6369	2	B7	6631	1.574" (39.98)	5.354" (135.99)	— —	M38 x 1.5 L.H. Ext.	1 1/8" (28.57)	1" (25.40)	25/32" (18.25)
Gildemeister: GM35 (Larger Capacity Solid Collets Available up to 1 39/64" Round, 1 25/64" Hex, 1 1/8" Square)											
Collet, Solid	4435	1			2.085" (52.96)	5.275" (133.98)	2.732" (69.39)	M48 x 1.5 L.H. Int.	1.378" (35.00)	1.193" (30.30)	.974" (24.73)
Collet, Style "S" Master	5313	1	S12	5603[3]	2.085" (52.96)	5.275" (133.98)	2.732" (69.39)	M48 x 1.5 L.H. Int.	1 1/4" (31.75)	1 1/16" (26.98)	7/8" (22.22)
Collet, Style "S" Master	8583A	1	S15	5605[3]	2.085" (52.96)	5.275" (133.98)	2.735" (69.46)	1.889" x 1.5mm L.H. Int.	1 1/4" (31.75)	1 5/64" (27.38)	7/8" (22.22)
Feed Finger, Solid	4439	2			1.622" (41.19)	5.354" (135.99)	— —	M39 x 1 R.H. Ext.	1.378" (35.00)	1.193" (30.30)	.974" (24.73)
Feed Finger, Style "B" Master	6371	2	B7	6631	1.622" (41.19)	5.354" (135.99)	— —	M39 x 1 R.H. Ext.	1 1/8" (28.57)	1" (25.40)	25/32" (18.25)
Gildemeister: GM36/42											
Collet, Solid	—	1			2.205" (56.00)	5.157" (131.)	2.850" (72.39)	2.047" x 1.5mm L.H. Int.	—	—	—
Feed Finger, Solid	—	2			1.771" (45.00)	5.354" (136.24)	— —	1.653" x 1.5mm L.H. Ext.	—	—	—
Gildemeister: GM 42											
Collet, Solid	1172K	1			2.519" (63.98)	5.078" (128.98)	3.169" (80.49)	2.323" x 1.57mm L.H. Int.	—	—	—
Feed Finger, Solid	1174K	2			2.023" (51.38)	5.354" (136.00)	— —	1.889" x 1.5mm R.H. Ext.	—	—	—

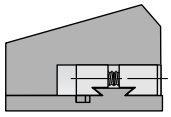
3 - Master Collet Pads available in smooth or serrated order holes

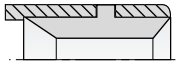
NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.

Call if your newer machine is not listed. Hardinge continuously builds new collets to meet industry requirements.






Style "S" Master Collet & Pad


Style "B" Master Feed Finger & Pad

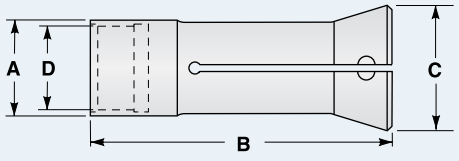
Spindle Tooling for Automatics

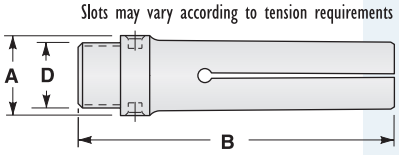
HARDINGE

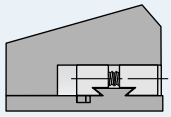
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
Gildemeister: AV48, AS48, AA48 (Larger Capacity Solid Collets Available up to 2 5/32" Round, 1 55/64" Hex, 1 17/32" Square)											
Collet, Solid	4130A	1			2.755" (69.97)	6.141" (155.98)	3.560" (90.42)	2.559" x 1.5mm L.H. Int.	1 57/64" (48.02)	1 5/8" (41.27)	1 21/64" (33.73)
Collet, Style "S" Master	3616A	1	S20	5609	2.755" (69.97)	6.141" (155.98)	3.560" (90.42)	2.559" x 1.5mm L.H. Int.	2" (50.80)	1 23/32" (43.65)	1 13/32" (35.72)
Feed Finger, Solid	8245A	2			2.250" (57.15)	6.300" 160.00)	— —	2.125" x 1.5mm L.H. Ext.	1 56/64" (47.22)	1 5/8" (41.27)	1 21/32" (42.06)
Feed Finger, Style "B" Master	3617A	2	B20	6661	2.250" (57.15)	6.300" 160.00)	— —	2.125" x 1.5mm L.H. Ext.	1 3/4" (44.45)	1 33/64" (38.49)	1 15/64" (31.35)
Gildemeister: AV67, AS67 (Larger Capacity Solid Collets Available up to 3" Round, 2 19/32" Hex, 2 1/8" Square)											
Collet, Solid	9881A	1			3.543" (90.00)	7.312" (185.72)	4.527" (115.00)	3.346" x 1.5mm L.H. Int.	2 5/8" (66.67)	2 9/32" (57.97)	1 55/64" (47.22)
Collet, Style "S" Master	5938A	1	S26	5613	3.543" (90.00)	7.312" (185.72)	4.527" (115.00)	3.346" x 1.5mm L.H. Int.	2 5/8" (66.67)	2 17/64" (57.54)	1 27/32" (46.83)
Feed Finger, Solid	9879A	2			3.055" (77.50)	6.687" (169.85)	— —	2.913" x 1.5mm L.H. Ext.	2 5/8" (66.67)	2 9/32" (57.94)	1 55/64" (47.22)
Feed Finger, Style "B" Master	3910C	2	B26	6673	3.055" (77.50)	6.687" (169.85)	— —	2.913" x 1.5mm L.H. Ext.	2 3/8" (60.32)	2 3/64" (52.00)	1 43/64" (42.46)
Gildemeister: AV/AS82											
Collet, Solid	—	1			4.291" (109.00)	7.440" (188.97)	5.449" (138.40)	4.015" x 1.5mm L.H. Int.	—	—	—
Feed Finger, Solid	—	2			3.7000" (93.98)	7.086" (180.00)	— —	3.464" x 1.5mm L.H. Ext.	—	—	—
Gildemeister: AS100											
Collet, Solid	6085H	1			5.039" (128.00)	9.842" (250.00)	6.315" (160.40)	4.803" x 1.5mm L.H. Int.	—	—	—
Feed Finger, Solid	5762H	2			4.488" (114.00)	9.252" (235.00)	— —	4.252" x 1.5mm L.H. Int.	—	—	—

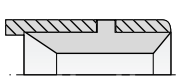
NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.

Call if your newer machine is not listed. Hardinge continuously builds new collets to meet industry requirements.

① 

② Slots may vary according to tension requirements



Style "S" Master Collet & Pad


Style "B" Master Feed Finger & Pad

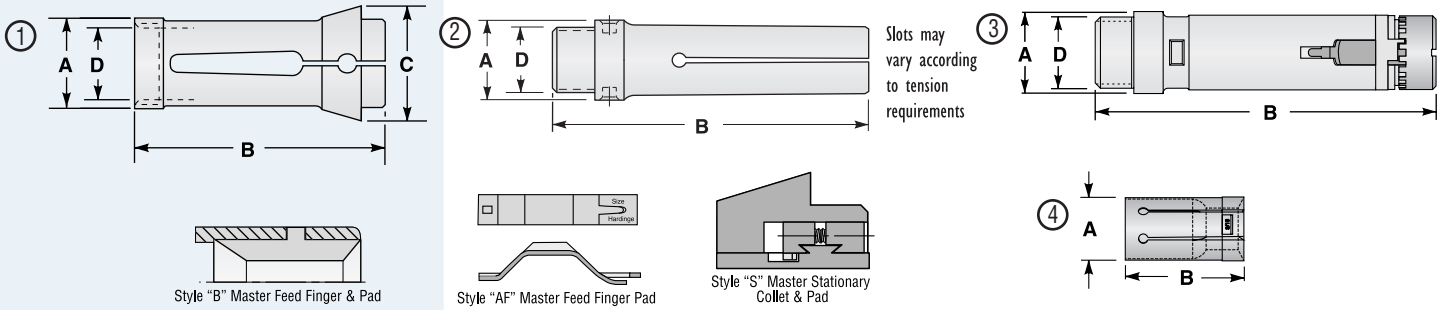
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
GREENLEE: 1" Capacity – Six Spindle (Larger Capacity Solid Collets Available up to 1 5/16" Round, 1 1/8" Hex, 59/64" Square)											
Collet, Solid	4301	1			1.559" (39.60)	4.438" (112.73)	2.003" (50.88)	—	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Feed Finger, Solid	4303	2			1.475" (37.47)	5.250" (133.35)	—	1.310" x 20 LH	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Feed Finger, Style "B" Master	6173	2	B6	6625	1.475" (37.47)	5.250" (133.35)	—	1.310" x 20 LH	7/8" (22.23)	3/4" (19.05)	39/64" (15.48)
Feed Finger, Squirrel Cage & Stock Saver		See Page 73									
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7045	3	AF6	7313[1] 7315[2]	1.475" (37.47)	5.000" (25.40)	—	1.310" x 20 LH	3/8" (9.53)	7/8" (22.23)	3/8" (9.53)	3/4" (19.05)
Bushing, Style "AF"	7361	4	AF6		.995" (25.27)	1.688" (42.88)	—	—	3/8" (9.53)	7/8" (22.23)	3/8" (9.53)	3/4" (19.05)
GREENLEE: 1 5/8" Capacity – Six Spindle (Larger Capacity Solid Collets Available up to 2 3/32" Round, 1 13/16" Hex, 1 15/32" Square)											
Collet, Solid	4305	1			2.434" (61.82)	5.750" (146.05)	3.127" (79.43)	—	1 5/8" (41.28)	1 13/32" (35.72)	1 9/64" (28.97)
Collet, Style "S" Master	5071	1	S16	5607	2.434" (61.82)	5.750" (146.05)	3.127" (79.43)	—	1 5/8" (41.28)	1 13/32" (35.72)	1 9/64" (28.97)
Feed Finger, Solid	4307	2			2.310" (58.67)	6.375" (161.93)	—	2.122" x 20 LH	1 5/8" (41.28)	1 13/32" (35.72)	1 9/64" (28.97)
Feed Finger, Style "B" Master	6175	2	B8	6635	2.310" (58.67)	6.375" (161.93)	—	2.122" x 20 LH	1 3/8" (34.93)	1 3/16" (30.16)	31/32" (24.61)
Feed Finger, Style "B" Master	6087	2	B9	6639	2.310" (58.67)	6.375" (161.93)	—	2.122" x 20 LH	1 9/16" (39.68)	1 3/8" (34.92)	1 3/32" (27.78)
Feed Finger, Style "B" Master	6177	2	B16	6657	2.310" (58.67)	6.375" (161.93)	—	2.122" x 20 LH	1 1/2" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
Feed Finger, Squirrel Cage & Stock Saver		See Page 73									
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7047	3	AF16	7325[1] 7327[2]	2.310" (58.67)	6.063" (154.00)	—	2.122" x 20 LH	5/8" (15.88)	1 7/16" (36.51)	5/8" (15.88)	1 1/4" (31.75)
Bushing, Style "AF"	7369	4	AF16		1.620" (41.15)	2.375" (60.33)	—	—	5/8" (15.88)	1 7/16" (36.51)	5/8" (15.88)	1 1/4" (31.75)

1 - Round
2 - Hexagon

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



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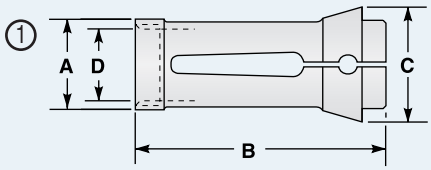
Spindle Tooling for Automatics

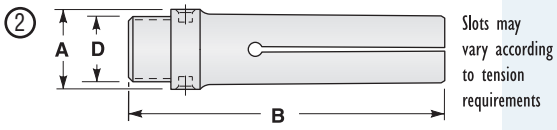
HARDINGE

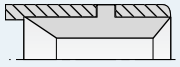
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
GREENLEE: 2" Capacity – Six Spindle (Larger Capacity Solid Collets Available up to $2^{15}/_{32}$" Round, $2^{9}/_{64}$" Hex, $1^{3}/_{4}$" Square)											
Collet, Solid	4311	1			2.872" (72.95)	5.875" (149.23)	3.439" (87.35)	—	2" (50.80)	$1^{23}/_{32}$" (43.66)	$1^{13}/_{32}$" (35.72)
Collet, Style "S" Master	5073	1	S20	5609[3]	2.872" (72.95)	5.875" (149.23)	3.439" (87.35)	—	2" (50.80)	$1^{23}/_{32}$" (43.66)	$1^{13}/_{32}$" (35.72)
Feed Finger, Solid	4309	2			2.625" (66.68)	6.750" (171.45)	— —	2.373" x 20 LH	2" (50.80)	$1^{23}/_{32}$" (43.66)	$1^{13}/_{32}$" (35.72)
Feed Finger, Style "B" Master	4353	2	B9	6639	2.625" (66.68)	6.750" (171.45)	— —	2.373" x 20 LH	$1^{9}/_{16}$" (39.68)	$1^{3}/_{8}$" (34.92)	$1^{3}/_{32}$" (27.78)
Feed Finger, Style "B" Master	6179	2	B20	6661	2.625" (66.68)	6.750" (171.45)	— —	2.373" x 20 LH	$1^{3}/_{4}$" (44.45)	$1^{33}/_{64}$" (38.50)	$1^{15}/_{64}$" (31.35)
Feed Fingers, Squirrel Cage & Stock Saver	See Page 73										
GREENLEE: $2^{1}/_{4}$" Capacity – Six Spindle (Larger Capacity Solid Collets Available up to $2^{19}/_{32}$" Round, $2^{1}/_{4}$" Hex, $1^{53}/_{64}$" Square)											
Collet, Solid	MP3830	1			2.934" (74.52)	5.875" (149.23)	3.439" (87.35)	—	$2^{1}/_{4}$" (57.15)	$1^{15}/_{16}$" (49.21)	$1^{37}/_{64}$" (40.08)
Collet, Style "S" Master	5059	1	S20	5609[3]	2.934" (74.52)	5.875" (149.23)	3.439" (87.35)	—	2" (50.80)	$1^{23}/_{32}$" (43.66)	$1^{13}/_{32}$" (35.72)
Feed Finger, Solid	MP3832	2			2.812" (71.42)	6.750" (171.45)	— —	2.623" x 20 LH	$2^{1}/_{4}$" (57.15)	$1^{15}/_{16}$" (49.21)	$1^{37}/_{64}$" (40.08)
Feed Finger, Style "B" Master	6181	2	B22	6665	2.812" (71.42)	6.750" (171.45)	— —	2.623" x 20 LH	2" (50.80)	$1^{23}/_{32}$" (43.66)	$1^{13}/_{32}$" (35.72)
GREENLEE: $2^{5}/_{8}$" Capacity – Four Spindle (Larger Capacity Solid Collets Available up to $2^{27}/_{32}$" Round, $2^{9}/_{16}$" Hex, $2^{3}/_{32}$" Square)											
Collet, Solid	4317	1			3.308" (84.02)	6.500" (165.10)	4.064" (103.23)	—	$2^{5}/_{8}$" (66.68)	$2^{17}/_{64}$" (57.55)	$1^{27}/_{32}$" (46.83)
Collet, Style "S" Master	5077	1	S26	5613[3]	3.308" (84.02)	6.500" (165.10)	4.064" (103.23)	—	$2^{5}/_{8}$" (66.68)	$2^{17}/_{64}$" (57.55)	$1^{27}/_{32}$" (46.83)
Feed Finger, Solid	4319	2			3.220" (81.79)	6.750" (171.45)	— —	2.997" x 20 LH	$2^{5}/_{8}$" (66.68)	$2^{17}/_{64}$" (57.55)	$1^{27}/_{32}$" (46.83)
Feed Finger, Style "B" Master	6183	2	B25	6669	3.220" (81.79)	6.750" (171.45)	— —	2.997" x 20 LH	$2^{1}/_{4}$" (57.15)	$1^{15}/_{16}$" (49.21)	$1^{37}/_{64}$" (40.08)

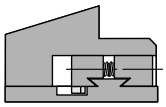
3 - Master Collet Pads available in smooth or serrated order holes

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.






Style "B" Master Feed Finger & Pad


Style "S" Master Stationary Collet & Pad

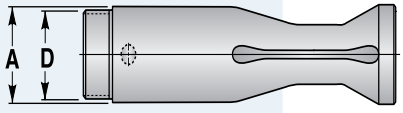
GREENLEE

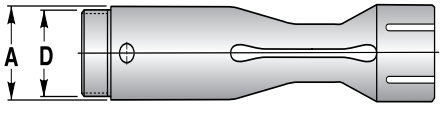
To Order Contact: Exact Tooling / www.exacttooling.com / sales@exacttooling.com / 888-988-8820

Spindle Tooling for Automatics

HARDINGE

Description		Hardinge Part Number	Figure	Dimensions A Back Bearing Diameter	B Overall Length	C Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
GREENLEE: 1" Capacity										
Feed Finger, Squirrel Cage	Steel	4303-88-	1	1.475"	—	—		1"	55/64"	45/64"
	Bronze	4303-90-	1	(37.47)	—	—	1.310" x 20 LH	(25.40)	(21.83)	(17.86)
Feed Finger, Stock Saver	Steel	4303-89-	2	1.475"	—	—		1"	55/64"	45/64"
	Bronze	4303-91-	2	(37.47)	—	—	1.310" x 20 LH	(25.40)	(21.83)	(17.86)
GREENLEE: 1⅝" Capacity										
Feed Finger, Squirrel Cage	Steel	4307-88-	1	2.310"	—	—		1⅝"	1 13/32"	1 9/64"
	Bronze	4307-90-	1	(58.67)	—	—	2.122" x 20 LH	(41.28)	(35.72)	(28.97)
Feed Finger, Stock Saver	Steel	4307-89-	2	2.310"	—	—		1⅝"	1 13/32"	1 9/64"
	Bronze	4307-91-	2	(58.67)	—	—	2.122" x 20 LH	(41.28)	(35.72)	(28.97)
GREENLEE: 2" Capacity										
Feed Finger, Squirrel Cage	Steel	4309-88-	1	2.625"	—	—		2"	1 23/32"	1 13/32"
	Bronze	4309-90-	1	(66.68)	—	—	2.373" x 20 LH	(50.80)	(43.66)	(35.72)
Feed Finger, Stock Saver	Steel	4309-89-	2	2.625"	—	—		2"	1 23/32"	1 13/32"
	Bronze	4309-91-	2	(66.68)	—	—	2.373" x 20 LH	(50.80)	(43.66)	(35.72)

① 

② 

To Order Contact: Exact Tooling / www.exacttooling.com / sales@exacttooling.com / 888-988-8820

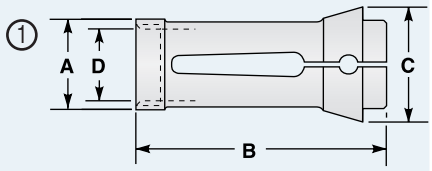
Spindle Tooling for Automatics

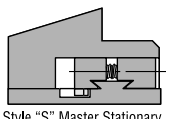
HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
HERBERT: 1" Capacity – #1-SO (Larger Capacity Solid Collets Available up to 1 1/32" Round, 7/8" Hex, 23/32" Square)											
Collet, Solid	MP3792	1			1.373" (34.87)	3.563" (90.50)	1.911" (48.54)	—	1" (25.40)	55/64" (21.83)	45/64" (17.86)
HERBERT: 1½" Capacity – #2, #2D, #3											
Collet, Solid	2561	1			1.874" (47.60)	3.906" (99.21)	2.450" (62.23)	—	1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
(Larger Capacity Collets Available up to 1 5/8" Round, 1 3/8" Hex, 1 1/8" Square)											
Collet, Style "S" Master	5195	1	S10	5601[3]	1.874" (47.60)	3.906" (99.21)	2.450" (62.23)	—	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, Solid	MP3141	1			2.373" (60.27)	4.938" (125.43)	3.255" (82.68)	—	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
Collet, Style "S" Master	MP3584	1	S20	5609[3]	2.373" (60.27)	4.938" (125.43)	3.255" (82.68)	—	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
HERBERT: 2" Capacity – #4 (Larger Capacity Solid Collets Available up to 2" Round, 1 23/32" Hex, 1 13/32" Square)											
Collet, Solid	2519	1			2.373" (60.27)	4.938" (125.43)	3.255" (82.68)	—	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
Collet, Style "S" Master	2531	1	S20	5609[3]	2.373" (60.27)	4.938" (125.43)	3.255" (82.68)	—	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
HERBERT: 2 3/16" Capacity – #7 (Larger Capacity Solid Collets Available up to 2 3/16" Round, 1 57/64" Hex, 1 35/64" Square)											
Collet, Solid	2527	1			2.623" (66.62)	5.375" (136.53)	3.845" (97.66)	—	2 3/16" (55.56)	1 57/64" (48.02)	1 35/64" (39.29)
HERBERT: 2½" Capacity – #5, #7 (Larger Capacity Solid Collets Available up to 2½" Round, 2 5/32" Hex, 1¾" Square)											
Collet, Solid	MP3546	1			2.873" (72.97)	6.125" (155.58)	3.845" (97.66)	—	2½" (63.50)	2 5/32" (54.77)	1¾" (44.45)
Collet, Style "S" Master	5197	1	S26	5613[3]	2.873" (72.97)	6.125" (155.58)	3.845" (97.66)	—	2 5/8" (66.68)	2 17/64" (57.55)	1 27/32" (46.83)

3 - Master Collet Pads available in smooth or serrated order holes

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.



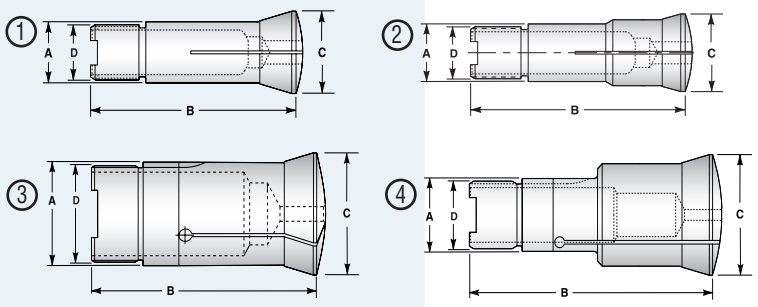

Style "S" Master Stationary Collet & Pad

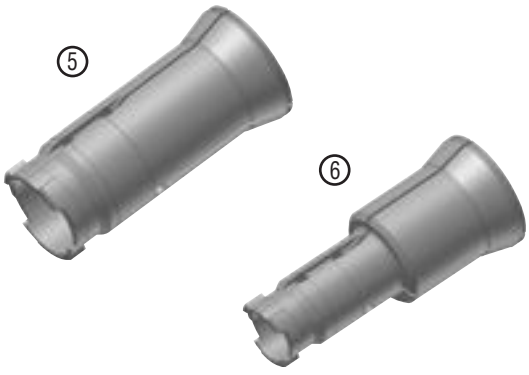
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
HYDROMAT: HW/25-12, HB/32-16, HB 32/45-16, HB/45-12, PRO20, EPIC R/T											
25W – Collet	1901	1			.984" (24.99)	3.719" (94.46)	1.326" (33.68)	.970" x 15.24 RH Buttress	¾" (19.05)	41/64" (16.27)	17/32" (13.49)
25W – Collet, EPIC R/T Quick-Change	91901	5			.984" (24.99)	3.766" (95.65)	1.326" (33.68)	Cam-Lock Bayonet-style	¾" (19.05)	41/64" (16.27)	17/32" (13.49)
25W-OS – Thru Collet	1903	2			.984" (24.99)	3.719" (94.46)	1.326" (33.68)	.970" x 15.24 RH Buttress	¾" (19.05)	41/64" (16.27)	17/32" (13.49)
25W-OS – Thru Collet, EPIC R/T Quick-Change	91903	6			.984" (24.99)	3.766" (95.65)	1.326" (33.68)	Cam-Lock Bayonet-style	¾" (19.05)	41/64" (16.27)	17/32" (13.49)
25W-OS – Stepped-Hole Collet	1903	2			.984" (24.99)	3.719" (94.46)	1.326" (33.68)	.970" x 15.24 RH Buttress	.751" - 1" (19.07-25.40)	.642" - ⅞" (16.30-22.22)	.532" - ¾" (13.51-19.05)
25W-OS – Stepped-Hole Collet, EPIC R/T Quick-Change	91903	6			.984" (24.99)	3.766" (95.65)	1.326" (33.68)	Cam-Lock Bayonet-style	.751" - 1" (19.07-25.40)	.642" - ⅞" (16.30-22.22)	.532" - ¾" (13.51-19.05)
B32 – Thru-Collet	2249	1			1.260" (32.00)	4.015" (101.98)	1.576" (40.03)	1.169 x 15 RH Buttress	.943" (23.95)	.817" (20.75)	.667" (16.94)
B32 – Stepped-Hole Collet	2249	1			1.260" (32.00)	4.015" (101.98)	1.576" (40.03)	1.169 x 15 RH Buttress	.944" - 1¼" (23.97-31.75)	.818" - 1.091" (20.77-27.71)	.668" -.890" (16.96-22.60)
B32/45 – Thru-Collet	2239	4			1.260" (32.00)	4.633" (117.67)	2.090" (53.08)	1.169 x 15 RH Buttress	59/64" (23.41)	.817" (20.75)	.667" (16.94)
B32/45 – Thru-Collet, EPIC R/T Quick-Change	92239	6			1.260" (32.00)	4.726" (120.04)	2.090" (53.08)	Cam-Lock Bayonet-style	59/64" (23.41)	.817" (20.75)	.667" (16.94)
B32/45 – Stepped-Hole Collet	2241	4			1.260" (32.00)	4.633" (117.67)	2.090" (53.08)	1.169 x 15 RH Buttress	.922" - 1¾" (23.97-44.45)	.818" - 1½" (20.77-38.10)	.668" - 1¼" (16.96-31.75)
B32/45 – Stepped-Hole Collet, EPIC R/T Quick-Change	92241	6			1.260" (32.00)	4.726" (120.04)	2.090" (53.08)	Cam-Lock Bayonet-style	.922" - 1¾" (23.97-44.45)	.818" - 1½" (20.77-38.10)	.668" - 1¼" (16.96-31.75)
B45 – Thru-Collet	2243	3			1.771" (44.48)	4.350" (110.49)	2.090" (53.08)	M42 x1.5 Buttress	1 13/32" (35.71)	1.240" (32.49)	1.013" (28.01)
B45 – Thru-Collet, EPIC R/T Quick-Change	92243	5			1.771" (44.48)	4.446" (112.92)	2.090" (53.08)	Cam-Lock Bayonet-style	1 13/32" (35.71)	1.240" (32.49)	1.013" (28.01)
B45 – Stepped-Hole Collet	2245	3			1.771" (44.48)	4.350" (110.49)	2.090" (53.08)	M42 x1.5 Buttress	1.407" - 1¾" (35.73-44.45)	1.241" - 1½" (31.52-38.10)	1.014" - 1¼" (25.75-31.75)
B45 – Stepped-Hole Collet, EPIC R/T Quick-Change	92245	5			1.771" (44.48)	4.446" (112.92)	2.090" (53.08)	Cam-Lock Bayonet-style	1.407"-1¾" (35.73-44.45)	1.241"-1½" (31.52-38.10)	1.014"-1¼" (25.75-31.75)
PRO20 – Thru-Collet	2247	2			.787" (20.00)	3.700" (93.98)	1.036" (26.31)	.775" x 15.24 RH Buttress	.5708" (14.49)	.4921" (12.50)	.3937" (10.00)
PRO20 – Stepped-Hole Collet	2247	2			.787" (20.00)	3.700" (93.98)	1.036" (26.31)	.775" x 15.24 RH Buttress	.571" - .7874" (14.50-20.00)	.493" - .6693" (12.52-1.007)	.394" - .551" (10.00-13.99)

NOTE: Millimeters in parentheses.
Collets available in smooth or serrated order holes.





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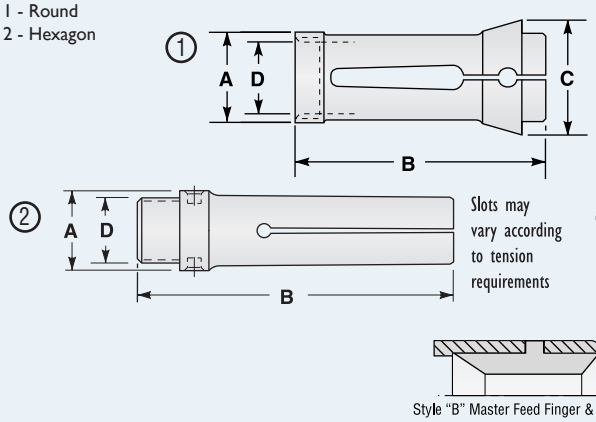
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
INDEX: ½" Capacity – #12 (Larger Capacity Solid Collets Available up to 21/32" Round, 9/16" Hex, 15/32" Square)											
Collet, Solid	3701	1			.864" (21.95)	2.172" (55.17)	1.186" (30.12)	—	½" (12.70)	27/64" (10.72)	11/32" (8.73)
INDEX: ½" Capacity – DG-12, DO-12, ON-12, OR-12 (Larger Capacity Solid Collets Available up to 21/32" Round, 9/16" Hex, 15/32" Square)											
Collet, Solid	MP3587	1			.786" (19.96)	2.125" (53.98)	1.030" (26.16)	—	½" (12.70)	27/64" (10.72)	11/32" (8.73)
Feed Fingers for Index – #12, DG-12, DO-12, ON-12, OR-12											
Feed Finger, Solid	3703	2			.708" (17.98)	2.750" (69.85)	—	.629" x 1 mm LH	½" (12.70)	27/64" (10.72)	11/32" (8.73)
Feed Finger, Style "B" Master	6287	2	B10	6643	.708" (17.98)	2.750" (69.85)	—	.629" x 1 mm LH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7101	3	AF10A	7321[1] 7323[2]	.708" (17.98)	2.594" (65.88)	—	.629" x 1 mm LH	1/16" (4.59)	3/8" (9.53)	1/8" (3.18)	5/16" (7.94)
Bushing, Style "AF"	7367	4	AF10A		.492" (12.50)	1.156" (29.36)	—	—	1/16" (4.59)	3/8" (9.53)	1/8" (3.18)	5/16" (7.94)
INDEX: 5/8" Capacity – ON-16, OR-16 (Larger Capacity Solid Collets Available up to 21/32" Round, 9/16" Hex, 15/32" Square)											
Collet, Solid	MP3680	1			.983" (24.97)	2.125" (53.98)	1.225" (31.12)	—	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
Feed Finger, Solid	MP3681	2			.846" (21.49)	2.750" (69.85)	—	.785" x 1 mm LH	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
INDEX: 3/4" Capacity – #18, #19, #25 (Do not confuse with MS-25) (Larger Capacity Solid Collets Available up to 7/8" Round, 3/4" Hex, 5/8" Square)											
Collet, Solid	3705	1			1.100" (27.94)	2.750" (69.85)	1.500" (38.10)	—	3/4" (19.05)	41/64" (16.27)	33/64" (13.10)
Feed Finger, Solid	3707	2			.945" (24.00)	3.344" (84.94)	—	.865" x 1 mm LH	3/4" (19.05)	41/64" (16.27)	33/64" (13.10)
Feed Finger, Style "B" Master	6289	2	XB4	6617	.945" (24.00)	3.344" (84.94)	—	.865" x 1 mm LH	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7095	3	AF3	7305[1] 7307[2]	.945" (24.00)	3.188" (80.98)	—	.865" x 1 mm LH	3/16" (4.76)	1/2" (12.70)	3/16" (4.76)	7/16" (11.11)
Bushing, Style "AF"	7357	4	AF3A		.638" (16.21)	1.250" (31.75)	—	—	3/16" (4.76)	1/2" (12.70)	3/16" (4.76)	7/16" (11.11)

1 - Round
2 - Hexagon



Style "B" Master Feed Finger & Pad

Style "AF" Master Feed Finger Pad

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.

Call if your newer machine is not listed. Hardinge continuously builds new collets to meet industry requirements.

INDEX

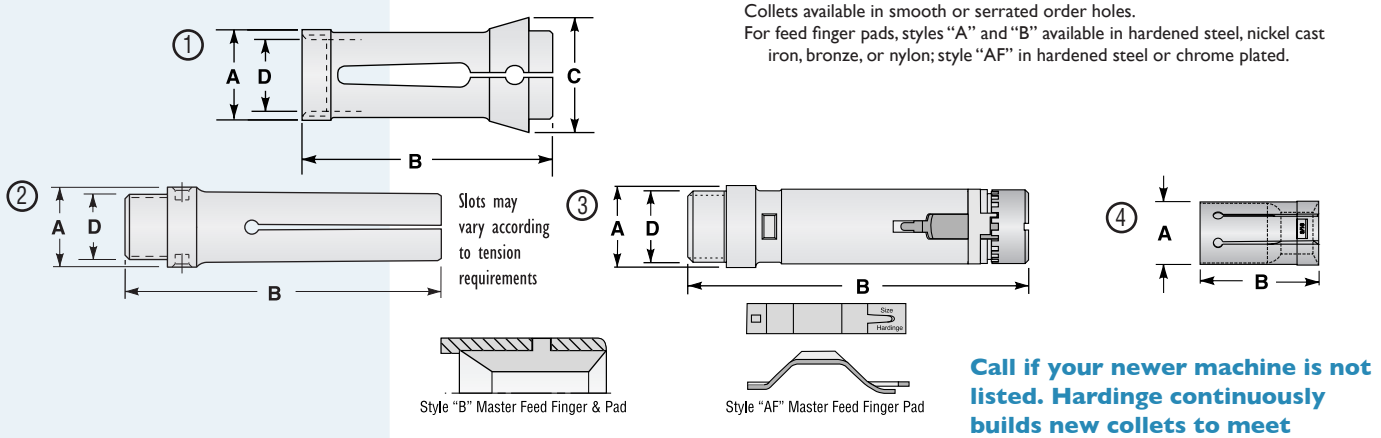
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
INDEX: 25/32" Capacity – #20 (Larger Capacity Solid Collets Available up to 1" Round, 7/8" Hex, 1 1/16" Square)											
Collet, Solid	3731	1			1.257" (31.93)	2.938" (74.63)	1.767" (44.88)	—	25/32" (19.85)	1 1/16" (17.46)	9/16" (14.29)
Feed Finger, Solid	MP3701	2			1.025" (26.04)	3.563" (90.50)	— —	.943" x 1 mm LH	25/32" (19.85)	1 1/16" (17.46)	9/16" (14.29)
INDEX: 15/16" Capacity – #24 (Larger Capacity Solid Collets Available up to 1 3/16" Round, 1 1/32" Hex, 27/32" Square)											
Collet, Solid	3713	1			1.376" (34.95)	3.156" (80.16)	1.895" (48.13)	—	15/16" (23.81)	51/64" (20.24)	21/32" (16.67)
Feed Finger, Solid	3715	2			1.183" (30.05)	3.750" (95.25)	— —	1.100" x 1 mm LH	15/16" (23.81)	1 3/16" (20.63)	21/32" (16.67)
Feed Finger, Style "B" Master	6293	2	B5	6621	1.183" (30.05)	3.750" (95.25)	— —	1.100" x 1 mm LH	3/4" (19.05)	41/64" (16.27)	33/64" (13.10)
INDEX: 1" Capacity – #25 (Not to be confused with MS-25) (Larger Capacity Solid Collets Available up to 1 5/32" Round, 1" Hex, 1 3/16" Square)											
Collet, Solid	3709	1			1.376" (34.95)	2.750" (69.85)	1.693" (43.00)	—	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Feed Finger, Solid	3711	2			1.220" (30.99)	3.547" (90.09)	— —	1.141" x 1 mm LH	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Feed Finger, Style "B" Master	6291	2	XB6	6625	1.220" (30.99)	3.547" (90.09)	— —	1.141" x 1 mm LH	7/8" (22.23)	3/4" (19.05)	39/64" (15.48)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7097	3	AF4	7309[1] 7311[2]	1.220" (30.99)	3.391" (86.13)	— —	1.141" x 1 mm LH	1/4" (6.35)	5/8" (15.88)	1/4" (6.35)	17/32" (13.50)
Bushing, Style "AF"	7359	4	AF4		.771" (19.58)	1.438" (36.53)	— —	—	1/4" (6.35)	5/8" (15.88)	1/4" (6.35)	17/32" (13.50)
INDEX: 1 3/16" Capacity – C-29, B-30, GS-30 (Larger Capacity Solid Collets Available up to 1 3/16" Round, 1 1/32" Hex, 27/32" Square)											
Collet, Solid	3713	1			1.376" (34.95)	3.156" (80.16)	1.895" (48.13)	—	1 3/16" (30.16)	1 1/64" (25.80)	53/64" (21.03)
Feed Finger, Solid Standard	3715	2			1.183" (30.05)	3.750" (95.25)	— —	1.100" x 1 mm LH	15/16" (23.81)	1 3/16" (20.63)	21/32" (16.67)
Feed Finger, Solid Outside	3717	2			1.656" (42.07)	4.719" (119.86)	— —	1.414" x 1.5 mm RH	1 3/16" (30.16)	1 1/32" (26.19)	27/32" (21.43)
Feed Finger, Style "B" Master	6293	2	B5	6621	1.183" (30.05)	3.750" (95.25)	— —	1.100" x 1 mm LH	3/4" (19.05)	41/64" (16.27)	33/64" (13.10)

1 - Round
2 - Hexagon

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



Call if your newer machine is not listed. Hardinge continuously builds new collets to meet industry requirements.

To Order Contact: Exact Tooling / www.exacttooling.com / sales@exacttooling.com / 888-988-8820

Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
INDEX: 1⅝" Capacity – B-42 (Larger Capacity Solid Collets Available up to 1²¹⁄₃₂" Round, 1¹³⁄₃₂" Hex, 1⁵⁄₃₂" Square)											
Collet, Solid	3719	1			1.887" (47.93)	3.688" (93.68)	2.355" (59.82)	M43 x 1 Stop Thrd.	1⅝" (41.28)	1¹³⁄₃₂" (35.72)	1⁹⁄₆₄" (28.97)
Collet, Style "S" Master	5205	1	S10	5601[3]	1.887" (47.93)	3.688" (93.68)	2.355" (59.82)	M43 x 1 Stop Thrd.	1" (25.40)	⁵⁵⁄₆₄" (21.83)	⁴⁵⁄₆₄" (17.86)
Feed Finger, Solid Standard	3721	2			1.652" (41.96)	4.563" (115.90)	—	1.574" x 1 mm LH	1¹³⁄₃₂" (35.72)	1⁷⁄₃₂" (32.70)	1" (25.40)
Feed Finger, Solid Outside	3723	2			2.205" (56.01)	5.438" (138.13)	—	1.965" x 1.5 mm LH	1²³⁄₃₂" (43.66)	1³¹⁄₆₄" (37.70)	1¹³⁄₆₄" (30.56)
Feed Finger, Style "B" Master Standard	6295	2	B7	6631	1.652" (41.96)	4.563" (115.90)	—	1.574" x 1 mm LH	1⅛" (28.58)	³¹⁄₃₂" (24.61)	²⁵⁄₃₂" (19.85)
Feed Finger, Style "B" Master Outside	6297	2	B16	6657	2.205" (56.01)	5.438" (138.11)	—	1.965" x 1.5 mm LH	1½" (38.10)	1¹⁹⁄₆₄" (32.94)	1³⁄₆₄" (26.59)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7099	3	AF7	7317[1] 7319[2]	1.652" (41.96)	4.344" (110.34)	—	1.574" x 1 mm LH	½" (12.70)	1⅛" (28.58)	½" (12.70)	¹⁵⁄₁₆" (23.81)
Bushing, Style "AF"	7363	4	AF7		1.235" (31.37)	1.938" (49.23)	—	—	½" (12.70)	1⅛" (28.58)	½" (12.70)	¹⁵⁄₁₆" (23.81)

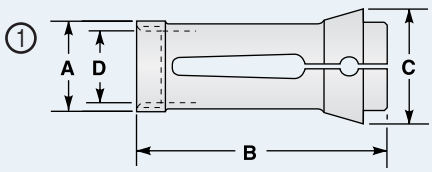
1 - Round
2 - Hexagon
3 - Master Collet Pads available in smooth or serrated order holes

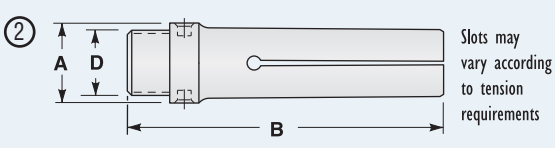
NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.

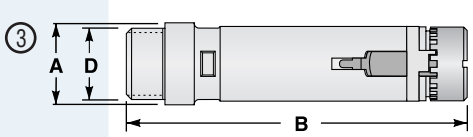
Call if your newer machine is not listed. Hardinge continuously builds new collets to meet industry requirements.

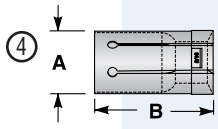
B-42 Solid Stop Assembly	3745
Stop Body	3747
Stop Rd	1097
Stop Nut	1185

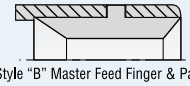
B-42 Rear Guide Bushing	3749

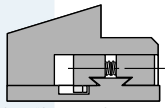


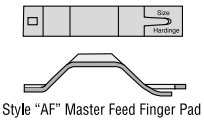







Style "B" Master Feed Finger & Pad


Style "S" Master Stationary Collet & Pad


Style "AF" Master Feed Finger Pad

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Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
INDEX: 2⅜" Capacity – B-60 (Larger Capacity Solid Collets Available up to 2⅜" Round, 2 1/16" Hex, 1 11/16" Square)											
Collet, Solid	3725-07	1			2.596" (65.94)	4.328" (109.93)	3.290" (83.57)	M61 x 1 Stop Thrd.	2⅜" (60.33)	2 3/64" (51.99)	1 43/64" (42.47)
Collet, Style "S" Master	5207	1	S16	5607[3]	2.596" (65.94)	4.328" (109.93)	3.290" (83.57)	M61 x 1 Stop Thrd.	1⅝" (41.28)	1 13/32" (35.72)	1 9/64" (28.97)
Collet, Style "S" Master -SC	5209-07	1	S20	5609[1]	2.596" (65.94)	4.328" (109.93)	3.290" (83.57)	M61 x 1 Stop Thrd.	2.0" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
Feed Finger, Solid Standard	3727	2			2.362" (59.99)	5.500" (139.70)	—	2.283" x 1 mm LH	2 1/16" (52.38)	1 25/32" (45.24)	1 7/16" (36.51)
Feed Finger, Solid Outside	3729	2			2.952" (74.98)	5.438" (138.13)	—	2.674" x 1.5 mm RH	2 13/32" (61.12)	2 1/16" (52.39)	1 11/16" (42.86)
Feed Finger, Style "B" Master Standard	6299	2	B20	6661	2.362" (59.99)	5.500" (139.70)	—	2.283" x 1 mm LH	1¾" (44.45)	1 33/64" (38.50)	1 15/64" (31.35)
Feed Finger, Style "B" Master Outside	6069	2	B22	6665	2.952" (74.98)	5.438" (138.13)	—	2.674" x 1.5 mm RH	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)

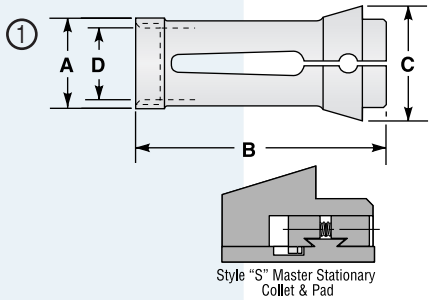
3 - Master Collet Pads available in smooth or serrated order holes

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.

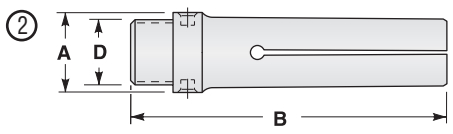
Call if your newer machine is not listed. Hardinge continuously builds new collets to meet industry requirements.

B-60 Solid Stop Assembly	3751
Stop Body	3753
Stop Rd	1363
Stop Nut	1185

B-60 Rear Guide Bushing	3755



Style "S" Master Stationary Collet & Pad



Style "B" Master Feed Finger & Pad

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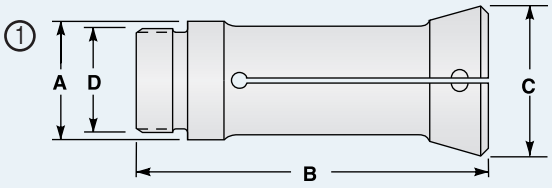
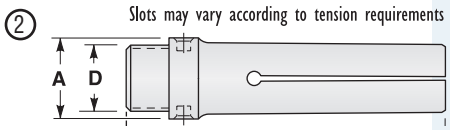
Spindle Tooling for Automatics

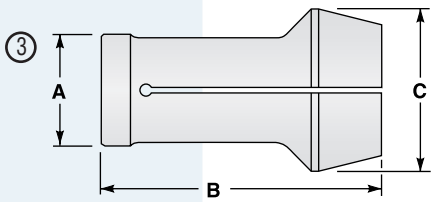
HARDINGE

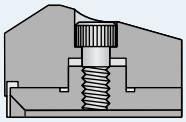
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
NATIONAL ACME: 9/16" Capacity – C (Larger Capacity Solid Collets Available up to 47/64" Round, 5/8" Hex, 1/2" Square)											
Collet, Solid	4349	1			1.059" (26.90)	2.906" (73.81)	1.380" (35.05)	.917" x 32 LH	9/16" (14.29)	31/64" (12.30)	25/64" (9.92)
Feed Finger, Solid	4017	2			.780" (19.81)	2.750" (69.85)	— —	.685" x 32 LH	9/16" (14.29)	31/64" (12.30)	25/64" (9.92)
Feed Finger, Solid Sweat-On	4019	2			.780" (19.81)	2.750" (69.85)	— —	—	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
NATIONAL ACME: #55 – Push Out (Larger Capacity Solid Collets Available up to 1 31/32" Round, 1 45/64" Hex, 1 25/64" Square)											
Collet, Conventional Style Master	MP1478	3		MP1432	2.323" (59.00)	4.750" (120.65)	3.565" (90.55)	—	1 5/8" (41.28)	1 13/32" (35.72)	1 9/64" (28.97)
Feed Finger, Style "B" Master	6315	2	B8	6635	1.995" (50.67)	4.938" (125.43)	— —	1.872" x 24 RH	1 3/8" (34.93)	1 3/16" (30.16)	31/32" (24.61)
NATIONAL ACME: #515 – Push Out (Larger Capacity Solid Collets Available up to 49/64" Round, 21/32" Hex, 17/32" Square)											
Collet, Solid	MP1063	3			1.059" (26.90)	2.812" (71.42)"	1.375" (34.93)	—	9/16" (14.29)	31/64" (12.30)	25/64" (9.92)
Feed Finger, Style "B" Master	6311	2	B2	6607	.840" (21.34)	3.063" (77.80)	— —	.748" x 30 LH	7/16" (11.11)	3/8" (9.53)	19/64" (7.54)

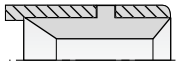
NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.








Conventional Style Master Collet & Pad


Style "B" Master Feed Finger & Pad

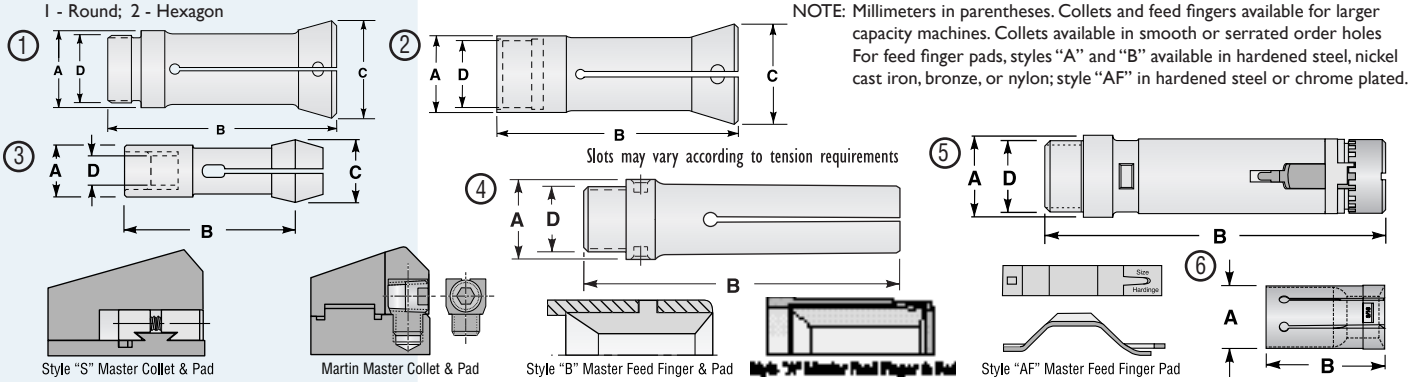
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
NEW BRITAIN: 9/16" Capacity (Larger Capacity Solid Collets Available up to 47/64" Round, 5/8" Hex, 1/2" Square)											
Collet, Solid	4349	1			1.059" (26.90)	2.906" (73.81)	1.380" (35.05)	.917" x 32 LH	9/16" (14.29)	31/64" (12.30)	25/64" (9.92)
Feed Finger, Solid	4017	4			.780" (19.81)	2.750" (69.85)	— —	.685" x 32 LH	9/16" (14.29)	31/64" (12.30)	25/64" (9.92)
Feed Finger, Solid Sweat-On	4019	4			.780" (19.81)	2.750" (69.85)	— —	—	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
NEW BRITAIN: 7/8" Capacity – #407 (Larger Capacity Solid Collets Available up to 1 5/32" Round, 1" Hex, 13/16" Square)											
Collet, Solid	MP1949	2			1.495" (37.97)	5.188" (131.78)	1.865" (47.37)	1.375" x 20 LH	7/8" (22.23)	3/4" (19.05)	39/64" (15.48)
Feed Finger, Solid	4033	4			1.150" (29.21)	5.250" (133.35)	— —	1.043" x 32 LH	7/8" (22.23)	3/4" (19.05)	39/64" (15.48)
Feed Finger, Style "B" Master	6231	4	B5	6621	1.150" (29.21)	5.250" (133.35)	— —	1.043" x 32 LH	3/4" (19.05)	41/64" (16.27)	33/64" (13.10)
NEW BRITAIN: 1" Capacity – #51, #60, #408 (Larger Capacity Solid Collets Available up to 1 9/32" Round, 1 3/32" Hex, 29/32" Square)											
Collet, Solid	4361	2			1.620" (41.15)	5.125" (130.18)	2.145" (54.48)	1.484" x 24 LH	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, HQC Quick-Change	See page 101										
Collet, Burring [1"] [RAN6] [AO2450]	4039	3			1.310" (33.27)	3.000" (76.20)	1.450" (36.83)	1.188" x 20 LH	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, Style "S" Master	5219	2	S10	5601	1.620" (41.15)	5.125" (130.18)	2.145" (54.48)	1.484" x 24 LH	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, Martin Master	5445	2	M10	5901	1.620" (41.15)	5.125" (130.18)	2.145" (54.48)	1.484" x 24 LH	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Feed Finger, Solid	4363	4			1.250" (31.75)	5.250" (133.35)	— —	1.185" x 24 LH	1" (25.40)	57/64" (22.62)	45/64" (17.86)
Feed Finger, Squirrel Cage & Stock Saver	See page 86										
Feed Finger, Style "B" Master	6321	4	B6	6625	1.250" (31.75)	5.250" (133.35)	— —	1.185" x 24 LH	7/8" (22.23)	3/4" (19.05)	39/64" (15.48)
Feed Finger, Style "A" Master	6441	4	A10	6715	1.250" (31.75)	5.250" (133.35)	— —	1.185" x 24 LH	15/16" (23.81)	51/64" (20.24)	21/32" (16.67)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7073	5	AF6	7313[1] 7315[2]	1.250" (31.75)	5.000" (127.00)	— —	1.185" x 24 LH	3/8" (9.53)	7/8" (22.23)	3/8" (9.53)	3/4" (19.05)
Bushing, Style "AF"	7361	6	AF6		.995" (25.27)	1.688" (42.88)	— —	—	3/8" (9.53)	7/8" (22.23)	3/8" (9.53)	3/4" (19.05)

1 - Round; 2 - Hexagon

NOTE: Millimeters in parentheses. Collets and feed fingers available for larger capacity machines. Collets available in smooth or serrated order holes For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



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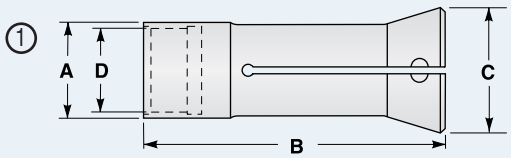
Spindle Tooling for Automatics

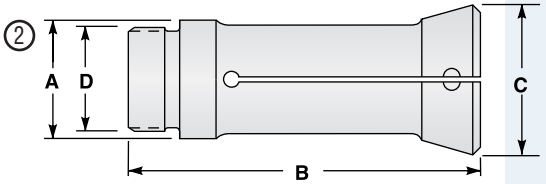
HARDINGE

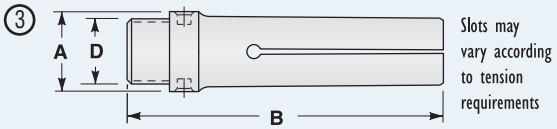
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
NEW BRITAIN: 1" Capacity – #172, #226 – Draw In (Larger Capacity Solid Collets Available up to 1 7/32" Round, 1 3/64" Hex, 55/64" Square)											
Collet, Solid	MP1953	1			1.620" (41.15)	4.500" (114.30)	2.115" (53.72)	1.484" x 24 LH	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, Style "S" Master	5221	1	S10	5601[3]	1.620" (41.15)	4.438" (112.71)	2.115" (53.72)	1.484" x 24 LH	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Feed Finger, Solid	MP1353	3			1.265" (32.13)	4.125" (104.78)	— —	1.484" x 24 LH	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Feed Finger, Style "B" Master	6323	3	B6	6625	1.265" (32.13)	4.125" (104.78)	— —	1.185" x 24 LH	7/8" (22.23)	3/4" (19.05)	39/64" (15.48)
NEW BRITAIN: 1 1/4" Capacity – #52, #601, SL (Larger Capacity Solid Collets Available up to 1 17/32" Round, 1 5/16" Hex, 1 1/16" Square)											
Collet, Solid	4043	2			2.058" (52.27)	6.000" (152.40)	2.550" (64.77)	1.810" x 20 LH	1 1/4" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Collet, HQC Quick-Change	See page 101										
Collet, Style "S" Master	5217	2	S12	5603[3]	2.058" (52.27)	6.000" (152.40)	2.550" (64.77)	1.810" x 20 LH	1 1/4" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Collet, Martin Master	5447	2	M12	5903	2.058" (52.27)	6.000" (152.40)	2.550" (64.77)	1.810" x 20 LH	1 1/4" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Feed Finger, Solid	4047	3			1.545" (39.24)	6.625" (168.28)	— —	1.435" x 20 LH	1 1/4" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Feed Finger, Squirrel Cage & Stock Saver	See page 86										
Feed Finger, Style "B" Master	6237	3	B7	6631	1.545" (39.24)	6.625" (168.28)	— —	1.435" x 20 LH	1 1/8" (28.58)	31/32" (24.61)	25/32" (19.85)
Feed Finger, Style "A" Master	6443	3	A12	6719	1.545" (39.24)	6.625" (168.28)	— —	1.435" x 20 LH	1 3/16" (30.16)	1 1/64" (25.80)	53/64" (21.03)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7061	4	AF7	7317[1] 7319[2]	1.545" (39.24)	6.375" (161.93)	— —	1.435" x 20 LH	1/2" (12.70)	1 1/8" (28.58)	1/2" (12.70)	15/16" (23.81)
Bushing, Style "AF"	7363	5	AF7		1.235" (30.99)	1.938" (49.21)	— —	—	1/2" (12.70)	1 1/8" (28.58)	1/2" (12.70)	15/16" (23.81)

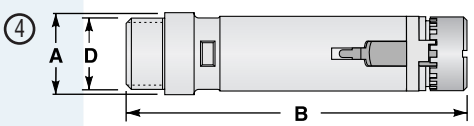
1 - Round
2 - Hexagon
3 - Master Collet Pads available in smooth or serrated order holes

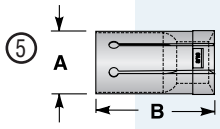
NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.

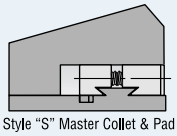


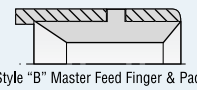


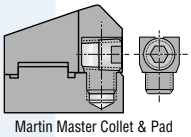


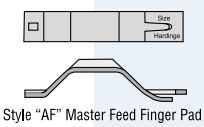





Style "S" Master Collet & Pad


Style "B" Master Feed Finger & Pad


Martin Master Collet & Pad


Style "AF" Master Feed Finger Pad

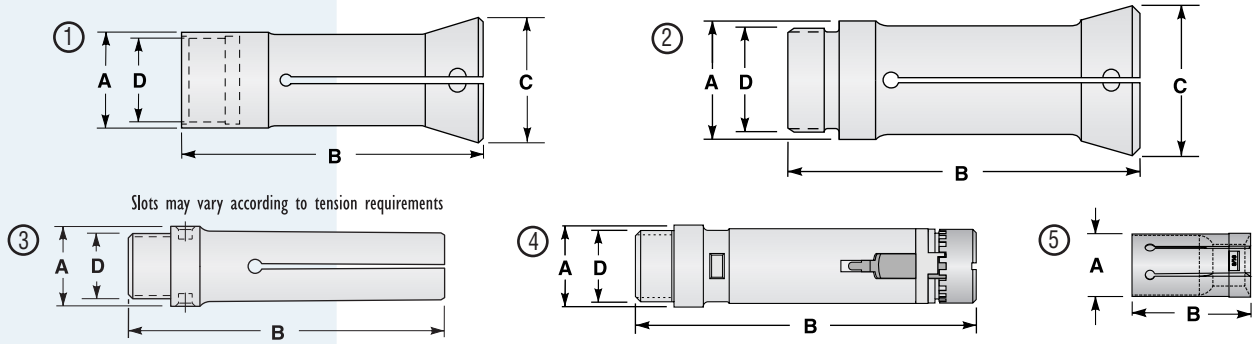
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
NEW BRITAIN: 1⅜" Capacity – #52, #60, #601 (Larger Capacity Solid Collets Available up to 1¾" Round, 1½" Hex, 1⁷⁄₃₂" Square)											
Collet, Solid	4065	2			2.241" (56.92)	5.875" (149.23)	2.755" (69.98)	1.997" x 20 LH	1⅜" (34.93)	1³⁄₁₆" (30.16)	31⁄32" (24.61)
Collet, Burring	4281	1			1.375" (34.93)	4.000" (101.60)	1.750" (44.45)	1.250" x 24 LH	1⅜" (34.93)	1³⁄₁₆" (30.16)	31⁄32" (24.61)
Collet, Style "S" Master	5105	2	S15	5605[3]	2.241" (56.92)	5.875" (149.23)	2.755" (69.98)	1.997" x 20 LH	1½" (38.10)	1¹⁹⁄₆₄" (32.94)	1³⁄₆₄" (26.59)
Feed Finger, Solid	4049	3			1.740" (44.20)	6.625" (168.28)	—	1.622" x 20 LH	1⅜" (34.93)	1³⁄₁₆" (30.16)	31⁄32" (24.61)
Feed Finger, Squirrel Cage & Stock Saver	See page 86										
Feed Finger, Style "B" Master	6241	3	B7	6631	1.740" (44.20)	6.625" (168.28)	—	1.622" x 20 LH	1⅛" (28.58)	31⁄32" (24.61)	25⁄32" (19.85)
NEW BRITAIN: 1⅝" Capacity – #41, #61, #62 (#816 External Thread[9]) (Larger Capacity Solid Collets Available up to 1⅝" Round, 1¹³⁄₃₂" Hex, 1⁹⁄₆₄" Square)											
Collet, Solid	4367	1			2.433" (61.80)	6.000" (152.40)	3.055" (77.60)	2.218" x 20 LH	1⅝" (41.28)	1¹³⁄₃₂" (35.72)	1⁹⁄₆₄" (28.97)
Collet, Style "S" Master	5223	1	S16	5607[3]	2.433" (61.80)	6.000" (152.40)	3.055" (77.60)	2.218" x 20 LH	1⅝" (41.28)	1¹³⁄₃₂" (35.72)	1⁹⁄₆₄" (28.97)
Collet, Martin Master	5449	1	M16	5907	2.433" (61.80)	6.000" (152.40)	3.055" (77.60)	2.218" x 20 LH	1⅝" (41.28)	1¹³⁄₃₂" (35.72)	1⁹⁄₆₄" (28.97)
Feed Finger, Solid	4369	3			1.940" (49.28)	6.000" (152.40)	—	1.872" x 20 LH	1⅝" (41.28)	1¹³⁄₃₂" (35.72)	1⁹⁄₆₄" (28.97)
Feed Finger, Squirrel Cage & Stock Saver	See page 86										
Feed Finger, Style "B" Master	6129	3	B8	6635	1.940" (49.28)	6.000" (152.40)	—	1.872" x 20 LH	1⅜" (34.93)	1³⁄₁₆" (30.16)	31⁄32" (24.61)
Feed Finger, Style "B" Master	6325	3	B16	6657	1.940" (49.28)	6.000" (152.40)	—	1.872" x 20 LH	1½" (38.10)	1¹⁹⁄₆₄" (32.94)	1³⁄₆₄" (26.59)
Feed Finger, Style "A" Master	6445	3	A16	6727	1.940" (49.28)	6.000" (152.40)	—	1.872" x 20 LH	1½" (38.10)	1¹⁹⁄₆₄" (32.94)	1³⁄₆₄" (26.59)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7075	4	AF16	7325[1] 7327[2]	1.940" (49.28)	5.688" (144.46)	—	1.872" x 20 LH	⅝" (15.88)	1⁷⁄₁₆" (36.51)	⅝" (15.88)	1¼" (31.75)
Bushing, Style "AF"	7369	5	AF16		1.620" (41.15)	2.375" (60.33)	—	—	⅝" (15.88)	1⁷⁄₁₆" (36.51)	⅝" (15.88)	1¼" (31.75)

9 - New Britain: 1⅝" Capacity – #816 (External Thread) See Page 10 – 1⅝" Acme-Gridley
3 - Master Collet Pads available in smooth or serrated order holes
2 - Hexagon
1 - Round

NOTE: Millimeters in parentheses. Collets and feed fingers available for larger capacity machines. Collets available in smooth or serrated order holes. For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated. S-pads available in hardened and ground, semi-hard emergency and soft emergency.



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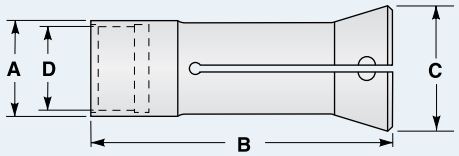
Spindle Tooling for Automatics

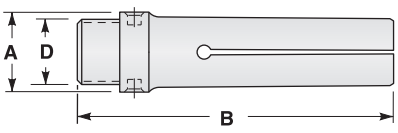
HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
NEW BRITAIN: 1¾" Capacity – #415 (Larger Capacity Solid Collets Available up to 2 7/32" Round, 1 59/64" Hex, 1 9/16" Square)											
Collet, Solid	MP1987	1			2.585" (65.66)	6.063" (154.00)	3.055" (77.60)	2.467" x 20 LH	1¾" (44.45)	1 33/64" (38.50)	1 15/64" (31.35)
Feed Finger, Solid	MP2019	2			2.185" (55.50)	5.938" (150.83)	— —	2.060" x 20 LH	1¾" (44.45)	1 33/64" (38.50)	1 15/64" (31.35)
Feed Finger, Style "B" Master	MP2911	2	B8	6635	2.185" (55.50)	5.938" (150.83)	— —	2.060" x 20 LH	1⅜" (34.93)	1 3/16" (30.16)	31/32" (24.61)
Feed Finger, Style "B" Master	MP3121	2	B16	6657	2.185" (55.50)	5.938" (150.83)	— —	2.060" x 20 LH	1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
NEW BRITAIN: 1¾" Capacity – #817 (Larger Capacity Solid Collets Available up to 2 9/32" Round, 1 31/64" Hex, 1 9/16" Square)											
Collet, Solid	4379	1			2.687" (68.25)	6.000" (152.40)	3.255" (82.68)	2.500" x 16 RH	1¾" (44.45)	1 33/64" (38.50)	1 15/64" (31.35)
Collet, Style "S" Master	5231	1	S20	5609[3]	2.687" (68.25)	6.000" (152.40)	3.255" (82.68)	2.500" x 16 RH	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
Feed Finger, Style "B" Master	6333	2	B20	6661	2.220" (56.39)	5.500" (139.70)	— —	2.061" x 24 LH	1¾" (44.45)	1 33/64" (38.50)	1 15/64" (31.35)
NEW BRITAIN: 2" Capacity – #61, #415 (Larger Capacity Solid Collets Available up to 2 13/32" Round, 2 5/64" Hex, 1 11/16" Square)											
Collet, Solid	MP1962	1			2.804" (71.22)	6.000" (152.40)	3.525" (89.54)	2.654" x 20 LH	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
Collet, Style "S" Master	5225	1	S20	5609[3]	2.804" (71.22)	6.000" (152.40)	3.525" (89.54)	2.654" x 20 LH	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
Feed Finger, Solid	MP2020	2			2.375" (60.33)	5.938" (150.83)	— —	2.247" x 20 LH	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
Feed Finger, Style "B" Master	6327	2	B20	6661	2.375" (60.33)	5.938" (150.83)	— —	2.247" x 20 LH	1¾" (44.45)	1 33/64" (38.50)	1 15/64" (31.35)
NEW BRITAIN: 2¼" Capacity – #61, #62 (Larger Capacity Solid Collets Available up to 2 19/32" Round, 2¼" Hex, 1 13/16" Square)											
Collet, Solid	4371	1			2.991" (75.97)	6.000" (152.40)	3.710" (94.23)	2.841" x 20 LH	2¼" (57.15)	1 15/16" (49.21)	1 37/64" (40.08)
Collet, HQC Quick-Change	See page 101										
Collet, Style "S" Master	5227	1	S22	5611[3]	2.991" (75.97)	6.000" (152.40)	3.710" (94.23)	2.841" x 20 LH	2¼" (57.15)	1 15/16" (49.21)	1 37/64" (40.08)
Collet, Martin Master	5453	1	M21	5911	2.991" (75.97)	6.000" (152.40)	3.710" (94.23)	2.841" x 20 LH	2⅛" (53.98)	1 53/64" (46.43)	1½" (38.10)
Feed Finger, Solid	4373	2			2.620" (66.55)	5.938" (150.83)	— —	2.485" x 20 LH	2¼" (57.15)	1 15/16" (49.21)	1 37/64" (40.08)
Feed Finger, Squirrel Cage & Stock Saver	See page 86										
Feed Finger, Style "B" Master	6329	2	B22	6665	2.620" (66.55)	5.938" (150.83)	— —	2.485" x 20 LH	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
Feed Finger, Style "A" Master	6447	2	A22	6735	2.620" (66.55)	5.906" (150.01)	— —	2.485" x 20 LH	2⅛" (53.98)	1 53/64" (46.43)	1½" (38.10)

3 - Master Collet Pads available in smooth or serrated order holes

NOTE: Millimeters in parentheses. Collets and feed fingers available for larger capacity machines. Collets available in smooth or serrated order holes. For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated. S-pads available in hardened and ground, semi-hard emergency and soft emergency.

① 

② 

Slots may vary according to tension requirements

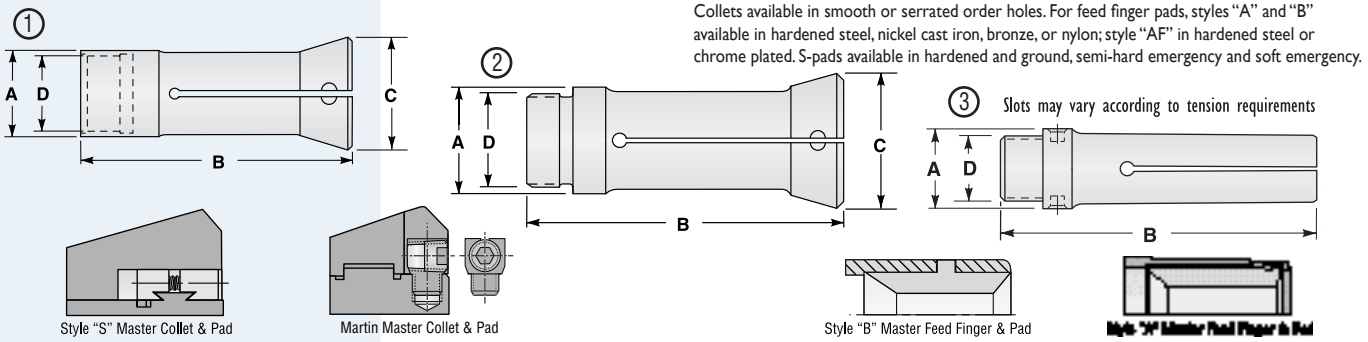
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
NEW BRITAIN: 2⅝" Capacity – #26 Single Spindle, #126, #626 (Larger Capacity Solid Collets Available up to 3⅛" Round, 2 11/16" Hex, 2 3/16" Square)											
Collet, Solid	4059	1			3.627" (92.13)	6.500" (165.10)	4.380" (111.25)	3.375" x 18 RH	2⅝" (66.68)	2 17/64" (57.55)	1 27/32" (46.83)
(for 826 machine)	MP3782	1						3.375" x 18 LH			
Collet, HQC Quick-Change	See page 101										
Collet, Style "S" Master	5113	1	S26	5613[3]	3.627" (92.13)	6.500" (165.10)	4.380" (111.25)	3.375" x 18 RH	2⅝" (66.68)	2 17/64" (57.55)	1 27/32" (46.83)
(for 826 machine)	MP3783	1						3.375" x 18 LH			
Collet, Martin Master	5437	1	M26	5915	3.627" (92.13)	6.500" (165.10)	4.380" (111.25)	3.375" x 18 RH	2⅝" (66.68)	2 17/64" (57.55)	1 27/32" (46.83)
Feed Finger, Solid	4201	3			2.995" (76.07)	7.000" (177.80)	— —	2.870" x 24 LH	2⅝" (66.68)	2 17/64" (57.55)	1 27/32" (46.83)
Feed Finger, Style "B" Master	6137	3	B26	6673	2.995" (76.07)	7.000" (177.80)	— —	2.870" x 24 LH	2⅜" (60.33)	2 3/64" (51.99)	1 43/64" (42.47)
Feed Finger, Style "A" Master	6449	3	A26	6739	2.995" (76.07)	7.000" (177.80)	— —	2.870" x 24 LH	2 9/16" (65.09)	2 7/32" (56.36)	1 51/64" (45.64)
NEW BRITAIN: 2¾" Capacity (Larger Capacity Solid Collets Available up to 3⅛" Round, 2 11/16" Hex, 2 3/16" Square)											
Collet, Solid	4375	1			3.620" (91.95)	6.500" (165.10)	4.380" (111.25)	3.437" x 18 LH	2¾" (69.85)	2⅜" (60.33)	1 15/16" (49.21)
Collet, Style "S" Master	5229	1	S26	5613[3]	3.620" (91.95)	6.500" (165.10)	4.380" (111.25)	3.437" x 18 LH	2⅝" (66.68)	2 17/64" (57.55)	1 27/32" (46.83)
Feed Finger, Solid	4377	3			3.125" (79.38)	7.000" (177.80)	— —	2.998" x 24 LH	2¾" (69.85)	2⅜" (60.33)	1 15/16" (49.21)
Feed Finger, Style "B" Master	6331	3	B26	6673	3.125" (79.38)	7.000" (177.80)	— —	2.998" x 24 LH	2⅜" (60.33)	2 3/64" (51.99)	1 43/64" (42.47)
NEW BRITAIN: 3½" Capacity – #635 (Larger Capacity Solid Collets Available up to 3 29/32" Round, 3⅜" Hex, 2¾" Square)											
Collet, Solid	4063	2			4.491" (114.07)	7.938" (201.63)	5.755" (146.18)	4.183" x 18 LH	3½" (88.90)	3 1/64" (76.60)	2 15/32" (62.71)
Collet, Style "S" Master	5115	2	S35	5617[3]	4.491" (114.07)	7.938" (201.63)	5.755" (146.18)	4.183" x 18 LH	3½" (88.90)	3 1/64" (76.60)	2 15/32" (62.71)
Collet, Martin Master	5439	2	M35	5921	4.491" (114.07)	7.938" (201.63)	5.755" (146.18)	4.183" x 18 LH	3½" (88.90)	3 1/64" (76.60)	2 15/32" (62.71)
Feed Finger, Solid	4061	3			3.910" (99.31)	10.188" (258.78)	— —	3.745" x 18 LH	3½" (88.90)	3 1/64" (76.60)	2 15/32" (62.71)
Feed Finger, Style "B" Master	6253	3	B35	6681	3.910" (99.31)	10.188" (258.78)	— —	3.745" x 18 LH	3⅛" (79.38)	2 45/64" (68.66)	2 13/64" (55.96)
Feed Finger, Style "A" Master	6453	3	A35	6751	3.910" (99.31)	10.188" (258.78)	— —	3.745" x 18 LH	3¼" (82.55)	2 13/16" (71.44)	2 19/64" (58.34)

3 - Master Collet Pads available in smooth or serrated order holes

NOTE: Millimeters in parentheses. Collets and feed fingers available for larger capacity machines. Collets available in smooth or serrated order holes. For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated. S-pads available in hardened and ground, semi-hard emergency and soft emergency.



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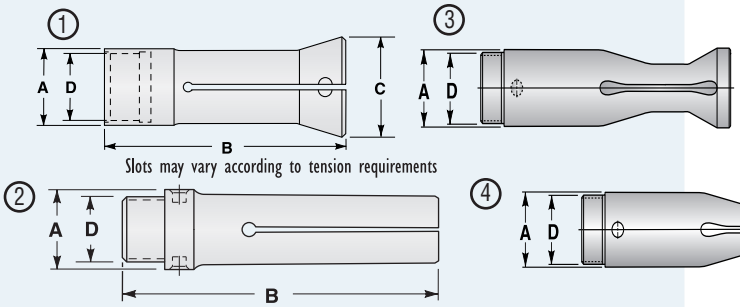
Spindle Tooling for Automatics

HARDINGE

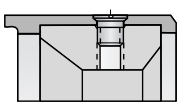
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
NEW BRITAIN: 4" Capacity – #640 (Larger Capacity Solid Collet Available up to $4^{17}/_{32}$" Round, $3^{59}/_{64}$" Hex, $3^{3}/_{16}$" Square)											
Collet, Solid	MP1657	1			4.990" (126.75)	7.500" (190.50)	6.130" (155.70)	4.750" x 18 RH	4" (101.60)	$3^{29}/_{64}$" (87.71)	$2^{53}/_{64}$" (71.83)
Collet, Style "S" Master	5033	1	S40	5619[3]	4.990" (126.75)	7.500" (190.50)	6.130" (155.70)	4.750" x 18 RH	4" (101.60)	$3^{29}/_{64}$" (87.71)	$2^{53}/_{64}$" (71.83)
Feed Finger, Solid	MP1658	2			4.375" (111.13)	8.500" (215.90)	— —	4.215" x 24 LH	4" (101.60)	$3^{29}/_{64}$" (87.71)	$2^{53}/_{64}$" (71.83)
Feed Finger, Conventional Style Master	MP1832	2		MP1833	4.375" (111.13)	8.500" (215.90)	— —	4.215" x 24 LH	$3^{5}/_{8}$" (92.08)	$3^{1}/_{8}$" (79.38)	$2^{9}/_{16}$" (65.09)

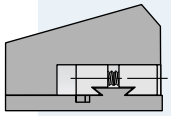
Description		Hardinge Part Number	Figure	Dimensions A Back Bearing Diameter	B Overall Length	C Diameter	D Thread	Capacity Round	Hexagon	Square
NEW BRITAIN: 1" Capacity —40, 60, NB Squirrel Cage and Stock Saver Feed Fingers										
Feed Finger, Squirrel Cage	Steel	4363-88-	3	1.250" (31.75)	— —	— —	1.185" x 24 LH	1" (25.40)	$^{57}/_{64}$" (22.62)	$^{45}/_{64}$" (17.86)
	Bronze	4363-90-	3							
Feed Finger, Stock Saver	Steel	4363-89-	4	1.250" (31.75)	— —	— —	1.185" x 24 LH	1" (25.40)	$^{57}/_{64}$" (22.62)	$^{45}/_{64}$" (17.86)
	Bronze	4363-91-	4							
NEW BRITAIN: 1¼" Capacity — 52, 601, NB Squirrel Cage and Stock Saver Feed Fingers										
Feed Finger, Squirrel Cage	Steel	4047-88-	3	1.545" (39.24)	— —	— —	1.435" x 20 LH	1¼" (31.75)	$1^{5}/_{64}$" (27.38)	$^{7}/_{8}$" (22.23)
	Bronze	4047-90-	3							
Feed Finger, Stock Saver	Steel	4047-89-	4	1.545" (39.24)	— —	— —	1.435" x 20 LH	1¼" (31.75)	$1^{5}/_{64}$" (27.38)	$^{7}/_{8}$" (22.23)
	Bronze	4047-91-	4							
NEW BRITAIN: 1⅜" Capacity — 52, NB Squirrel Cage and Stock Saver Feed Fingers										
Feed Finger, Squirrel Cage	Steel	4049-88-	3	1.740" (44.20)	— —	— —	1.622" x 20 LH	1⅜" (34.93)	$1^{3}/_{16}$" (30.16)	$^{31}/_{32}$" (24.61)
	Bronze	4049-90-	3							
Feed Finger, Stock Saver	Steel	4049-89-	4	1.740" (44.20)	— —	— —	1.622" x 20 LH	1⅜" (34.93)	$1^{3}/_{16}$" (30.16)	$^{31}/_{32}$" (24.61)
	Bronze	4049-91-	4							
NEW BRITAIN: 1⅝" Capacity — 61, 62, NB Squirrel Cage and Stock Saver Feed Fingers										
Feed Finger, Squirrel Cage	Steel	4369-88-	3	1.940" (49.28)	— —	— —	1.872" x 20 LH	1⅝" (41.28)	$1^{13}/_{32}$" (35.72)	$1^{9}/_{64}$" (28.97)
	Bronze	4369-90-	3							
Feed Finger, Stock Saver	Steel	4369-89-	4	1.940" (49.28)	— —	— —	1.872" x 20 LH	1⅝" (41.28)	$1^{13}/_{32}$" (35.72)	$1^{9}/_{64}$" (28.97)
	Bronze	4369-91-	4							
NEW BRITAIN: 2¼" Capacity — 61, 62, NB Squirrel Cage and Stock Saver Feed Fingers										
Feed Finger, Squirrel Cage	Steel	4373-88-	3	2.620" (66.55)	— —	— —	2.485" x 20 LH	2¼" (57.15)	$1^{15}/_{16}$" (49.21)	$1^{37}/_{64}$" (40.08)
	Bronze	4373-90-	3							
Feed Finger, Stock Saver	Steel	4373-89-	4	2.620" (66.55)	— —	— —	2.485" x 20 LH	2¼" (57.15)	$1^{15}/_{16}$" (49.21)	$1^{37}/_{64}$" (40.08)
	Bronze	4373-91-	4							

3 - Master Collet Pads available in smooth or serrated order holes



NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.


Conventional Style Master Feed Finger & Pad


Style "S" Master Collet & Pad

NEW BRITAIN

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Spindle Tooling for Automatics

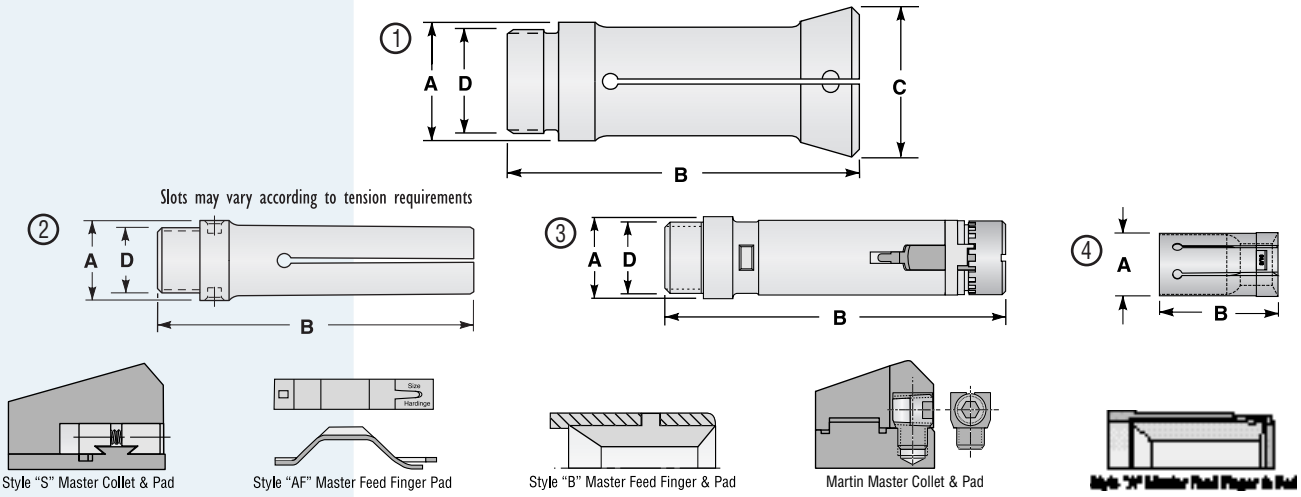
HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
SCHUTTE: SE16 (Larger Capacity Solid Collets Available up to 23/32" Round, 5/8" Hex, 1/2" Square)											
Collet, Solid	2651	1			1.259" (31.98)	3.312" (84.12)	1.635" (41.53)	1.100" x 1 mm LH	23/32" (18.26)	5/8" (15.88)	1/2" (12.70)
Feed Finger, Solid	4279	2			.984" (24.99)	3.500" (88.90)	— —	.904" x 1 mm RH	23/32" (18.26)	5/8" (15.88)	1/2" (12.70)
Feed Finger, Style "B" Master	MP3694	2	B3	6611	.984" (24.99)	3.500" (88.90)	— —	.904" x 1 mm RH	1/2" (12.70)	27/64" (10.72)	11/32" (8.73)
S & M: 1¼" Capacity – #654 (Larger Capacity Solid Collets Available up to 1 17/32" Round, 1 5/16" Hex, 1 1/16" Square)											
Collet, Solid	4043	1			2.058" (52.27)	6.000" (152.40)	2.550" (64.77)	1.810" x 20 LH	1¼" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Collet, HQC Quick-Change	See page 101										
Collet, Style "S" Master	5217	1	S12	5603[3]	2.058" (52.27)	6.000" (152.40)	2.550" (64.77)	1.810" x 20 LH	1¼" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Collet, Martin Master	5447	1	M12	5903	2.058" (52.27)	6.000" (152.40)	2.550" (64.77)	1.810" x 20 LH	1¼" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Feed Finger, Solid	4047	2			1.545" (39.24)	6.625" (168.28)	— —	1.435" x 20 LH	1¼" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Feed Finger, Style "B" Master	6237	2	B7	6631	1.545" (39.24)	6.625" (168.28)	— —	1.435" x 20 LH	1⅛" (28.58)	31/32" (24.61)	25/32" (19.85)
Feed Finger, Style "A" Master	6443	2	A12	6719	1.545" (39.24)	6.625" (168.28)	— —	1.435" x 20 LH	1 3/16" (30.16)	1 1/64" (25.80)	53/64" (21.03)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7061	3	AF7	7317[1] 7319[2]	1.545" (39.24)	6.375" (161.93)	— —	1.435" x 20 LH	1/2" (12.70)	1⅛" (28.58)	1/2" (12.70)	15/16" (23.81)
Bushing, Style "AF"	7363	4	AF7		1.235" (30.99)	1.938" (49.21)	— —	—	1/2" (12.70)	1⅛" (28.58)	1/2" (12.70)	15/16" (23.81)

1 - Round
2 - Hexagon
3 - Master Collet Pads available in smooth or serrated order holes

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.

Call if your newer machine is not listed. Hardinge continuously builds new collets to meet industry requirements.



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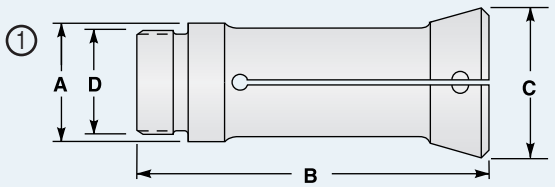
Spindle Tooling for Automatics

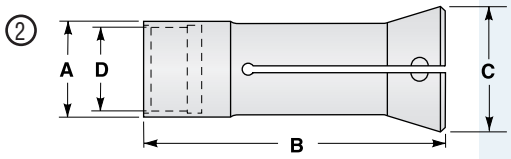
HARDINGE

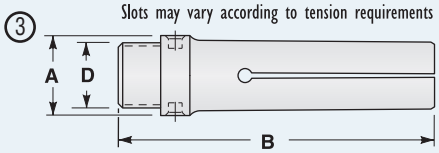
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
S & M: 1⅜" Capacity – #654L (Larger Capacity Solid Collets Available up to 1¾" Round, 1½" Hex, 1⅞₂" Square)											
Collet, Solid	MP1680	1			2.241" (56.92)	5.875" (149.23)	2.755" (69.98)	1.997" x 20 LH	1⅜" (34.93)	1¹³⁄₁₆" (30.16)	31⁄32" (24.61)
Collet, Burring	MP3772	2			1.375" (34.93)	4.000" (101.60)	1.750" (44.45)	1.250" x 24 LH	1⅜" (34.93)	1¹³⁄₁₆" (30.16)	31⁄32" (24.61)
Collet, Style "S" Master	5105	1	S15	5605[3]	2.241" (56.92)	5.875" (149.23)	2.755" (69.98)	1.997" x 20 LH	1½" (38.10)	1¹⁹⁄₆₄" (32.94)	1³⁄₆₄" (26.59)
Feed Finger, Solid	4049	3			1.740" (44.20)	6.625" (168.28)	— —	1.622" x 20 LH	1⅜" (34.93)	1¹³⁄₁₆" (30.16)	31⁄32" (24.61)
Feed Finger, Style "B" Master	6241	3	B7	6631	1.740" (44.20)	6.625" (168.28)	— —	1.622" x 20 LH	1⅛" (28.58)	31⁄32" (24.61)	25⁄32" (19.85)
S & M: 1½" Capacity – #664											
Collet, Solid	0327L	2			2.245" (57.02)	4.562" (115.87)	2.755" (69.98)	2.062" x 18 LH	1½" (38.10)	1¹⁹⁄₆₄" (32.94)	1³⁄₆₄" (26.59)
Collet, Style "S" Master	0329L	2	S15	5605[3]	2.245" (57.02)	4.562" (115.87)	2.755" (69.98)	2.062" x 18 LH	1½" (38.10)	1¹⁹⁄₆₄" (32.94)	1³⁄₆₄" (26.59)
Collet, Martin Master		2	M15	5905	2.245" (57.02)	4.562" (115.87)	2.755" (69.98)	2.062" x 18 LH	1½" (38.10)	1¹⁹⁄₆₄" (32.94)	1³⁄₆₄" (26.59)
Feed Finger, Solid	4189	3			1.815" (46.10)	5.250" (133.35)	— —	1.684" x 24 LH	1½" (38.10)	1¹⁹⁄₆₄" (32.94)	1³⁄₆₄" (26.59)
Feed Finger, Style "B" Master	6127	3	B8	6635	1.815" (46.10)	5.250" (133.35)	— —	1.684" x 24 LH	1⅜" (34.93)	1¹³⁄₁₆" (30.16)	31⁄32" (24.61)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7027	4	AF7	7317[1] 7319[2]	1.815" (46.10)	5.000" (127.00)	— —	1.684" x 24 LH	½" (12.70)	1⅛" (28.58)	½" (12.70)	15⁄16" (23.81)
Bushing, Style "AF"	7363	5	AF7		1.235" (31.37)	1.938" (49.23)	— —	—	½" (12.70)	1⅛" (28.58)	½" (12.70)	15⁄16" (23.81)

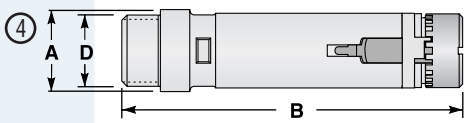
1 - Round
2 - Hexagon
3 - Master Collet Pads available in smooth or serrated order holes

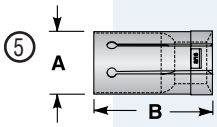
NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.

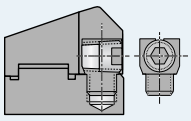


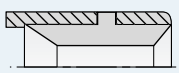


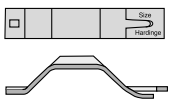


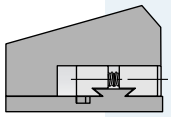





Martin Master Collet & Pad


Style "B" Master Feed Finger & Pad


Style "AF" Master Feed Finger Pad


Style "S" Master Collet & Pad

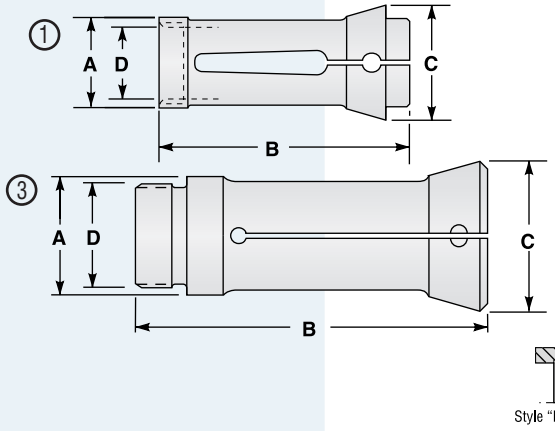
Spindle Tooling for Automatics

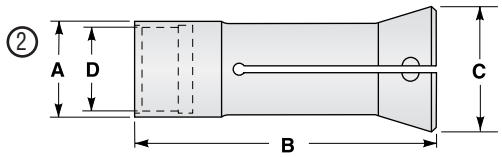
HARDINGE

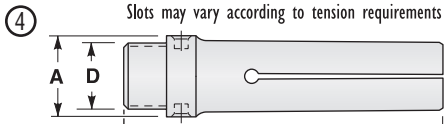
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
SMART & BROWN: L16 (Larger Capacity Solid Collets Available up to 1 1/16" Round, 19/32" Hex, 31/64" Square)											
Collet, Solid	MP3142	1			.936" (23.77)	2.500" (63.50)	1.190" (30.23)	—	1 1/16" (17.46)	19/32" (15.08)	31/64" (12.30)
TORNOS BECHLER: AS14, BS14 (Larger Capacity Solid Collets Available up to 47/64" Round, 5/8" Hex, 33/64" Square)											
Collet, Solid	4391	2			.984" (24.99)	2.953" (75.01)	1.378" (35.00)	M22 x 1 mm RH	.550" (13.97)	7/16" (11.11)	25/64" (9.92)
Collet, Pick-off	4411	1	AS-24		.630" (16.00)	2.593" (65.86)	.828" (21.03)	M14 x .75mm RH	15/32" (11.90)	13/32" (10.32)	21/64" (8.33)
Feed Finger, Solid	4393	4			.704" (17.88)	2.750" (69.85)	—	M16 x .75 mm RH	1/2" (12.70)	27/64" (10.72)	11/32" (8.73)
Feed Finger, Style "B" Master	6335	4	B10	6643	.704" (17.88)	2.750" (69.85)	—	M16 x .75 mm RH	3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
TORNOS BECHLER: AS16, SAS16 (Larger Capacity Solid Collets Available up to 13/16" Round, 11/16" Hex, 9/16" Square)											
Collet, Solid	4403	3			.984" (24.99)	3.710" (94.23)	1.382" (35.10)	M25 x 1 mm RH	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
Collet, Pick-off	4411	1	AS-24		.630" (16.00)	2.593" (65.86)	.828" (21.03)	M14 x .75mm RH	15/32" (11.90)	13/32" (10.32)	21/64" (8.33)
Feed Finger, Solid	4401	4			.897" (22.78)	3.859" (98.02)	—	M20 x .75 mm RH	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
TORNOS BECHLER: BS20, BS20B (Larger Capacity Solid Collets Available up to 1 5/32" Round, 1" Hex, 13/16" Square)											
Collet, Solid	4407	1			1.417" (35.99)	4.213" (107.01)	1.774" (45.06)	M33 x 1.25 mm RH	13/16" (20.64)	45/64" (17.86)	9/16" (14.29)
Feed Finger, Solid	4409	4			1.091" (27.71)	4.562" (115.88)	—	M25 x 1 mm RH	13/16" (20.64)	45/64" (17.86)	9/16" (14.29)
TORNOS BECHLER: BS22 (Larger Capacity Solid Collets Available up to 1.070" Round, .927" Hex, .757" Square)											
Collet, Solid	4472P	3			1.3777" (35.00)	4.216" (107.08)	1.790" (45.46)	M33 x1 mm RH	1.070"[10] (27.17)	.927"[10] (23.54)	.757"[10] (19.22)
Collet, Pick-off	4411	1	AS-24		.630" (16.00)	2.593" (65.86)	.828" (21.03)	M14 x .75mm RH	15/32" (11.90)	13/32" (10.32)	21/64" (8.33)
Feed Finger, Solid	4409	4			1.091" (27.71)	4.562" (115.88)	—	M25 x 1 mm RH	13/16" (20.64)	45/64" (17.86)	9/16" (14.29)

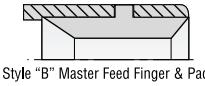
10 - Collet capacity not machine capacity

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.








Style "B" Master Feed Finger & Pad

To Order Contact: Exact Tooling / www.exacttooling.com / sales@exacttooling.com / 888-988-8820

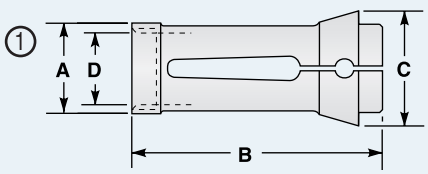
Spindle Tooling for Automatics

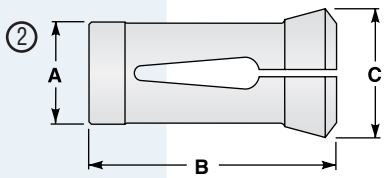
HARDINGE

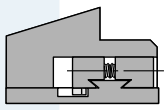
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
TRAUB: A15, A15L, TD16 (Larger Capacity Solid Collets Available up to 11/16" Round, 9/16" Hex, 7/16" Square)											
Collet, Solid	3033[11]	1	10		.936" (23.77)	2.500" (63.50)	1.115" (28.32)	—	19/32" (15.08)	1/2" (12.70)	13/32" (10.32)
TRAUB: A20 (Larger Capacity Solid Collets Available up to 55/64" Round, 3/4" Hex, 19/32" Square)											
Collet, Solid	3057[12]	1	11		1.061" (26.95)	2.875" (73.03)	1.490" (37.85)	—	25/32" (19.85)	43/64" (17.07)	35/64" (13.89)
TRAUB: A25, A26 (Larger Capacity Solid Collets Available up to 1 1/16" Round, 15/16" Hex, 3/4" Square)											
Collet, Solid	3089[13]	1	21		1.248" (31.70)	2.813" (71.45)	1.675" (42.55)	—	1" (25.40)	55/64" (21.83)	45/64" (17.86)
TRAUB: A36, AH36, TD36 (Larger Capacity Solid Collets Available up to 1 1/4" Round, 1 1/16" Hex, 7/8" Square)											
Collet, Solid	3111	1	22		1.498" (38.05)	4.250" (107.95)	1.925" (48.90)	—	1 1/4" (31.75)	1 1/16" (26.98)	7/8" (22.22)
Collet, Solid	3125	2	22C		1.748" (44.40)	4.250" (107.95)	2.160" (54.86)	—	1 13/32" (35.72)	1 13/64" (30.56)	63/64" (25.00)
Collet, Solid	MP3712	2	22CT		1.842" (46.79)	4.140" (105.16)	2.160" (54.86)	—	1 5/8" (41.28)	1 13/32" (35.72)	1 9/64" (28.97)
TRAUB: A42, TB42 (Larger Capacity Solid Collets Available up to 1 21/32" Round, 1 13/32" Hex, 1 5/32" Square)											
Collet, Solid	3719	1	B42		1.887" (47.93)	3.688" (93.66)	2.355" (59.82)	—	1 5/8" (41.28)	1 13/32" (35.72)	1 9/64" (28.97)
Collet, Style "S" Master	5205	1	S10	5601[3]	1.887" (47.93)	3.688" (93.66)	2.355" (59.82)	—	1" (25.40)	55/64" (21.83)	45/64" (17.86)
TRAUB: A56, A60, TB60, TS60 (Larger Capacity Solid Collets Available up to 2 3/8" Round, 2 1/16" Hex, 1 11/16" Square)											
Collet, Solid	3725	1	B60		2.596" (65.94)	4.328" (109.93)	3.290" (83.57)	—	2 3/8" (60.33)	2 3/64" (51.99)	1 43/64" (42.47)
Collet, Style "S" Master	5207	1	S16	5607[3]	2.596" (65.94)	4.328" (109.93)	3.290" (83.57)	—	1 5/8" (41.28)	1 13/32" (35.72)	1 9/64" (28.97)

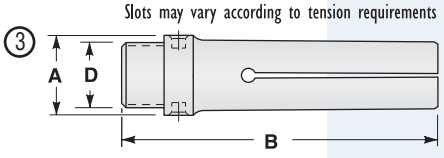
3 - Master Collet Pads available in smooth or serrated order holes
11 - May also use #12 Index collet (Hardinge part number 3701)
12 - May also use #18 Index collet (Hardinge part number 3705)
13 - May also use #20 Index collet (Hardinge part number 3731)

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.






Style "S" Master Stationary Collet & Pad



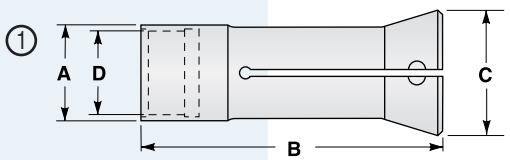
Spindle Tooling for Automatics

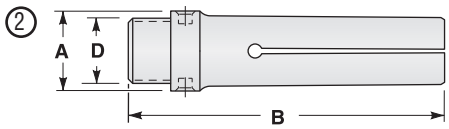
HARDINGE

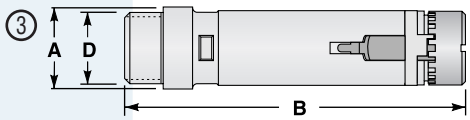
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
WARNER & SWASEY: ¾" Capacity – Six Spindle (Larger Capacity Solid Collets Available up to ¾" Round, 41/64" Hex, 33/64" Square)											
Collet, Solid	MP3171	1			1.556" (39.52)	5.000" (127.00)	2.130" (54.10)	1.375" x 24 RH	¾" (19.05)	41/64" (16.27)	33/64" (13.10)
Collet, Style "S" Master	5251	1	S10	5601[3]	1.556" (39.52)	5.000" (127.00)	2.130" (54.10)	1.375" x 24 RH	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Feed Finger, Solid	MP3177	2			1.093" (27.76)	5.000" (127.00)	—	.934" x 24 LH	¾" (19.05)	41/64" (16.27)	33/64" (13.10)
Feed Finger, Style "B" Master	6341	2	B5	6621	1.093" (27.76)	5.000" (127.00)	—	.934" x 24 LH	¾" (19.05)	41/64" (16.27)	33/64" (13.10)
WARNER & SWASEY: 1¼" Capacity – Six Spindle – 0AB (Larger Capacity Solid Collets Available up to 1 23/32" Round, 1 19/32" Hex, 1 7/32" Square)											
Collet, Solid	4421	1			2.056" (52.22)	5.000" (127.00)	2.630" (66.80)	1.875" x 24 RH	1¼" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Collet, Style "S" Master	5253	1	S12	5603[2]	2.056" (52.22)	5.000" (127.00)	2.630" (66.80)	1.875" x 24 RH	1¼" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Collet, Martin Master	5958A	1	M12	5903	2.056" (52.22)	5.000" (127.00)	2.630" (66.80)	1.875" x 24 RH	1¼" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Feed Finger, Solid	4417	2			1.593" (40.46)	5.000" (127.00)	—	1.434" x 24 LH	1¼" (31.75)	1 5/64" (27.38)	7/8" (22.23)
Feed Finger, Style "B" Master	6343	2	B7	6631	1.593" (40.46)	5.000" (127.00)	—	1.434" x 24 LH	1⅛" (28.58)	31/32" (24.61)	25/32" (19.85)
Feed Finger, Style "A" Master	6405	2	A12W	6723	1.593" (40.46)	5.000" (127.00)	—	1.434" x 24 LH	1¼" (31.75)	1 5/64" (27.38)	7/8" (22.23)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7083	3	AF7	7317[1] 7319[2]	1.593" (40.46)	4.750" (120.65)	—	1.434" x 24 LH	½" (12.70)	1⅛" (28.58)	½" (12.70)	15/16" (23.81)
Bushing, Style "AF"	7363	4	AF7		1.235" (30.99)	1.938" (49.21)	—	—	½" (12.70)	1⅛" (28.58)	½" (12.70)	15/16" (23.81)

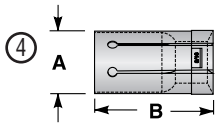
1 - Round
2 - Hexagon
3 - Master Collet Pads available in smooth or serrated order holes

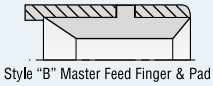
NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.

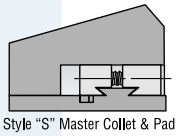


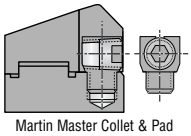


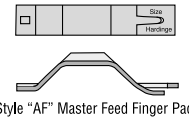





Style "B" Master Feed Finger & Pad


Style "S" Master Collet & Pad


Martin Master Collet & Pad


Style "AF" Master Feed Finger Pad

To Order Contact: Exact Tooling / www.exacttooling.com / sales@exacttooling.com / 888-988-8820

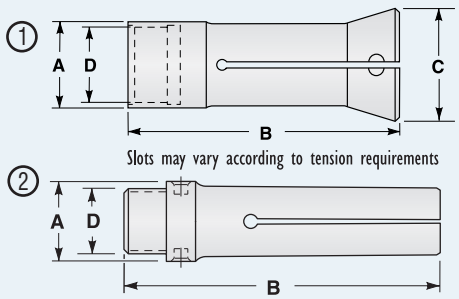
Spindle Tooling for Automatics

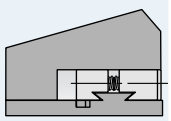
HARDINGE

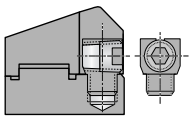
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
WARNER & SWASEY: 1¾" Capacity – Five Spindle (Larger Capacity Solid Collets Available up to 2⁹⁄₃₂" Round, 1³¹⁄₃₂" Hex, 1³⁹⁄₆₄" Square)											
Collet, Solid	4425	1			2.681" (68.10)	6.000" (152.40)	3.255" (82.68)	2.500" x 16 RH	1¾" (44.45)	1³³⁄₆₄" (38.50)	1¹⁵⁄₆₄" (31.35)
Collet, Style "S" Master	5255	1	S20	5609[3]	2.681" (68.10)	6.000" (152.40)	3.255" (82.68)	2.500" x 16 RH	2" (50.80)	1²³⁄₃₂" (43.66)	1¹³⁄₃₂" (35.72)
Collet, Martin Master	5531B	1	M17	MP3907	2.681" (68.10)	6.000" (152.40)	3.255" (82.68)	2.500" x 16 RH	1¾" (44.45)	1³³⁄₆₄" (38.50)	1¹⁵⁄₆₄" (31.35)
Feed Finger, Solid	MP2981	2			2.220" (56.39)	5.500" (139.70)	—	2.059" x 24 LH	1¾" (44.45)	1³³⁄₆₄" (38.50)	1¹⁵⁄₆₄" (31.35)
Feed Finger, Style "B" Master	6345	2	B20	6661	2.220" (56.39)	5.500" (139.70)	—	2.059" x 24 LH	1¾" (44.45)	1³³⁄₆₄" (38.50)	1¹⁵⁄₆₄" (31.35)
Feed Finger, Style "A" Master	2725A	2	A17	6725	2.220" (56.39)	5.500" (139.70)	—	2.059" x 24 LH	1¾" (44.45)	1³³⁄₆₄" (38.50)	1¹⁵⁄₆₄" (31.35)
WARNER & SWASEY: 2¼" Capacity – 1AB – Single and Five Spindle (Larger Capacity Solid Collets Available up to 2¹⁹⁄₃₂" Round, 2¼" Hex, 1⁵³⁄₆₄" Square)											
Collet, Solid	4423	1			3.055" (77.60)	6.000" (152.40)	3.505" (89.03)	2.875" x 16 RH	2¼" (57.15)	1¹⁵⁄₁₆" (49.21)	1³⁷⁄₆₄" (40.08)
Collet, Style "S" Master	5257	1	S22	5611[3]	3.055" (77.60)	6.000" (152.40)	3.505" (89.03)	2.875" x 16 RH	2¼" (57.15)	1¹⁵⁄₁₆" (49.21)	1³⁷⁄₆₄" (40.08)
Collet, Martin Master	5461	1	M23	5933	3.055" (77.60)	6.000" (152.40)	3.505" (89.03)	2.875" x 16 RH	2⅜" (60.33)	2⁴⁄₆₄" (51.99)	1⁴³⁄₆₄" (42.47)
Feed Finger, Solid	4419	2			2.598" (65.99)	5.500" (139.70)	—	2.496" x 24 LH	2¼" (57.15)	1¹⁵⁄₁₆" (49.21)	1³⁷⁄₆₄" (40.08)
Feed Finger, Style "B" Master	6347	2	B22	6665	2.598" (65.99)	5.500" (139.70)	—	2.496" x 24 LH	2" (50.80)	1²³⁄₃₂" (43.66)	1¹³⁄₃₂" (35.72)
Feed Finger, Style "A" Master	6461	2	A22W		2.598" (65.99)	5.500" (139.70)	—	2.496" x 24 LH	2⅛" (53.98)	1⁵³⁄₆₄" (46.43)	1½" (38.10)
WARNER & SWASEY: 3" Capacity – 2AB – Single Spindle (Larger Capacity Solid Collets Available up to 3¹¹⁄₃₂" Round, 2⅞" Hex, 2²³⁄₆₄" Square)											
Collet, Solid	MP3605	1			3.805" (96.65)	6.750" (171.45)	4.645" (117.98)	3.625" x 16 RH	3" (76.20)	2¹⁹⁄₃₂" (65.88)	2⁷⁄₆₄" (53.58)
Collet, Style "S" Master	5261	1	S30	5615[3]	3.805" (96.65)	6.750" (171.45)	4.645" (117.98)	3.625" x 16 RH	3" (76.20)	2¹⁹⁄₃₂" (65.88)	2⁷⁄₆₄" (53.58)
Collet, Martin Master	MP3951	1	M30	5917	3.805" (96.65)	6.750" (171.45)	4.645" (117.98)	3.625" x 16 RH	3" (76.20)	2¹⁹⁄₃₂" (65.88)	2⁷⁄₆₄" (53.58)
Feed Finger, Solid	MP3656	2			3.355" (85.22)	6.875" (174.63)	—	3.233" x 20 LH	3" (76.20)	2¹⁹⁄₃₂" (65.88)	2⁷⁄₆₄" (53.58)
Feed Finger, Style "B" Master	6349	2	B30	6677	3.355" (85.22)	6.875" (174.63)	—	3.233" x 20 LH	2⅝" (66.68)	2¹⁷⁄₆₄" (57.55)	1²⁷⁄₃₂" (46.83)
Feed Finger, Style "A" Master	4726D	2	A30	6745	3.355" (85.22)	6.875" (174.63)	—	3.233" x 20 LH	2¹³⁄₁₆" (71.44)	2²⁷⁄₆₄" (61.52)	1⁶³⁄₆₄" (50.40)

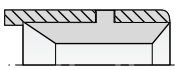
3 - Master Collet Pads available in smooth or serrated order holes

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.




Style "S" Master Collet & Pad


Martin Master Collet & Pad

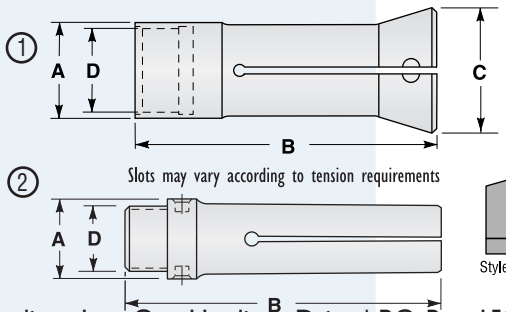

Style "B" Master Feed Finger & Pad

Spindle Tooling for Automatics

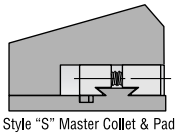
HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
WARNER & SWASEY: 4 9/16" Capacity – 3AB – Single Spindle (Larger Capacity Collets Available up to 5 5/32" Round, 4 29/64" Hex, 3 41/64" Square)											
Collet, Solid	MP4049	1			5.997" (152.32)	9.000" (228.60)	7.005" (177.93)	5.500" x 16 RH	4 9/16" (115.89)	3 15/16" (100.01)	3 17/64" (82.95)
Collet, Martin Master	5419	1	M50	MP4034	5.997" (152.32)	9.000" (228.60)	7.005" (177.93)	5.500" x 16 RH	5" (127.00)	4 21/64" (109.93)	3 17/32" (89.70)
Feed Finger, Solid	MP4032	2			5.000" (127.00)	8.750" (222.25)	— —	4.873" x 16 LH	4 9/16" (115.89)	3 15/16" (100.01)	3 17/64" (82.95)
Feed Finger, Style "A" Master	MP4037	2	A47	7344A	5.000" (127.00)	8.750" (222.25)	— —	4.875" x 16 LH	4 7/16" (112.71)	3 53/64" (97.23)	3 1/8" (79.38)
WARNER & SWASEY: Old Style – 1SC – NC – Single Spindle											
Collet, Style "S" Master	5263	1	S22	5611[3]	2.560" (65.02)	6.000" (152.40)	4.003" (101.68)	2.312" x 16 RH	2 1/4" (57.15)	1 15/16" (49.21)	1 37/64" (40.08)
WARNER & SWASEY: New Style – 1SC – NC – Single Spindle (Larger Capacity Collets Available up to 2 31/64" Round, 2 5/32" Hex, 1 3/4" Square)											
Collet, Solid	MP3889	1			2.998" (76.15)	6.875" (174.63)	4.000" (101.60)	2.750" x 16 RH	2 15/32" (62.71)	2 1/8" (53.98)	1 47/64" (44.05)
Collet, Style "S" Master	5265	1	S22	5611[3]	2.998" (76.15)	6.875" (174.63)	4.000" (101.60)	2.750" x 16 RH	2 1/4" (57.15)	1 15/16" (49.21)	1 37/64" (40.08)
Collet, Martin Master	MP4035	1	M23	5933	2.998" (76.15)	6.875" (174.63)	4.000" (101.60)	2.750" x 16 RH	2 3/8" (60.33)	2 3/64" (51.99)	1 43/64" (42.47)
Feed Finger, Style "B" Master	6347	2	B22	6665	2.598" (65.99)	5.500" (139.70)	— —	2.496" x 24 LH	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
Feed Finger, Style "A" Master	6461	2	A22W	6737	2.598" (65.99)	5.500" (139.70)	— —	2.496" x 24 LH	2 1/8" (53.98)	1 53/64" (46.43)	1 1/2" (38.10)
WARNER & SWASEY: 2SC15 – 2SCL – NC											
Collet, Martin Master	MP4038	1	M47	MP4043	5.247" (133.27)	8.500" (215.90)	7.005" (177.93)	4.875" x 16 RH	4 3/4" (120.65)	4 7/64" (104.38)	3 11/32" (84.93)
Feed Finger, Solid	MP4032	2			5.000" (127.00)	8.750" (222.25)	— —	4.875" x 16 LH	4 9/16" (115.89)	3 15/16" (100.01)	3 17/64" (82.95)
Feed Finger, Style "A" Master	MP4037	2	A47	7344A	5.000" (127.00)	8.750" (222.25)	— —	4.875" x 16 LH	4 7/16" (112.71)	3 53/64" (97.23)	3 1/8" (79.38)
WARNER & SWASEY: 2SC12 – NC											
Collet, Style "S" Master	MP3887	1	S30	5615[3]	3.622" (92.00)	7.187" (182.55)	5.003" (127.08)	3.375" x 18 RH	3" (76.20)	2 19/32" (65.88)	2 7/64" (53.58)
Collet, Martin Master	5409	1	M30	5917	3.622" (92.00)	7.187" (182.55)	5.003" (127.08)	3.375" x 18 RH	3" (76.20)	2 19/32" (65.88)	2 7/64" (53.58)
Feed Finger, Style "B" Master	6141	2	B35	6681	3.870" (98.30)	6.750" (171.45)	— —	3.765" x 24 LH	3 1/8" (79.38)	2 45/64" (68.66)	2 13/64" (55.96)
Feed Finger, Style "A" Master	6417	2	A35	6751	3.870" (98.30)	6.750" (171.45)	— —	3.765" x 24 LH	3 1/4" (82.55)	2 13/16" (71.44)	2 19/64" (58.34)

3 - Master Collet Pads available in smooth or serrated order holes



NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.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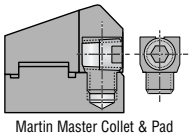
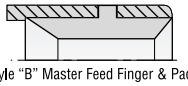

Martin Master Collet & Pad


Style "B" Master Feed Finger & Pad

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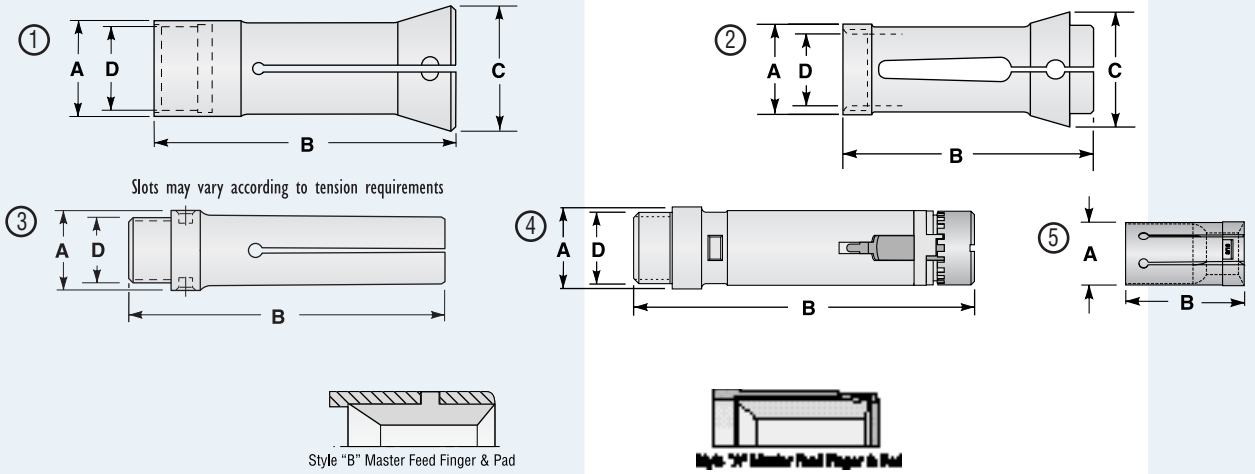
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
WICKMAN: 5/8" Capacity – Six Spindle (Larger Capacity Solid Collets Available up to 27/32" Round, 3/4" Hex, 19/32" Square)											
Collet, Solid	4461	1			1.158" (29.41)	3.563" (90.49)	1.502" (38.15)	1.031" x 24 LH	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
Collet, Burring	4463	2			.749" (19.02)	2.188" (55.58)	1.035" (26.29)	—	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
Feed Finger, Solid	4465	3			.850" (21.59)	3.375" (85.73)	— —	.769" x 24 LH	5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
Feed Finger, Style "B" Master	6355	3	B11	6653	.850" (21.59)	3.375" (85.73)	— —	.769" x 24 LH	9/16" (14.29)	31/64" (12.30)	25/64" (9.92)
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7089	4	AF3A	7305[1] 7307[2]	.850" (21.59)	3.218" (81.74)	— —	.769" x 24 LH	3/16" (4.76)	1/2" (12.70)	3/16" (4.76)	7/16" (11.11)
Bushing, Style "AF"	7357	5	AF3A		.638" (16.21)	1.250" (31.75)	— —	—	3/16" (4.76)	1/2" (12.70)	3/16" (4.76)	7/16" (11.11)

1 - Round
2 - Hexagon

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.



Style "B" Master Feed Finger & Pad

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Spindle Tooling for Automatics

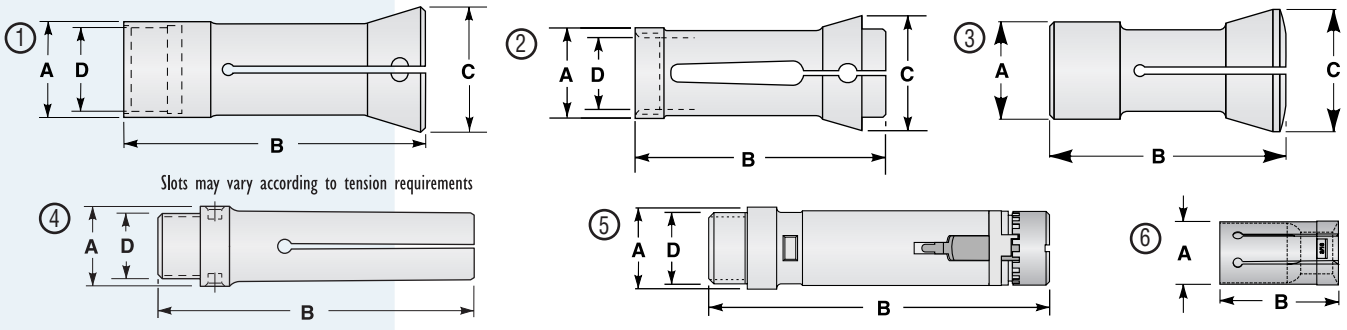
HARDINGE

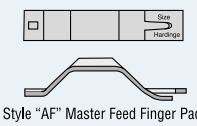
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
WICKMAN: 1" Capacity – Six Spindle (Larger Capacity Solid Collets Available up to 1 9/32" Round, 1 3/32" Hex, 29/32" Square)											
Collet, Solid	4361	1			1.620" (41.15)	5.125" (130.18)	2.145" (54.48)	1.484" x 24 LH	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, HQC Quick-Change	See page 101				.999" (25.37)	3.688" (93.66)	1.520" (38.61)	—	3/4" (19.05)	41/64" (16.27)	33/64" (13.10)
Collet, Solid High Speed Drill	4277	3			.687" (17.45)	2.062" (52.37)	.938" (23.83)	—	7/16" (11.11)	3/8" (9.53)	19/64" (7.54)
Collet, Style "S" Master	5219	1	S10	5601[3]	1.620" (41.15)	5.125" (130.18)	2.145" (54.48)	1.484" x 24 LH	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Collet, Martin Master	5445	1	M10	5901	1.620" (41.15)	5.125" (130.18)	2.145" (54.48)	1.484" x 24 LH	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Feed Finger, Solid	4363	4			1.250" (31.75)	5.250" (133.35)	— —	1.185" x 24 LH	1" (25.40)	55/64" (21.83)	45/64" (17.86)
Feed Finger, Style "B" Master	6321	4	B6	6625	1.250" (31.75)	5.250" (133.35)	— —	1.185" x 24 LH	7/8" (22.23)	3/4" (19.05)	39/64" (15.48)
Feed Finger, Style "A" Master	6441	4	A10	6715	1.250" (31.75)	5.250" (133.35)	— —	1.185" x 24 LH	15/16" (23.81)	51/64" (20.24)	21/32" (16.67)
Feed Finger, Squirrel Cage & Stock Saver	See page 100										

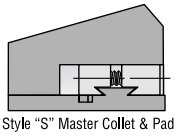
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7073	5	AF6	7313[1] 7315[2]	1.250" (31.75)	5.000" (127.00)	— —	1.185" x 24 LH	3/8" (9.53)	7/8" (22.23)	3/8" (9.53)	3/4" (19.05)
Bushing, Style "AF"	7361	6	AF6		.990" (25.15)	1.688" (42.88)	— —	—	3/8" (9.53)	7/8" (22.23)	3/8" (9.53)	3/4" (19.05)

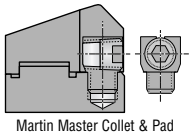
1 - Round
2 - Hexagon
3 - Master Collet Pads available in smooth or serrated order holes

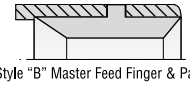
NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.




Style "AF" Master Feed Finger Pad


Style "S" Master Collet & Pad


Martin Master Collet & Pad


Style "B" Master Feed Finger & Pad

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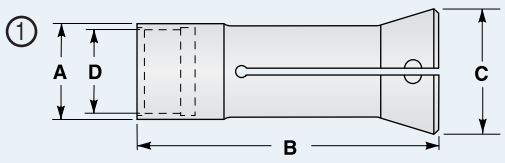
Spindle Tooling for Automatics

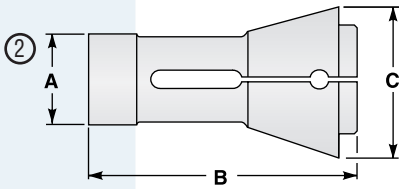
HARDINGE

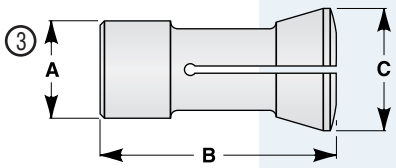
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
WICKMAN: 1⅜" Capacity – Five and Six Spindle (Larger Capacity Solid Collets Available up to 1²³⁄₃₂" Round, 1³¹⁄₆₄" Hex, 1⁷⁄₃₂" Square)											
Collet, Solid	4469	1			2.184" (55.47)	4.625" (117.48)	2.630" (66.80)	2.001" x 22 RH	1⅜" (34.93)	1³⁄₁₆" (30.16)	³¹⁄₃₂" (24.61)
Collet, Solid Burring	4485	2			1.562" (39.67)	4.750" (120.65)	2.565" (65.15)	—	1¾" (44.45)	1³³⁄₆₄" (38.50)	1¹⁵⁄₆₄" (31.35)
Collet, Master Burring	5045	2	S10	5601[3]	1.562" (39.67)	4.750" (120.65)	2.565" (65.15)	—	1" (25.40)	⁵⁵⁄₆₄" (21.83)	⁴⁵⁄₆₄" (17.86)
Collet, Solid High Speed Drill	4487	3			.782" (19.86)	3.250" (82.55)	1.378" (35.00)	—	⁹⁄₁₆" (14.29)	³¹⁄₆₄" (12.30)	²⁵⁄₆₄" (9.92)
Collet, Style "S" Master	5301	1	S12	5603[3]	2.184" (55.47)	4.625" (117.48)	2.630" (66.80)	2.001" x 22 RH	1¼" (31.75)	1³⁄₆₄" (27.38)	⅞" (22.23)
Feed Finger, Solid	4471	4			1.687" (42.85)	4.625" (117.48)	— —	1.586" x 22 LH	1⅜" (34.93)	1³⁄₁₆" (30.16)	³¹⁄₃₂" (24.61)
Feed Finger, Style "B" Master	6357	4	B7	6631	1.687" (42.85)	4.625" (117.48)	— —	1.586" x 22 LH	1⅛" (28.58)	³¹⁄₃₂" (24.61)	²⁵⁄₃₂" (19.85)
Feed Finger, Squirrel Cage & Stock Saver		See page 100									
									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7091	5	AF7	7317[1] 7319[2]	1.687" (42.85)	4.375" (111.13)	— —	1.586" x 22 LH	½" (12.70)	1⅛" (28.58)	½" (12.70)	¹⁵⁄₁₆" (23.81)
Bushing, Style "AF"	7363	6	AF7		1.235" (31.37)	1.938" (49.23)	— —	—	½" (12.70)	1⅛" (28.58)	½" (12.70)	¹⁵⁄₁₆" (23.81)

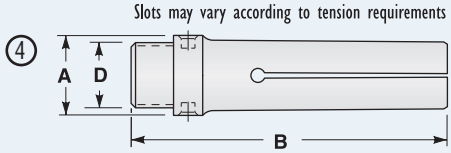
1 - Round
2 - Hexagon
3 - Master Collet Pads available in smooth or serrated order holes

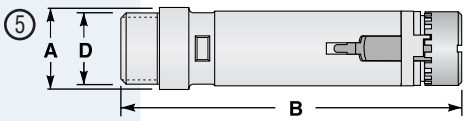
NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.

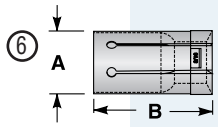


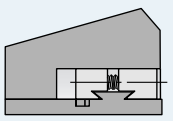


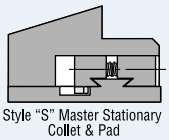









Style "S" Master Collet & Pad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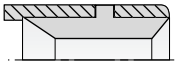
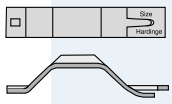

Style "B" Master Feed Finger & Pad


Style "AF" Master Feed Finger Pad

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Spindle Tooling for Automatics

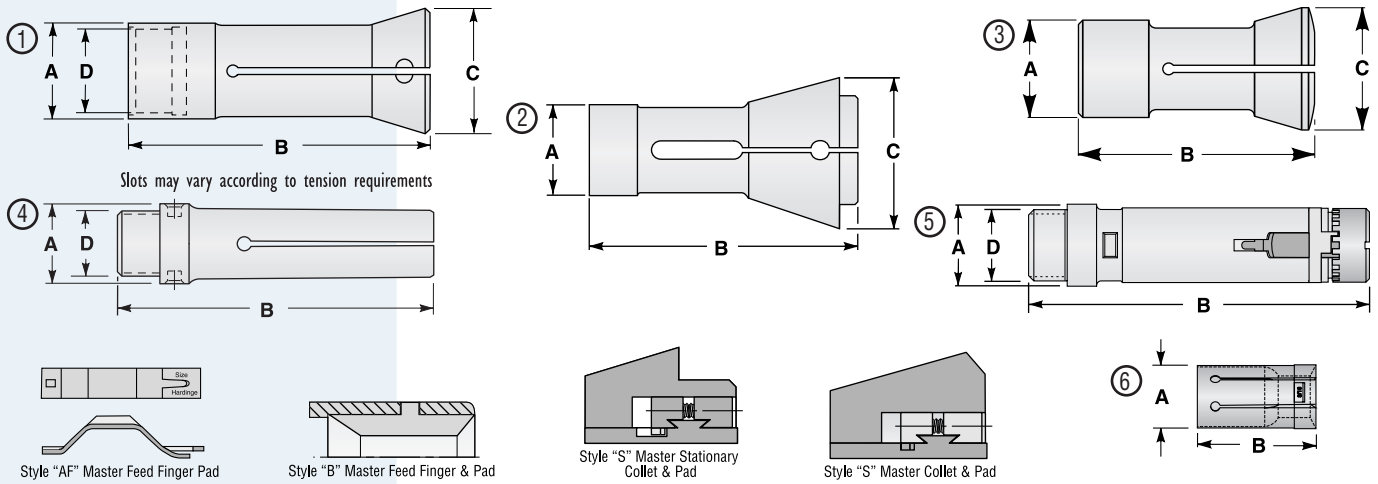
HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
WICKMAN: 1¾" Capacity – Five, Six, and Eight Spindle (Larger Capacity Solid Collets Available up to 2³⁄₃₂" Round, 1¹³⁄₁₆" Hex, 1¹⁵⁄₃₂" Square)											
Collet, Solid	4473	1			2.527" (64.19)	5.000" (127.00)	3.098" (78.69)	2.376" x 16 RH	1¾" (44.45)	1³³⁄₆₄" (38.50)	1¹⁵⁄₆₄" (31.35)
Collet, Solid Burring	4485	2			1.562" (39.67)	4.750" (120.65)	2.565" (65.15)	—	1¾" (44.45)	1³³⁄₆₄" (38.50)	1¹⁵⁄₆₄" (31.35)
Collet, Master Burring	5045	2	S10	5601[3]	1.562" (39.67)	4.750" (120.65)	2.565" (65.15)	—	1" (25.40)	⁵⁵⁄₆₄" (21.83)	⁴⁵⁄₆₄" (17.86)
Collet, Solid High Speed Drill	4487	3			.782" (19.86)	3.250" (82.55)	1.378" (35.00)	—	⁹⁄₁₆" (14.29)	³¹⁄₆₄" (12.30)	²⁵⁄₆₄" (9.92)
Collet, Style "S" Master	5303	1	S16	5607[3]	2.527" (64.19)	5.000" (127.00)	3.098" (78.69)	2.376" x 16 RH	1⅝" (41.28)	1¹³⁄₃₂" (35.72)	1⁹⁄₆₄" (28.97)
Feed Finger, Solid	4475	4			2.062" (52.37)	5.000" (127.00)	—	1.961" x 22 LH	1¾" (44.45)	1³³⁄₆₄" (38.50)	1¹⁵⁄₆₄" (31.35)
Feed Finger, Style "B" Master	6359	4	B16	6657	2.062" (52.37)	5.000" (127.00)	—	1.961" x 22 LH	1½" (38.10)	1¹⁹⁄₆₄" (32.94)	1³⁄₆₄" (26.59)
Feed Finger, Style "B" Master	6075	4	B8	6635	2.062" (52.37)	5.000" (127.00)	—	1.961" x 22 LH	1⅜" (34.93)	1³⁄₁₆" (30.16)	³¹⁄₃₂" (24.61)
Feed Finger, Squirrel Cage & Stock Saver		See page 100									

									Round Min.	Round Max.	Hexagon Min.	Hexagon Max.
Feed Finger, Style "AF" Master Adjustable Tension	7093	5	AF16	7325[1] 7327[2]	2.062" (52.37)	4.688" (119.08)	—	1.961" x 22 LH	⅝" (15.88)	1⁷⁄₁₆" (36.51)	⅝" (15.88)	1¼" (31.75)
Bushing, Style "AF"	7369	6	AF16		1.610" (40.89)	2.375" (60.33)	—	—	⅝" (15.88)	1⁷⁄₁₆" (36.51)	⅝" (15.88)	1¼" (31.75)

1 - Round
2 - Hexagon
3 - Master Collet Pads available in smooth or serrated order holes

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.



Hardinge Inc. One Hardinge Drive | P.O. Box 1507 | Elmira, New York 14902-1507 USA
USA: 800-843-8801 or 607-378-4022 | Canada: 800-468-5946 | Fax: 607-734-3886
To Order Online: www.hardingetooling.com | Corporate Homepage: www.hardinge.com | E-mail: info@hardingetooling.com

To Order Contact: Exact Tooling / www.exacttooling.com / sales@exacttooling.com / 888-988-8820

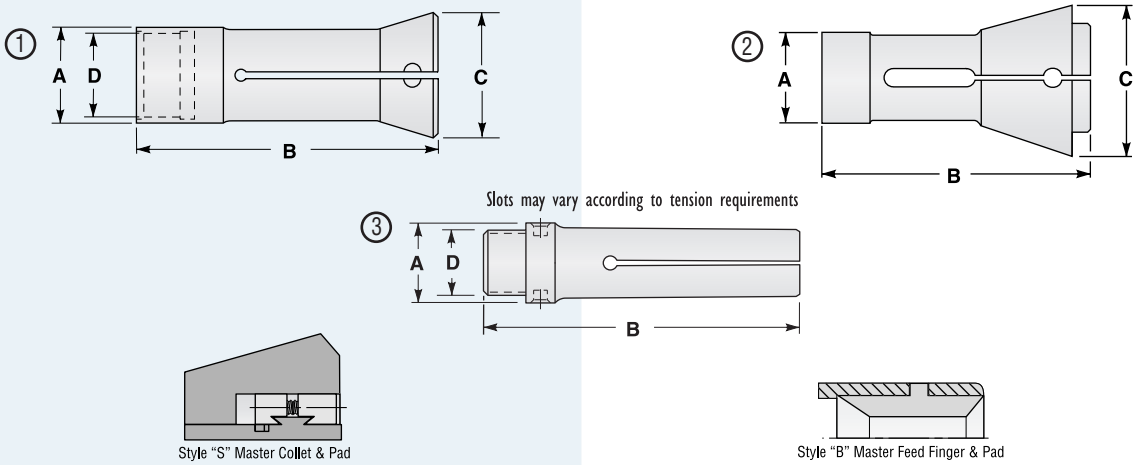
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
WICKMAN: 2¼" Capacity – Six Spindle (Larger Capacity Solid Collets Available up to 2 19/32" Round, 2¼" Hex, 1 53/64" Square)											
Collet, Solid	4483	1			3.026" (76.86)	7.125" (180.98)	3.760" (95.50)	2.849" x 22 LH	2¼" (57.15)	1 15/16" (49.21)	1 37/64" (40.08)
Collet, Burring	4287	2			1.812" (46.02)	5.625" (142.88)	3.053" (77.55)	—	2¼" (57.15)	1 15/16" (49.21)	1 37/64" (40.08)
Collet, Style "S" Master	5305	1	S22	5611[3]	3.026" (76.86)	7.125" (180.98)	3.760" (95.50)	2.849" x 22 LH	2¼" (57.15)	1 15/16" (49.21)	1 37/64" (40.08)
Feed Finger, Solid	4477	3			2.560" (65.02)	6.750" (171.45)	— —	2.460" x 22 LH	2¼" (57.15)	1 15/16" (49.21)	1 37/64" (40.08)
Feed Finger, Style "B" Master	6361	3	B22	6665	2.560" (65.02)	6.750" (171.45)	— —	2.460" x 22 LH	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
WICKMAN: 2⅝" Capacity – Single and Six Spindle (Larger Capacity Solid Collets Available up to 3⅛" Round, 2 11/16" Hex, 2 3/16" Square)											
Collet, Solid	4199	1			3.613" (91.77)	6.500" (165.10)	4.380" (111.25)	3.375" x 18 RH	2⅝" (66.68)	2 17/64" (57.55)	1 27/32" (46.83)
Collet, HQC Quick-Change	See page 101										
Collet, Style "S" Master	5025	1	S26	5613[3]	3.613" (91.77)	6.500" (165.10)	4.380" (111.25)	3.375" x 18 RH	2⅝" (66.68)	2 17/64" (57.55)	1 27/32" (46.83)
Collet, Martin Master	5411	1	M26	5915[3]	3.613" (91.77)	6.500" (165.10)	4.380" (111.25)	3.375" x 18 RH	2⅝" (66.68)	2 17/64" (57.55)	1 27/32" (46.83)
Feed Finger, Solid	4201	3			2.995" (76.07)	7.000" (177.80)	— —	2.870" x 24 LH	2⅝" (66.68)	2 17/64" (57.55)	1 27/32" (46.83)
Feed Finger, Style "B" Master	6137	3	B26	6673	2.995" (76.07)	7.000" (177.80)	— —	2.870" x 24 LH	2⅜" (60.33)	2 3/64" (51.99)	1 43/64" (42.47)
Feed Finger, Style "A" Master	6449	3	A26	6739	2.995" (76.07)	7.000" (177.80)	— —	2.870" x 24 LH	2 9/16" (65.09)	2 7/32" (56.36)	1 51/64" (45.64)
Feed Finger, Squirrel Cage & Stock Saver	See page 100										

3 - Master Collet Pads available in smooth or serrated order holes

NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.



Style "S" Master Collet & Pad

Style "B" Master Feed Finger & Pad

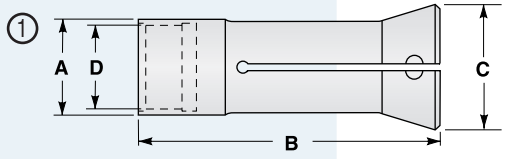
Spindle Tooling for Automatics

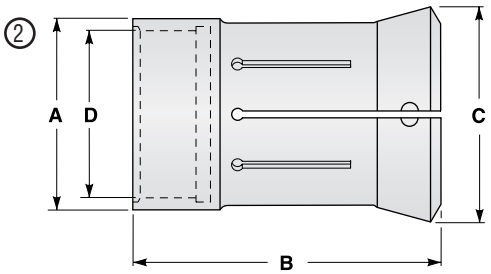
HARDINGE

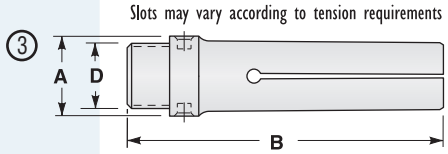
Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	B Overall Length	C Collet Head Diameter	D Thread	Machine Tool Builder's Rated Capacity Round	Hexagon	Square
WICKMAN: 3¼" Capacity – Six Spindle (Larger Capacity Solid Collets Available up to 3¼" Round, 2 13/16" Hex, 2 5/16" Square)											
Collet, Solid	4479	1			4.187" (106.35)	7.750" (196.85)	5.005" (127.13)	3.966" x 16 RH	3¼" (82.55)	2 13/16" (71.44)	2 19/64" (58.34)
Collet, Style "S" Master	5307	1	S30	5615[3]	4.187" (106.35)	7.750" (196.85)	5.005" (127.13)	3.966" x 16 RH	3" (76.20)	2 19/32" (65.88)	2 7/64" (53.58)
Feed Finger, Solid	4481	3			3.625" (92.08)	7.250" (184.15)	—	3.492" x 22 LH	3¼" (82.55)	2 13/16" (71.44)	2 19/64" (58.34)
Feed Finger, Style "B" Master	6363	3	B33	6679	3.625" (92.08)	7.250" (184.15)	—	3.492" x 22 LH	3" (76.20)	2 19/32" (65.88)	2 7/64" (53.58)
WICKMAN: 3½" Capacity – Single and Four Spindle (Larger Capacity Solid Collets Available up to 3 29/32" Round, 3⅛" Hex, 2¾" Square)											
Collet, Solid	MP3773	1			4.370" (111.00)	6.500" (165.10)	5.315" (135.00)	4.187" x 18 RH	3½" (88.90)	3 1/64" (76.60)	2 15/32" (62.71)
Collet, Style "S" Master	5309	1	S35	5617[3]	4.370" (111.00)	6.500" (165.10)	5.315" (135.00)	4.187" x 18 RH	3½" (88.90)	3 1/64" (76.60)	2 15/32" (62.71)
Collet, Martin Master	MP3955	1	M35	5921[3]	4.370" (111.00)	6.500" (165.10)	5.315" (135.00)	4.187" x 18 RH	3½" (88.90)	3 1/64" (76.60)	2 15/32" (62.71)
Feed Finger, Solid	4203	3			3.870" (98.30)	6.750" (171.45)	—	3.765" x 24 LH	3½" (88.90)	3 1/64" (76.60)	2 15/32" (62.71)
Feed Finger, Style "B" Master	6141	3	B35	6681	3.870" (98.30)	6.750" (171.45)	—	3.765" x 24 LH	3⅛" (79.38)	2 45/64" (68.66)	2 13/64" (55.96)
Feed Finger, Style "B' Master	MP2894-W	3	B35	6681	3.870" (98.30)	6.750" (171.45)	—	3.765" x 24 LH	3⅛" (79.38)	2 45/64" (68.66)	2 13/64" (55.96)
Feed Finger, Style "A" Master	6417	3	A35	6751	3.870" (98.30)	6.750" (171.45)	—	3.765" x 24 LH	3¼" (82.55)	2 13/16" (71.44)	2 19/64" (58.34)
WICKMAN: 4⅛" Capacity – Six Spindle											
Collet, Solid	MP3702	2			5.062" (128.58)	8.500" (215.90)	6.005" (152.53)	4.844" x 16 RH	4⅛" (104.78)	3 9/16" (90.49)	2⅞" (73.82)
Collet, Style "S" Master	MP3759	2	S40	5619[3]	5.062" (128.58)	8.500" (215.90)	6.005" (152.53)	4.844" x 16 RH	4" (101.60)	3 29/64" (87.71)	2 53/64" (71.83)

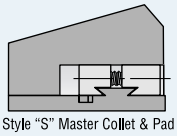
3 - Master Collet Pads available in smooth or serrated order holes

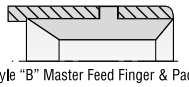
NOTE: Millimeters in parentheses.
Collets and feed fingers available for larger capacity machines.
Collets available in smooth or serrated order holes.
For feed finger pads, styles "A" and "B" available in hardened steel, nickel cast iron, bronze, or nylon; style "AF" in hardened steel or chrome plated.
S-pads available in hardened and ground, semi-hard emergency and soft emergency.

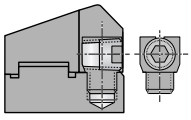







Style "S" Master Collet & Pad


Style "B" Master Feed Finger & Pad


Martin Master Collet & Pad

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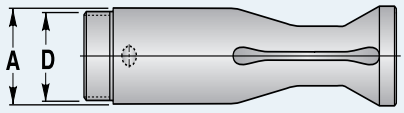
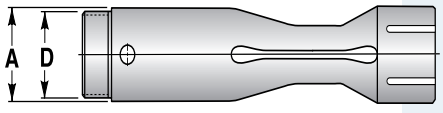
Spindle Tooling for Automatics

HARDINGE

Description	Hardinge Part Number	Figure	Style	Pad Part Number	Dimensions A Back Bearing Diameter	Dimensions B Overall Length	Dimensions C Collet Head Diameter	Dimensions D Thread	Machine Tool Builder's Rated Capacity: Round	Hexagon	Square
WICKMAN: 1" Capacity											
Feed Finger, Squirrel Cage	Steel	4363-88-	1	1.250"	—	—		1"	55/64"	45/64"
	Bronze	4363-90-	1	(31.75)	—	—	1.185" x 24 LH	(25.40)	(21.83)	(17.86)
Feed Finger, Stock Saver	Steel	4363-89-	2	1.250"	—	—		1"	55/64"	45/64"
	Bronze	4363-91-	2	(31.75)	—	—	1.185" x 24 LH	(25.40)	(21.83)	(17.86)
WICKMAN: 1 3/8" Capacity											
Feed Finger, Squirrel Cage	Steel	4471-88-	1	1.687"	—	—		1 3/8"	1 3/16"	31/32"
	Bronze	4471-90-	1	(42.85)	—	—	1.586" x 22 LH	(34.93)	(30.16)	(24.61)
Feed Finger, Stock Saver	Steel	4471-89-	2	1.687"	—	—		1 3/8"	1 3/16"	31/32"
	Bronze	4471-91-	2	(42.85)	—	—	1.586" x 22 LH	(34.93)	(30.16)	(24.61)
WICKMAN: 1 3/4" Capacity											
Feed Finger, Squirrel Cage	Steel	4475-88-	1	2.062"	—	—		1 3/4"	1 33/64"	1 15/64"
	Bronze	4475-90-	1	(52.37)	—	—	1.961" x 22 LH	(44.45)	(38.50)	(31.35)
Feed Finger, Stock Saver	Steel	4475-89-	2	2.062"	—	—		1 3/4"	1 33/64"	1 15/64"
	Bronze	4475-91-	2	(52.37)	—	—	1.961" x 22 LH	(44.45)	(38.50)	(31.35)
WICKMAN: 2 5/8" Capacity											
Feed Finger, Squirrel Cage	Steel	4201-88-	1	2.995"	—	—		2 5/8"	2 17/64"	1 27/32"
	Bronze	4201-90-	1	(76.07)	—	—	2.870" x 24 LH	(66.68)	(57.55)	(46.83)
Feed Finger, Stock Saver	Steel	4201-89-	2	2.995"	—	—		2 5/8"	2 17/64"	1 27/32"
	Bronze	4201-91-	2	(76.07)	—	—	2.870" x 24 LH	(66.68)	(57.55)	(46.83)

① 

② 

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Spindle Tooling for Automatics

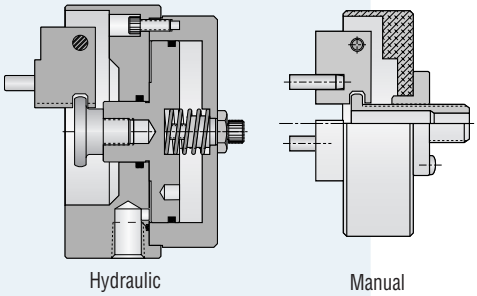
HARDINGE

Machine Size and Model		Collet Body Part No.	Collet Head Part No.	Capacity: Round Smooth	Capacity: Round Serrated	Capacity: Hexagon	Capacity: Square	Collet Head Changing Fixture: Hydraulic	Collet Head Changing Fixture: Manual Pneumatic	QC Slot/ Seal Insert
Acme-Gridley: HQC Qick-Change Collet System										
1"	C, R, R4, R6, RA, RA4, RA6, RAN6, RAS6	4515	4501	5/16" to 1"	5/16" to 15/16"	5/16" to 7/8"	5/16" to 11/16"	ST575-A1	ST575	7755
1¼"	G, G4, GA4, R, R6, RA, RA4, RA6, RB6, RB8	4519	4505	5/16" to 1¼"	5/16" to 1 3/16"	5/16" to 1 1/16"	5/16" to 7/8"	ST575-A2	ST575-A	7755
1⅝"	C, G, GA, GA4, R, R4,R6, RA, RA4, RA6 RA8, RAS4, RB, RB6, RB8	4521	4507	5/16' to 1⅝"	5/16" to 1 9/16"	5/16" to 1⅜"	5/16" to 1⅛"	ST575-B2	ST575-B	7755
2"	B, R, R4, R6, RA, RA4, 4A6, RAS, RAS4 RAS6, RB, RB6, RL	4533	4535	5/16" to 2"	5/16" to 2"	½" to 1 11/16"	¾" to 1⅜"	ST575-C1	ST575-C	7757
2⅜"	HSC Chucker–Spindle Adapter Required (Spindle Adapter Part No. – 7743)	4531	4505	5/16" to 1¼"	5/16" to 1 3/16"	5/16" to 1 1/16"	5/16" to 7/8"	7781	90575	7757
2⅝"	M, R, R6, R8, RA, RA6, RA8, RB6, RB8 Internal Threads	4527	4513	¾" to 2⅝"	½" to 2 9/16"	⅝" to 2¼"	⅝" to 1 13/16"	ST575-D1	ST575-D	7757
3½"	M, MR, R6, R8, RA, R4, RA6, RB4,RB6,RB8	4537	4539	1½" to 3½"	1½" to 3 7/16"	1½" to 3"	1½" to 2½"	7793	—	7787
Cone: HQC Qick-Change Collet System										
1"	Six Spindle - SK, SL, SW, TB, TC, TK, TS	4517	4503	5/16" to 7/8"	5/16" to 13/16"	5/16" to ¾"	5/16" to ⅝"	ST575-A1	ST575	7755
1⅝"	1-5/8"(Also used for #61 New Britian Int.)	4523	4509	5/16" to 1⅝"	5/16" to 1 9/16"	5/16" to 1⅜"	5/16" to 1⅛"	ST575-B3	ST575-B1	7755
2⅝"	2-1/2", 2-5/8"	4529	4513	¾' to 2⅝"	½" to 2 9/16"	⅝" to 2¼"	⅝" to1 13/16"	ST575-D1	ST575-D6	7755
New Britain: HQC Qick-Change Collet System										
1"	51, 60, 408	4517	4503	5/16" to 7/8"	5/16" to 13/16"	5/16" to ¾"	5/16" to ⅝"	ST 575-A1	ST575	7755
1¼"	52, 601, SL	4519	4505	5/16" to 1¼"	5/16" to 1 3/16"	5/16" to 1 1/16"	5/16" to 7/8"	ST575-A2	ST 575-A	7755
1⅝"	816 (External Threads)	4521	4507	5/16" to 1⅝"	5/16" to 1 9/16"	5/16" to 1⅜"	5/16" to 1⅛"	ST575-B2	ST575-B	7755
1⅝"	Model #61 with ID Threads same as 1⅝" Cone (Special Pads 94509-88-18-0679N for Rd and 94509-88-29-0549N for Hex and Sq.)									
2¼"	61, 62	4525	4511	5/16" to 2⅛"	½" to 2 1/16"	½" to 1 13/16"	¾" to 1½"	ST575-C1	ST575-C	7757
2⅝"	26 Single Spindle, 126, 626	4527	4513	¾" to 2⅝"	½" to 2 9/16"	⅝" to 2¼"	⅝" to 1 13/16"	ST575-D1	ST575-D	7757
3½"	635	4539	4537	1½" to 3½"	1½" to 3 7/16"	1½" to 3"	1½" to 2½"	7793	—	7787
Wickman: HQC Qick-Change Collet System										
1"	Six Spindle	4517	4503	5/16" to 7/8"	5/16" to 13/16"	5/16" to ¾"	5/16" to ⅝"	ST575-A1	ST575	7755
2⅝"	One and Six Spindle	4529	4513	¾" to 2⅝"	½" to 2 9/16"	⅝" to 2¼"	⅝" to 1 13/16"	ST575-D1	ST575-D	7757

Options:

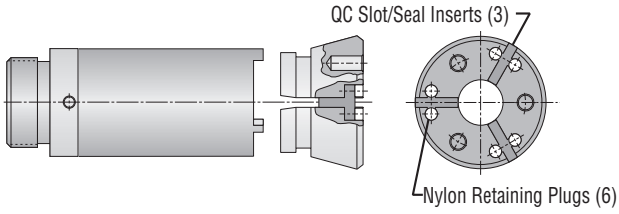
Hydraulic Power Unit	For all Hydraulic Changing Fixtures	Part Number: STA-0009189-01
Ingersoll-Rand Pneumatic Ratchet	RW6	Part Number: ST -0009189
Nylon Retaining Plugs	Supplied installed in collet head	Part Number: 7759

Collet Head Changing Fixtures



Hydraulic Manual

NOTE: See solid collets under specific manufacturer for dimensions. Collet Head Changing Fixture part number requires "ST" prefix. Initial order for Collet Head Changing Fixture includes QC Slot/ Seal Inserts and Nylon Retaining Plugs assembled in place.



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Spindle Tooling for *Turret Lathes*

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Spindle Tooling for Turret Lathes

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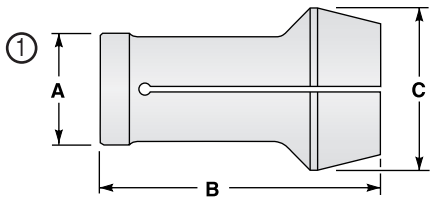
Spindle Tooling for Turret Lathes

HARDINGE

Machine Model and Size	Hardinge Collet Part Number	Vendor Part Number	Figure	Hardinge Pad Part Number	Collet Dimensions A Back Bearing Diameter	Collet Dimensions B Overall Length	Collet Dimensions C Collet Head Diameter	Pad Dimensions D Outside Diameter	Pad Dimensions E Overall Length	Machine Tool Builder's Rated Capacity & Collet Capacity: Round	Hexagon	Square
BARDONS & OLIVER: Solid Collets												
#0	2511		1		.624" (15.85)	2.000" (50.80)	.755" (19.18)			3/8" (9.53)	5/16" (7.94)	17/64" (6.75)
#1	2501		1		1.124" (28.55)	2.750" (69.85)	1.305" (33.15)			13/16" (20.64)	45/64" (17.86)	9/16" (14.29)
#3	MP2011		1		1.185" (30.09)	3.000" (76.20)	1.506" (38.25)			7/8" (22.23)	3/4" (19.05)	39/64" (15.48)
#3	MP2506		1		1.936" (49.17)	4.750" (120.65)	2.615" (66.42)			1 1/2" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
#3½	MP1349		1		1.499" (38.07)	3.500" (88.90)	1.695" (43.05)			1 1/8" (28.58)	31/32" (24.61)	25/32" (19.85)
#4	2505		1		1.374" (34.90)	3.500" (88.90)	1.600" (40.64)			1 1/16" (26.99)	29/32" (23.02)	3/4" (19.05)
#4½	2507		1		1.749" (44.42)	3.500" (88.90)	1.850" (46.99)			1 9/32" (32.55)	1 7/64" (28.18)	29/32" (23.02)
#5	2509		1		1.936" (49.17)	3.750" (95.25)	2.185" (55.50)			1 1/2" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
#6	MP1046		1		2.373" (60.27)	4.250" (107.95)	2.645" (67.18)			1 3/4" (44.45)	1 33/64" (38.50)	1 15/64" (31.35)
#7	MP1048		1		2.624" (66.65)	4.750" (120.65)	3.075" (78.11)			2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
#8	MP2338		1		2.937" (74.60)	5.750" (146.05)	4.155" (105.54)			2 1/4" (57.15)	1 15/16" (49.21)	1 37/64" (40.08)
#8	MP2647		1		2.934" (74.52)	5.250" (133.35)	3.405" (86.49)			2 1/4" (57.15)	1 15/16" (49.21)	1 37/64" (40.08)
#10	MP3014		1		3.873" (98.37)	6.500" (165.10)	5.055" (128.40)			3 1/16" (77.79)	2 41/64" (67.07)	2 5/32" (54.77)
BARDONS & OLIVER: Emergency Solid Collets												
#4	MP2535E		1		1.374" (34.90)	3.500" (88.90)	1.600" (40.64)			1 1/16" (26.99)	29/32" (23.02)	3/4" (19.05)

NOTE: Millimeters in parentheses.
Collets available in smooth or serrated order holes.



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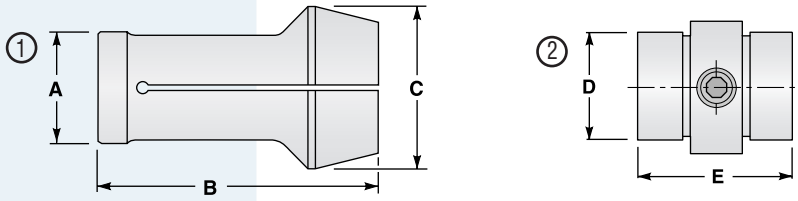
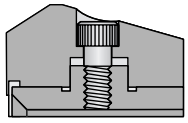
Spindle Tooling for Turret Lathes

HARDINGE

Machine Model and Size	Hardinge Collet Part Number	Vendor Part Number	Figure	Hardinge Pad Part Number	Collet Dimensions A Back Bearing Diameter	Collet Dimensions B Overall Length	Collet Dimensions C Collet Head Diameter	Pad Dimensions D Outside Diameter	Pad Dimensions E Overall Length	Machine Tool Builder's Rated Capacity & Collet Capacity: Round	Hexagon	Square
BARDONS & OLIVER: Conventional Style Master Collets and Pads												
#2⅞	4337		1, 2	MP3030	1.749" (44.42)	3.750" (95.25)	3.615" (91.82)	2.875" (73.03)	1.000" (25.40)	2½" (63.50)	2 5/32" (54.77)	1¾" (44.45)
#3	MP2433		1, 2	5717	1.936" (49.17)	4.750" (120.65)	2.600" (66.04)	1.750" (44.45)	1.219" (30.96)	1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
#3	MP2866		1, 2	MP3562	1.936" (49.17)	4.250" (107.95)	4.125" (104.78)	3.250" (82.55)	1.203" (30.56)	3¼" (82.55)	2 13/16" (71.44)	2 19/64" (58.34)
#3¼	MP2379		1, 2	MP3146	1.748" (44.40)	4.250" (107.95)	4.125" (104.78)	3.500" (88.90)	1.171" (29.74)	2¼" (57.15)	1 15/16" (49.21)	1 37/64" (40.08)
#5	MP3017		1, 2	5717	1.937" (49.20)	4.750" (120.65)	2.615" (66.42)	1.750" (44.45)	1.219" (30.96)	1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
#7	4331		1, 2	MP2465	2.622" (66.60)	4.750" (120.65)	3.695" (93.85)	2.500" (63.50)	1.688" (42.88)	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
#7	MP2463		1, 2	MP2465	2.623" (66.62)	5.250" (133.35)	3.695" (93.85)	2.500" (63.50)	1.688" (42.88)	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
#7	4333		1, 2	MP2524	3.123" (79.32)	6.750" (171.45)	4.410" (112.01)	3.125" (79.38)	2.000" (50.80)	2½" (63.50)	2 5/32" (54.77)	1¾" (44.45)
#8	MP1868		1, 2	MP1933	2.934" (74.52)	5.750" (146.05)	4.155" (105.54)	2.812" (71.42)	1.875" (47.63)	2¼" (57.15)	1 15/16" (49.21)	1 37/64" (40.08)
#10	MP3015		1, 2	2667A	3.873" (98.37)	6.500" (165.10)	5.055" (128.40)	3.625" (92.08)	2.250" (57.15)	3 1/16" (77.79)	2 41/64" (67.07)	2 5/32" (54.77)
BARDONS & OLIVER: Emergency Collet Pads												
#3, #5	—		2				1.750" (44.45)	1.219" (30.96)	1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)	5719
#7	—		2				2.500" (63.50)	1.688" (42.88)	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)	5721
#7	—		2				3.125" (79.38)	2.000" (50.80)	2½" (63.50)	2 5/32" (54.77)	1¾" (44.45)	MP2524E

NOTE: Millimeters in parentheses.
Collets available in smooth or serrated order holes.





Conventional Style Master Collet & Pad

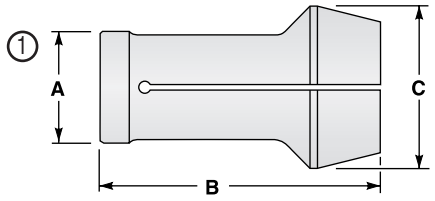
BARDONS & OLIVER

Spindle Tooling for Turret Lathes

HARDINGE

Machine Model and Size	Hardinge Collet Part Number	Vendor Part Number	Figure	Hardinge Pad Part Number	Collet Dimensions A Back Bearing Diameter	Collet Dimensions B Overall Length	Collet Dimensions C Collet Head Diameter	Pad Dimensions D Outside Diameter	Pad Dimensions E Overall Length	Machine Tool Builder's Rated Capacity & Collet Capacity: Round	Hexagon	Square
FOSTER: Solid Collets												
#0 NS	MP1682		1		.749" (19.02)	2.500" (63.50)	.910" (23.11)			½" (12.70)	27/64" (10.72)	11/32" (8.73)
#0	MP1031		1		.874" (22.20)	2.500" (63.50)	.955" (24.26)			19/32" (15.08)	½" (12.70)	13/32" (10.32)
#1 OS	MP1033		1		1.123" (28.52)	2.750" (69.85)	1.205" (30.61)			13/16" (20.64)	45/64" (17.86)	9/16" (14.29)
#1	MP1032		1		1.185" (30.10)	2.750" (69.85)	1.235" (31.37)			13/16" (20.64)	45/64" (17.86)	9/16" (14.29)
#1B	MP2570		1		2.558" (64.97)	6.500" (165.10)	3.455" (87.76)			2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
#2	MP1034		1		1.374" (34.90)	3.500" (88.90)	1.480" (37.59)			1 1/16" (26.99)	29/32" (23.02)	¾" (19.05)
#3 OS	MP1036		1		1.624" (41.25)	4.250" (107.95)	1.925" (48.90)			1 5/16" (33.34)	1⅛" (28.58)	59/64" (23.42)
#3	MP1035		1		1.873" (47.57)	5.000" (127.00)	2.505" (63.63)			1 5/16" (33.34)	1⅛" (28.58)	59/64" (23.42)
#4	MP1037		1		1.935" (49.15)	5.000" (127.00)	2.310" (58.67)			1 9/16" (39.69)	1 11/32" (34.13)	1 3/32" (27.78)
#4	MP2643		1		2.745" (69.72)	6.875" (174.63)	3.505" (89.03)			2¼" (57.15)	1 15/16" (49.21)	1 37/64" (40.08)
#5	MP2930		1		2.310" (58.67)	5.500" (139.70)	3.125" (79.38)			1⅞" (47.63)	1 39/64" (40.88)	1 5/16" (33.34)
#5 NS	MP1038		1		2.558" (64.97)	5.500" (139.70)	3.090" (78.49)			1 13/16" (46.04)	1 9/16" (39.69)	1 9/32" (32.55)
#5 OS	MP1039		1		2.184" (55.47)	5.000" (127.00)	2.590" (65.79)			1 13/16" (46.04)	1 9/16" (39.69)	1 9/32" (32.55)
#6	MP1040		1		2.433" (61.80)	6.000" (152.40)	3.025" (76.84)			2 1/16" (52.39)	1 25/32" (45.25)	1 29/64" (36.91)
#7	MP1823		1		2.746" (69.75)	6.000" (152.40)	3.300" (83.82)			2 5/16" (58.74)	2" (50.80)	1⅝" (41.28)

NOTE: Millimeters in parentheses.
Collets available in smooth or serrated order holes.



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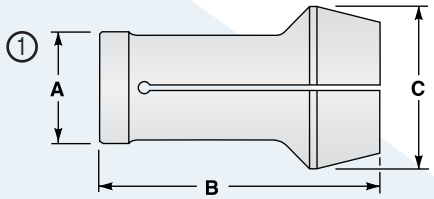
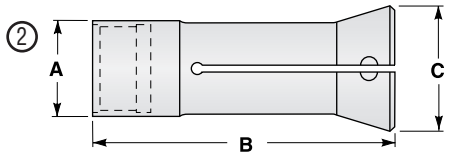
Spindle Tooling for Turret Lathes

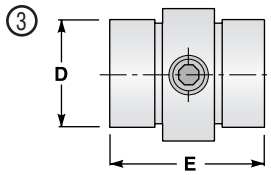
HARDINGE

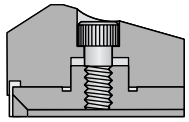
Machine Model and Size	Hardinge Collet Part Number	Vendor Part Number	Figure	Hardinge Pad Part Number	Collet Dimensions A Back Bearing Diameter	Collet Dimensions B Overall Length	Collet Dimensions C Collet Head Diameter	Pad Dimensions D Outside Diameter	Pad Dimensions E Overall Length	Machine Tool Builder's Rated Capacity & Collet Capacity: Round	Hexagon	Square
FOSTER: Conventional Style Master Collets and Pads												
#1B	MP2004		1, 3	MP2005	2.560" (65.02)	6.500" (165.10)	3.455" (87.76)	2.375" (60.33)	1.468" (37.29)	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
#1B	MP3061		2, 3	MP2005	2.560" (65.02)	6.750" (171.45)	3.750" (95.25)	2.375" (60.33)	1.468" (37.29)	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
#2B	MP3742		2, 3	MP1887	3.864" (98.15)	8.500" (215.90)	5.525" (140.34)	3.625" (92.08)	2.250" (57.15)	3 1/4" (82.55)	2 13/16" (71.44)	2 19/64" (58.34)
#3	MP1497		1, 3	MP1498	1.874" (47.60)	5.000" (127.00)	2.510" (63.75)	1.625" (41.28)	1.125" (28.58)	1 5/16" (33.34)	1 1/8" (28.58)	59/64" (23.42)
#5	MP2044		1, 3	MP1565	2.308" (58.62)	5.500" (139.70)	3.120" (79.25)	2.125" (53.98)	1.375" (34.93)	1 13/16" (46.04)	1 9/16" (39.69)	1 9/32" (32.55)
#5	MP1556		1, 3	MP1565	2.558" (64.97)	5.500" (139.70)	3.090" (78.49)	2.125" (53.98)	1.375" (34.93)	1 13/16" (46.04)	1 9/16" (39.69)	1 9/32" (32.55)

NOTE: Millimeters in parentheses. Collets available in smooth or serrated order holes.









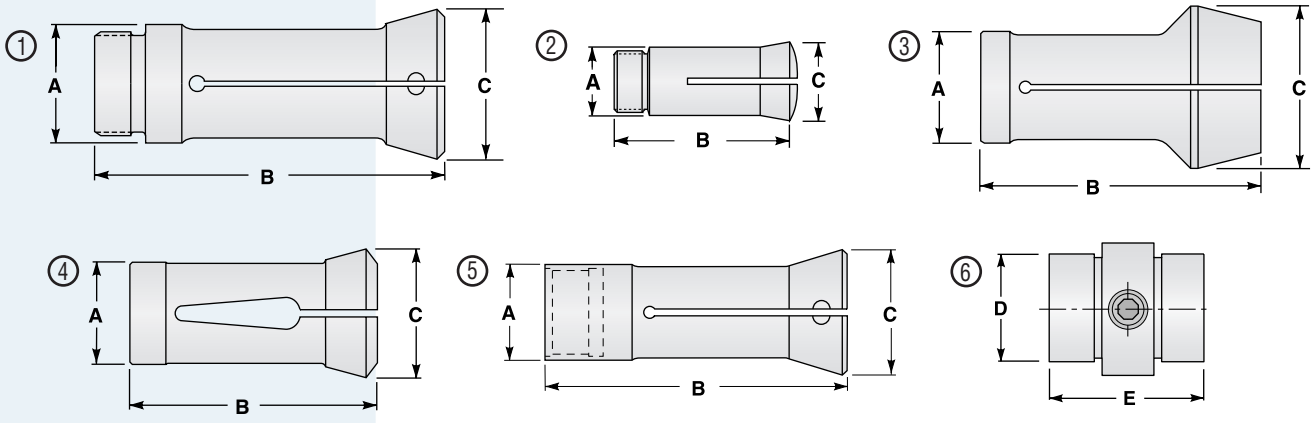
Conventional Style Master Collet & Pad

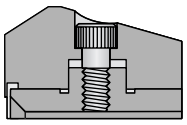
Spindle Tooling for Turret Lathes

HARDINGE

Machine Model and Size	Hardinge Collet Part Number	Vendor Part Number	Figure	Hardinge Pad Part Number	Collet Dimensions A Back Bearing Diameter	Collet Dimensions B Overall Length	Collet Dimensions C Collet Head Diameter	Pad Dimensions D Outside Diameter	Pad Dimensions E Overall Length	Machine Tool Builder's Rated Capacity & Collet Capacity: Round	Hexagon	Square
GARVIN: Solid Collets												
#103-A	MP2613		1		1.245" (31.62)	3.187" (80.95)	1.750" (44.45)			7/8" (22.23)	3/4" (19.05)	39/64" (15.48)
#00 #106½	MP1332		2		.591" (15.01)	2.093" (53.16)	.810" (20.57)			5/16" (7.94)	17/64" (6.75)	7/32" (5.56)
#1 #107-B	MP1749		3		.811" (20.60)	2.625" (66.68)	1.040" (26.42)			5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
#2 #108-B	MP1765		3		1.245" (31.62)	3.125" (79.38)	1.740" (44.20)			7/8" (22.23)	3/4" (19.05)	39/64" (15.48)
#2½ #109-B	MP1766		3		1.744" (44.30)	4.500" (114.30)	2.125" (53.98)			1 3/8" (34.93)	1 3/16" (30.16)	31/32" (24.61)
#3 #110-B	MP1578		3		2.493" (63.32)	6.000" (152.40)	3.055" (77.60)			2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
#117	MP2552		4		.810" (20.57)	2.750" (69.85)	1.030" (26.16)			1/2" (12.70)	27/64" (10.72)	11/32" (8.73)
#123, ½	MP1967		5		1.480" (37.59)	4.375" (111.13)	1.935" (49.15)			1 1/16" (26.99)	29/32" (23.02)	3/4" (19.05)
#123-E	MP2460		5		1.308" (33.22)	4.375" (111.13)	1.935" (49.15)			7/8" (22.23)	3/4" (19.05)	39/64" (15.48)
#140-K	MP1757		3		1.464" (37.19)	3.750" (95.25)	1.765" (44.83)			1 1/8" (28.58)	31/32" (24.61)	25/32" (19.85)
#2, ½ #141-K	MP1295		3		1.745" (44.32)	4.125" (104.78)	2.130" (54.10)			1 7/16" (36.51)	1 15/64" (31.35)	1 1/64" (25.80)
GARVIN: Emergency Solid Collets												
#2 #140-K	MP1757E		3		1.464" (37.19)	3.750" (95.25)	1.765" (44.83)			1 1/8" (28.58)	31/32" (24.61)	25/32" (19.85)
GARVIN: Conventional Style Master Collets and Pads												
#129-G	MP3055		5, 6		1.748" (44.40)	5.000" (127.00)	2.395" (60.83)	1.500" (38.10)	1.125" (28.58)	1 1/4" (31.75)	1 5/64" (27.38)	7/8" (22.23)

NOTE: Millimeters in parentheses. Collets available in smooth or serrated order holes.





Conventional Style Master Collet & Pad

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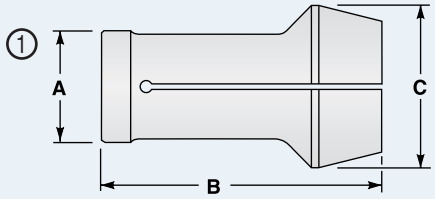
Spindle Tooling for Turret Lathes

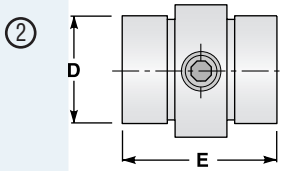
HARDINGE

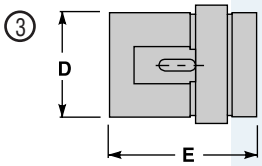
Machine Model and Size	Hardinge Collet Part Number	Vendor Part Number	Figure	Hardinge Pad Part Number	Collet Dimensions A Back Bearing Diameter	Collet Dimensions B Overall Length	Collet Dimensions C Collet Head Diameter	Pad Dimensions D Outside Diameter	Pad Dimensions E Overall Length	Machine Tool Builder's Rated Capacity & Collet Capacity: Round	Hexagon	Square
GISHOLT: Solid Collets												
#3	MP3640		1		3.498" (88.85)	5.438" (138.13)	4.783" (121.49)			3" (76.20)	2 19/32" (65.88)	2 7/64" (53.58)
#4	MP1119	41473	1		2.249" (57.12)	5.188" (131.78)	3.270" (83.06)			1 5/8" (41.28)	1 13/32" (35.72)	1 9/64" (28.97)
#4B	MP1120	4Y7142A	1		2.499" (63.47)	5.188" (131.78)	3.400" (86.36)			2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
#5	MP3168	5Y7154	1		3.373" (85.67)	6.313" (160.35)	4.240" (107.70)			3" (76.20)	2 19/32" (65.88)	2 7/64" (53.58)
#6	MP1122		1		3.124" (79.35)	6.313" (160.35)	4.245" (107.82)			2 1/2" (63.50)	2 5/32" (54.77)	1 3/4" (44.45)
GISHOLT: Conventional Style 3-Split Master Collets and Pads												
#3	MP3674	4Y7138A	1, 2	5839	2.496" (63.40)	5.250" (133.35)	3.400" (86.36)	2.375" (60.33)	1.750" (44.45)	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
#4	MP3673	4Y7138B	1, 2	5839	2.996" (76.10)	5.250" (133.35)	3.400" (86.36)	2.375" (60.33)	1.750" (44.45)	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
GISHOLT: Style "S" 3-Split Master Collets and Pads												
#3	MP2951[1]		1, 3	5605	2.124" (53.95)	4.750" (120.65)	3.126" (79.40)	1.625" (41.28)	1.250" (31.75)	1 1/2" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
#4	MP2959[2]		1, 3	MP2649	2.499" (63.47)	5.188" (131.78)	3.400" (86.36)	2.000" (50.80)	1.500" (38.10)	1 3/4" (44.45)	1 33/64" (38.50)	1 15/64" (31.35)
#5	MP2963[3]		1, 3	5611	3.124" (79.35)	6.313" (160.35)	4.245" (107.82)	2.375" (60.33)	1.563" (39.70)	2 1/4" (57.15)	1 15/16" (49.21)	1 37/64" (40.08)
GISHOLT: 3-Split Emergency Collets and Pads												
#4	5841-14	1129E	2	5841				2.375" (60.33)	1.750" (44.45)	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
#5,1L	5845-14	471E	2	5845				3.000" (76.20)	1.875" (47.63)	2 1/2" (63.50)	1 5/32" (54.77)	1 3/4" (44.45)

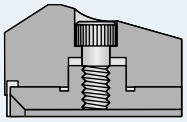
1 - Style S15
2 - Style S17
3 - Style S22

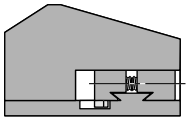
NOTE: Millimeters in parentheses. Collets available in smooth or serrated order holes.








Conventional Style Master Collet & Pad


Style "S" Master Push Collet & Pad

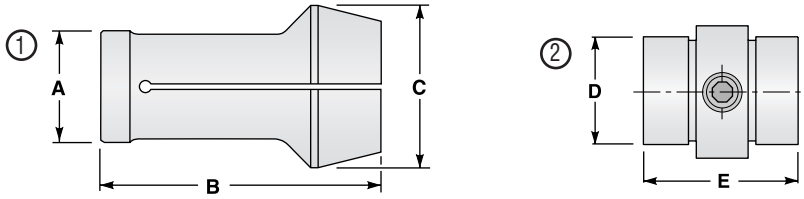
To Order Contact: Exact Tooling / www.exacttooling.com / sales@exacttooling.com / 888-988-8820

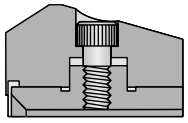
Spindle Tooling for Turret Lathes

HARDINGE

Machine Model and Size	Hardinge Collet Part Number	Vendor Part Number	Figure	Hardinge Pad Part Number	Collet Dimensions A: Back Bearing Diameter	Collet Dimensions B: Overall Length	Collet Dimensions C: Collet Head Diameter	Pad Dimensions D: Outside Diameter	Pad Dimensions E: Overall Length	Machine Tool Builder's Rated Capacity & Collet Capacity: Round	Hexagon	Square
GISHOLT: Conventional Style 4-Split Master Collets and Pads												
#5,1L	2555	5Y7112	1, 2	5759	3.124" (79.35)	6.313" (160.35)	4.245" (107.82)	2.875" (73.03)	1.813" (46.05)	2½" (63.50)	2 5/32" (54.77)	1¾" (44.45)
#2L	MP2599	12X6561	1, 2	MP1439	4.124" (104.75)	8.000" (203.20)	5.650" (143.51)	4.000" (101.60)	2.750" (69.85)	3½" (88.90)	3 1/64" (76.60)	2 15/32" (62.71)
#3L	4341	13X6561	1, 2	MP2622	5.124" (130.15)	8.500" (215.90)	7.025" (178.44)	5.000" (127.00)	3.250" (82.55)	4½" (114.30)	3 57/64" (98.82)	3 11/64" (80.57)
#3	MP2743	3Y7193	1, 2	MP2742	3.498" (88.85)	5.438" (138.13)	4.778" (121.36)	3.500" (88.90)	2.000" (50.80)	3" (76.20)	2 19/32" (65.88)	2 7/64" (53.58)
#3	2551	3Y7112A	1, 2	5751	2.124" (53.95)	4.750" (120.65)	3.126" (79.40)	1.875" (47.63)	1.313" (33.35)	1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
#4	MP1503		1, 2	MP1561	2.249" (57.12)	5.188" (131.78)	3.220" (81.79)	2.000" (50.80)	1.500" (38.10)	1 5/8" (41.28)	1 13/32" (35.72)	1 9/64" (28.97)
#4	2553	4Y7112A	1, 2	5755	2.499" (63.47)	5.188" (131.78)	3.400" (86.36)	2.375" (60.33)	1.500" (38.10)	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
GISHOLT: 4-Split Emergency Collet Pads												
#3	—	3X-7731	2	5753				1.875" (47.63)	1.313" (33.35)	1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
#4	—	4X-7731	2	5757				2.375" (60.33)	1.500" (38.10)	2.000" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
#5, 1L	—	5X-7731	2	5761				2.875" (73.03)	1.813" (46.05)	2½" (63.50)	2 5/32" (54.77)	1¾" (44.45)
#3L	—	13X-7731	2	MP2622E				5.000" (127.00)	3.250" (82.55)	4½" (114.30)	3 57/64" (98.82)	3 11/64" (80.57)

NOTE: Millimeters in parentheses. Collets available in smooth or serrated order holes.





Conventional Style Master Collet & Pad

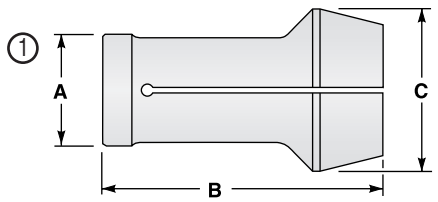
To Order Contact: Exact Tooling / www.exacttooling.com / sales@exacttooling.com / 888-988-8820

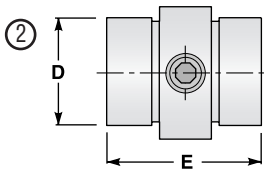
Spindle Tooling for Turret Lathes

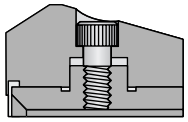
HARDINGE

Machine Model and Size	Hardinge Collet Part Number	Vendor Part Number	Figure	Hardinge Pad Part Number	Collet Dimensions A Back Bearing Diameter	Collet Dimensions B Overall Length	Collet Dimensions C Collet Head Diameter	Pad Dimensions D Outside Diameter	Pad Dimensions E Overall Length	Machine Tool Builder's Rated Capacity & Collet Capacity: Round	Hexagon	Square
JONES & LAMSON: Solid Collet												
#7B	MP3572		1		3.119" (79.22)	7.000" (177.80)	4.720" (119.89)			2 9/16" (65.09)	2 7/32" (56.36)	1 51/64" (45.64)
JONES & LAMSON: Conventional Style Master Collets and Pads												
#3	MP2066	10463	1, 2	5801	2.183" (55.45)	6.500" (165.10)	3.370" (85.60)	2.000" (50.80)	2.000" (50.80)	1 1/2" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
#4	4347	11709	1, 2	5805	2.186" (55.52)	6.500" (165.10)	3.375" (85.73)	2.187" (50.55)	2.000" (50.80)	1 3/4" (44.45)	1 33/64" (38.50)	1 15/64" (31.35)
#4	2523	19985	1, 2	MP3523	2.620" (66.55)	6.500" (165.10)	3.875" (98.43)	2.500" (63.50)	2.000" (50.80)	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
7A, B, D #5, 2 1/2"	2569	10464	1, 2	5809	3.119" (79.22)	7.000" (177.80)	4.720" (119.89)	3.125" (79.38)	2.500" (63.50)	2-9/16" (65.09)	2 7/32" (56.36)	1 51/64" (45.64)
#5, 3"	MP3870	15246	1, 2	5815	3.620" (91.95)	7.750" (196.85)	5.125" (130.18)	3.625" (92.08)	2.500" (63.50)	3" (76.20)	2 19/32" (65.88)	2 7/64" (53.58)
JONES & LAMSON: Emergency Collet Pads												
#3	—	10482	2	5803				2.000" (50.80)	2.000" (50.80)	1 1/2" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
#4	—	11710	2	5807				2.187" (50.55)	2.000" (50.80)	1 3/4" (44.45)	1 33/64" (38.50)	1 15/64" (31.35)
#5, 3"	—	15239	2	5817				3.625" (92.08)	2.500" (63.50)	3" (76.20)	2 19/32" (65.88)	2 7/64" (53.58)

NOTE: Millimeters in parentheses. Collets available in smooth or serrated order holes.







Conventional Style Master Collet & Pad

To Order Contact: Exact Tooling / www.exacttooling.com / sales@exacttooling.com / 888-988-8820

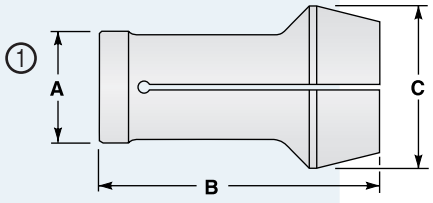
Spindle Tooling for Turret Lathes

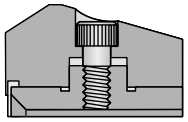
HARDINGE

Machine Model and Size	Hardinge Collet Part Number	Vendor Part Number	Figure	Hardinge Pad Part Number	Collet Dimensions A Back Bearing Diameter	Collet Dimensions B Overall Length	Collet Dimensions C Collet Head Diameter	Pad Dimensions D Outside Diameter	Pad Dimensions E Overall Length	Machine Tool Builder's Rated Capacity & Collet Capacity: Round	Hexagon	Square
MOREY: Solid Collets												
#2	2613	273	1		1.309" (33.25)	3.813" (96.85)	1.660" (42.16)			1" (25.40)	55/64" (21.83)	45/64" (17.86)
#3, Universal	2621	373	1		2.058" (52.27)	4.750" (120.65)	2.830" (71.88)			1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
#4, 1¾"	MP2180		1		2.308" (58.62)	6.000" (152.40)	3.630" (92.20)			1¾" (44.45)	1 33/64" (38.50)	1 15/64" (31.35)
#4, 2"	MP2716		1		2.744" (69.70)	6.000" (152.40)	3.630" (92.20)			2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
#5	2633		1		3.119" (79.22)	6.500" (165.10)	4.340" (110.24)			2½" (63.50)	2 5/32" (54.77)	1¾" (44.45)
MOREY: Emergency Solid Collets												
#2	2615-14-10		1		1.309" (33.25)	3.813" (96.85)	1.660" (42.16)			1" (25.40)	55/64" (21.83)	45/64" (17.86)
#3, Univ.	2621-10[4]		1		2.058" (52.27)	4.750" (120.65)	2.830" (71.88)			1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
#3	2621-14-10		1		2.058" (52.27)	4.750" (120.65)	2.830" (71.88)			1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
#4, 1¾"	MP2180E		1		2.308" (58.62)	6.000" (152.40)	3.630" (92.20)			1¾" (44.45)	1 33/64" (38.50)	1 15/64" (31.35)
#4, 2"	MP2716E		1		2.744" (69.70)	6.000" (152.40)	3.630" (92.20)"			2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
MOREY: Conventional Style 3-Split Master Collets and Pads												
#3	2625	376	1, 2	5835	2.058" (52.27)	4.750" (120.65)	2.830" (71.88)	1.875" (47.63)	1.375" (34.93)	1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
#4, 1¾"	2627	476	1, 2	5839	2.308" (58.62)	6.000" (152.40)	3.630" (92.20)	2.375" (60.33)	1.750" (44.45)	1¾" (44.45)	1 33/64" (38.50)	1 15/64" (31.35)
#4, 2"	2629	476	1, 2	5839	2.750" (69.85)	6.000" (152.40)	3.630" (92.20)	2.375" (60.33)	1.750" (44.45)	1 1/16" (52.39)	1 25/32" (45.25)	1 29/64" (36.91)
#5	2631	576	1, 2	5843	3.119" (79.22)	6.500" (165.10)	4.340" (110.24)	3.000" (76.20)	1.875" (47.63)	2½" (63.50)	2 5/32" (54.77)	1¾" (44.45)
MOREY: 3-Split Emergency Collets and Pads												
#3	—	371	2	5837				1.875" (47.63)	1.375" (34.93)	1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
#4	5845-14	471	2	5841				2.375" (60.33)	1.750" (44.45)	1¾" (44.45)	1 33/64" (38.50)	1 15/64" (31.35)
#5	—	571	2	5845				3.000" (76.20)	1.875" (47.63)	2½" (63.50)	2 5/32" (54.77)	1¾" (44.45)

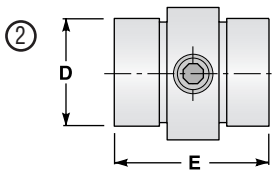
4 - Customer blank — no slots; no holes.

NOTE: Millimeters in parentheses.
Collets available in smooth or serrated order holes.





Conventional Style Master Collet & Pad



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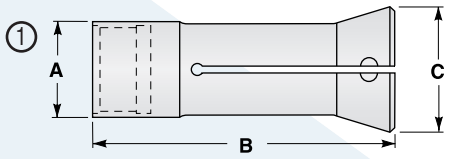
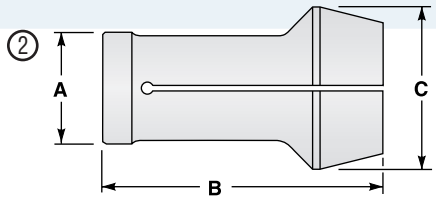
Spindle Tooling for Turret Lathes

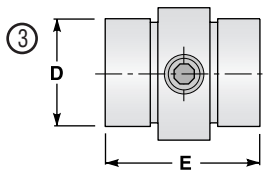
HARDINGE

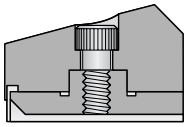
Machine Model and Size	Hardinge Collet Part Number	Vendor Part Number	Figure	Hardinge Pad Part Number	Collet Dimensions A Back Bearing Diameter	Collet Dimensions B Overall Length	Collet Dimensions C Collet Head Diameter	Pad Dimensions D Outside Diameter	Pad Dimensions E Overall Length	Machine Tool Builder's Rated Capacity & Collet Capacity: Round	Hexagon	Square
OSTER: Solid Collets — Draw In												
1½" #601	MP2457	601506	1		2.058" (52.27)	5.000" (127.00)	2.970" (75.44)			1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
OSTER: Solid Collets — Push Out												
1½" #601	2621	601531	2		2.058" (52.27)	4.750" (120.65)	2.830" (71.88)			1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
OSTER: Conventional Style Master Collets and Pads — Draw In												
#601	MP2584		1, 3	5835	2.058" (52.27)	5.000" (127.00)	2.970" (75.44)	1.875" (47.63)	1.375" (34.93)	1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
OSTER: Conventional Style Master Collets and Pads — Push Out												
#601	2625		2, 3	5835	2.058" (52.27)	4.750" (120.65)	2.830" (71.88)	1.875" (47.63)	1.375" (34.93)	1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)

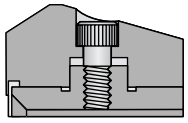
NOTE: Millimeters in parentheses.
Collets available in smooth or serrated order holes.








Conventional Master Collet & Pad


Conventional Style Master Collet & Pad

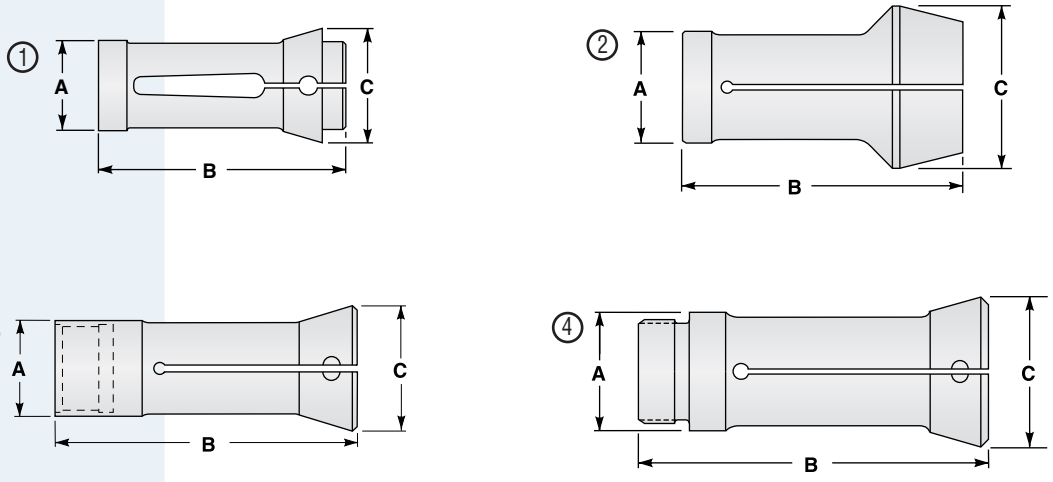
OSTER

Spindle Tooling for Turret Lathes

HARDINGE

Machine Model and Size	Hardinge Collet Part Number	Vendor Part Number	Figure	Hardinge Pad Part Number	Collet Dimensions A: Back Bearing Diameter	Collet Dimensions B: Overall Length	Collet Dimensions C: Collet Head Diameter	Pad Dimensions D: Outside Diameter	Pad Dimensions E: Overall Length	Machine Tool Builder's Rated Capacity & Collet Capacity: Round	Hexagon	Square
PRATT & WHITNEY: Solid Collets												
5/8"	MP1284		3		.936" (23.77)	1.750" (44.45)	1.380" (35.05)			5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
3/4"	MP2342		2		1.308" (33.22)	2.781" (70.64)	1.280" (32.51)			3/4" (19.05)	41/64" (16.27)	33/64" (13.10)
1"	MP1283		1		1.309" (33.25)	2.062" (52.37)	1.880" (47.75)			1" (25.40)	55/64" (21.83)	45/64" (17.86)
2½"	MP1649		2		1.309" (33.25)	3.000" (76.20)	1.560" (39.62)			1" (25.40)	55/64" (21.83)	45/64" (17.86)
2½" OS	MP1898		2		1.744" (44.30)	3.000" (76.20)	2.000" (50.80)			1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
#0	MP2381		1		.622" (15.80)	2.125" (53.98)	.665" (16.89)			5/16" (7.94)	17/64" (6.75)	7/32" (5.56)
#1	MP1286		1		.748" (19.00)	2.250" (57.15)	.815" (20.70)			17/32" (13.50)	29/64" (11.51)	3/8" (9.53)
#2	MP1287		2		.936" (23.77)	2.625" (66.68)	1.325" (33.66)			5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
#2	MP2609		2		1.994" (50.65)	4.500" (114.30)	2.000" (50.80)			1" (25.40)	55/64" (21.83)	45/64" (17.86)
#2	MP2646		3		1.113" (28.27)	3.500" (88.90)	1.650" (41.91)			15/16" (23.81)	51/64" (20.24)	21/32" (16.67)
#2	MP2667		2		1.370" (34.80)	3.000" (76.20)	1.535" (38.99)			1 3/32" (27.78)	15/16" (23.81)	49/64" (19.45)
#3	MP1655		2		2.433" (61.60)	4.500" (114.30)	3.255" (82.68)			2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
PRATT & WHITNEY: Solid Collets — Draw In												
#2 Shaver	MP1865		4		1.760" (44.70)	5.000" (127.00)	2.250" (57.15)			1 3/8" (34.93)	1 3/16" (30.16)	31/32" (24.61)

NOTE: Millimeters in parentheses. Collets available in smooth or serrated order holes.



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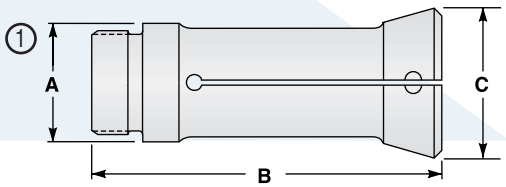
Spindle Tooling for Turret Lathes

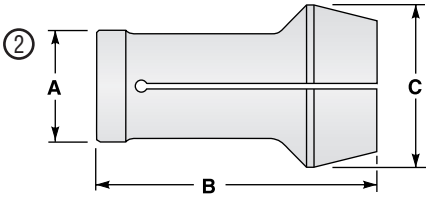
HARDINGE

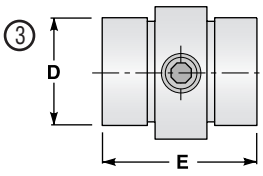
Machine Model and Size	Hardinge Collet Part Number	Vendor Part Number	Figure	Hardinge Pad Part Number	Collet Dimensions A Back Bearing Diameter	Collet Dimensions B Overall Length	Collet Dimensions C Collet Head Diameter	Pad Dimensions D Outside Diameter	Pad Dimensions E Overall Length	Machine Tool Builder's Rated Capacity & Collet Capacity: Round	Hexagon	Square
RIVETT: Solid Collets												
#7R	MP3063		2		1.062" (26.97)	3.500" (88.90)	1.625" (41.28)			7/8" (22.23)	3/4" (19.05)	39/64" (15.48)
#5R, 918	MP2724		2		1.248" (31.70)	3.312" (84.12)	2.002" (50.85)			1" (25.40)	55/64" (21.83)	45/64" (17.86)
SIMMONS: Solid Collets												
2B*	2599		2		1.687" (42.85)	3.813" (96.85)	2.065" (52.45)			1 1/4" (31.75)	1 5/64" (27.38)	7/8" (22.23)
SIMMONS: Conventional Style Master Collets and Pads												
2B*	MP2776		2, 3	MP2777	1.687" (42.85)	3.813" (96.85)	2.065" (52.45)	1.187" (30.15)	1.250" (31.75)	15/16" (23.81)	51/64" (20.24)	21/32" (16.67)
SIMMONS: Emergency Solid Collets												
2B*	MP2201-BC[4]		2		1.687" (42.85)	3.813" (96.85)	2.065" (52.45)			1 1/4" (31.75)	1 5/64" (27.38)	7/8" (22.23)
2B*	MP2201E		1		1.687" (42.85)	3.813" (96.85)	2.065" (52.45)			1 1/4" (31.75)	1 5/64" (27.38)	7/8" (22.23)

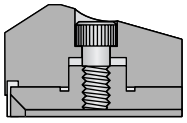
* Do not confuse with 2B Becker Collet - See Brochure 2348
4 - Customer blank — no slots; no holes.

NOTE: Millimeters in parentheses. Collets available in smooth or serrated order holes.








Conventional Style Master Collet & Pad

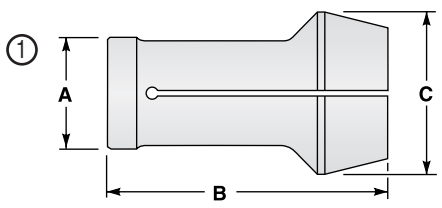
Spindle Tooling for Turret Lathes

HARDINGE

Machine Model and Size	Hardinge Collet Part Number	Vendor Part Number	Figure	Hardinge Pad Part Number	Collet Dimensions A Back Bearing Diameter	Collet Dimensions B Overall Length	Collet Dimensions C Collet Head Diameter	Pad Dimensions D Outside Diameter	Pad Dimensions E Overall Length	Machine Tool Builder's Rated Capacity & Collet Capacity: Round	Hexagon	Square
WARNER & SWASEY: Solid Collets — Push Out												
#1	2611	139	1		.873" (22.17)	2.531" (64.29)	1.200" (30.48)			5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
#1-12" #2-14"	2613	178	1		1.309" (33.25)	3.813" (96.85)	1.660" (42.16)			1" (25.40)	55/64" (21.83)	45/64" (17.86)
#2	MP2012	72-1003	1		1.184" (30.07)	3.000" (76.20)	1.580" (40.13)			7/8" (22.23)	3/4" (19.05)	39/64" (15.48)
#2-1899, OS	2617	77	1		1.309" (33.25)	3.000" (76.20)	1.565" (39.75)			1" (25.40)	55/64" (21.83)	45/64" (17.86)
#3	MP1053	88-1014	1		1.495" (37.97)	3.812" (96.82)	2.000" (50.80)			1 1/8" (28.58)	31/32" (24.61)	25/32" (19.85)
#4, OS	2619	377	1		1.870" (47.50)	4.563" (115.90)	2.405" (61.09)			1 1/2" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
#5	MP3616		1		3.247" (82.47)	6.500" (165.10)	4.350" (110.49)			2 3/4" (69.85)	2 3/8" (60.33)	1 15/16" (49.21)
#5-1A	2633	471	1		3.119" (79.22)	6.500" (165.10)	4.345" (110.36)			2 1/2" (63.50)	2 5/32" (54.77)	1-3/4" (44.45)
#6 NS	MP1057		1		3.119" (79.22)	6.500" (165.10)	4.000" (101.60)			2 1/4" (57.15)	1 15/16" (49.21)	1 37/64" (40.08)
#6 0S	MP1058	387	1		2.682" (68.12)	5.500" (139.70)	3.375" (85.73)			2 1/4" (57.15)	1 15/16" (49.21)	1 37/64" (40.08)
WARNER & SWASEY: Emergency Solid Collets												
#1	2611-10[4]		1		.873" (22.17)	2.531" (64.29)	1.200" (30.48)			5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
#1	2611-14-10		1		.873" (22.17)	2.531" (64.29)	1.200" (30.48)			5/8" (15.88)	17/32" (13.50)	7/16" (11.11)
#1-12" #2-14"	2613-10[4]		1		1.309" (33.25)	3.813" (96.85)	1.660" (42.16)			1" (25.40)	55/64" (21.83)	45/64" (17.86)
#1-12" #2-14"	2615-14-10		1		1.309" (33.25)	3.813" (96.85)	1.660" (42.16)			1" (25.40)	55/64" (21.83)	45/64" (17.86)
#4, OS	2619-10[4]		1		1.870" (47.50)	4.563" (115.90)	2.405" (61.09)			1 1/2" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
WARNER & SWASEY: Universal Solid Collets — Push Out												
#4	2621	461	1		2.058" (52.27)	4.750" (120.65)	2.830" (71.88)			1 1/2" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
#4, 1 3/4"	MP2180	1369	1		2.308" (58.62)	6.000" (152.40)	3.630" (92.20)			1 3/4" (44.45)	1 33/64" (38.50)	1 15/64" (31.35)
#4, 2"	MP2716	1129	1		2.744" (69.70)	6.000" (152.40)	3.630" (92.20)			2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)

4 - Customer blank — no slots; no holes.

NOTE: Millimeters in parentheses.
Collets available in smooth or serrated order holes.

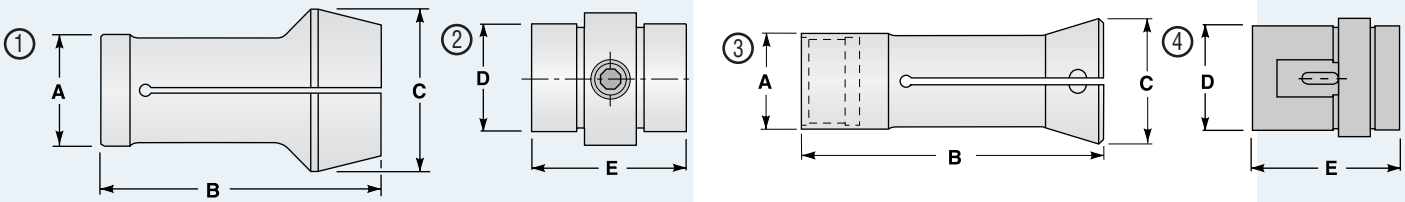


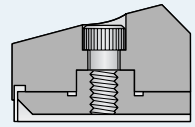
Spindle Tooling for Turret Lathes

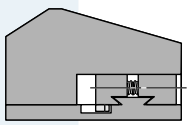
HARDINGE

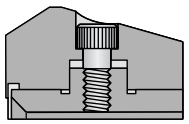
Machine Model and Size	Hardinge Collet Part Number	Vendor Part Number	Figure	Hardinge Pad Part Number	Collet Dimensions A: Back Bearing Diameter	Collet Dimensions B: Overall Length	Collet Dimensions C: Collet Head Diameter	Pad Dimensions D: Outside Diameter	Pad Dimensions E: Overall Length	Machine Tool Builder's Rated Capacity & Collet Capacity: Round	Hexagon	Square
WARNER & SWASEY: 3-Split Conventional Style Master Collets and Pads — Draw In												
Micro-Cut #2	MP3740		2, 3	MP3696	1.749" (44.42)	5.750" (146.05)	2.628" (66.75)	1.625" (41.28)	1.375" (34.93)	1¼" (31.75)	1⁵⁄₆₄" (27.38)	⅞" (22.23)
WARNER & SWASEY: 3-Split Conventional Style Master Collets and Pads — Push Out												
#5 #1A	2631	471-1001	1, 2	5843	3.119" (79.22)	6.500" (165.10)	4.340" (110.24)	3.000" (76.20)	1.875" (47.63)	2½" (63.50)	2⁵⁄₃₂" (54.77)	1¾" (44.45)
WARNER & SWASEY: 3-Split Universal Master Collets and Pads — Push Out												
#3 #4, 1½"	2625	461-1002	1, 2	5835	2.058" (52.27)	4.750" (120.65)	2.830" (71.88)	1.875" (47.63)	1.375" (34.93)	1½" (38.10)	1¹⁹⁄₆₄" (32.94)	1³⁄₆₄" (26.59)
#4, 1¾"	2627	1369-1003	1, 2	5839	2.308" (58.62)	6.000" (152.40)	3.630" (92.20)	2.375" (60.33)	1.750" (44.45)	1¾" (44.45)	1³³⁄₆₄" (38.50)	1¹⁵⁄₆₄" (31.35)
#4, 1¾"	MP2950	1369-1008	1, 2	5835	2.308" (58.62)	6.000" (152.40)	3.630" (92.20)	1.875" (47.63)	1.375" (34.93)	1½" (38.10)	1¹⁹⁄₆₄" (32.94)	1³⁄₆₄" (26.59)
#4, 2"	2629	1129-1002	1, 2	5839	2.744" (69.70)	6.000" (152.40)	3.630" (92.20)	2.375" (60.33)	1.750" (44.45)	2" (50.80)	1²³⁄₃₂" (43.66)	1¹³⁄₃₂" (35.72)
WARNER & SWASEY: 4-Split Style "S" Master Collets and Pads — Push Out												
1A	4329		1, 4	5613	3.119" (79.22)	6.500" (165.10)	4.340" (110.24)	2.750" (69.85)	1.875" (47.63)	2⅝" (66.68)	2¹⁷⁄₆₄" (57.55)	1²⁷⁄₃₂" (46.83)
WARNER & SWASEY: 4-Split Conventional Style Master Collets and Pads — Push Out												
#4	MP1484	377-1015	1, 2	MP1453	1.870" (47.50)	4.563" (115.90)	2.485" (63.12)	1.562" (39.67)	1.375" (34.93)	1¼" (31.75)	1⁵⁄₆₄" (27.38)	⅞" (22.23)
4Y7142A #5, 4½"	MP2601	2779	1, 2	MP2622	5.125" (130.18)	8.500" (215.90)	7.025" (178.43)	5.000" (127.00)	3.250" (82.55)	4½" (114.30)	3⅞" (98.43)	3⅛" (79.38)
#6 OS	MP1487	387-1028	1, 2	MP1455	2.682" (68.12)	5.500" (139.70)	3.375" (85.73)	2.375" (60.33)	1.688" (42.88)	2" (50.80)	1²³⁄₃₂" (43.66)	1¹³⁄₃₂" (35.72)
#24, ½"	MP2639		1, 2	MP2640	1.309" (33.25)	4.125" (104.78)	3.590" (91.19)	2.750" (69.85)	1.063" (27.00)	2½" (63.50)	2⁵⁄₃₂" (54.77)	1¾" (44.45)
#33	MP1318		1, 2	MP1319	2.058" (52.27)	5.250" (133.35)	4.130" (104.90)	3.250" (82.55)	1.000" (25.40)	2½" (63.50)	2⁵⁄₃₂" (54.77)	1¾" (44.45)

NOTE: Millimeters in parentheses.
Collets available in smooth or serrated order holes.




Conventional Master Collet & Pad


Style "S" Master Push Collet & Pad


Conventional Style Master Collet & Pad

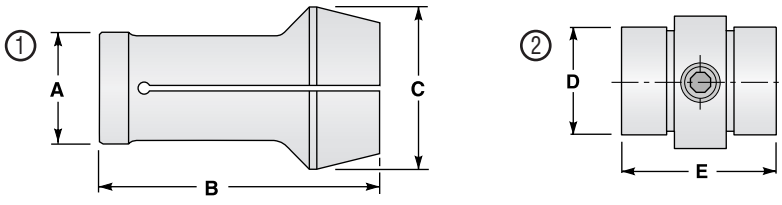
Spindle Tooling for Turret Lathes

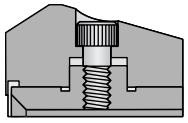
HARDINGE

Machine Model and Size	Hardinge Collet Part Number	Vendor Part Number	Figure	Hardinge Pad Part Number	Collet Dimensions A Back Bearing Diameter	Collet Dimensions B Overall Length	Collet Dimensions C Collet Head Diameter	Pad Dimensions D Outside Diameter	Pad Dimensions E Overall Length	Machine Tool Builder's Rated Capacity & Collet Capacity: Round	Hexagon	Square
WARNER & SWASEY: 6-Split Conventional Style Master Collet and Pad — Push Out												
#5, 2¼" #6 NS	MP1488	357-1003	1, 2	MP1456	3.119" (79.22)	6.500" (165.10)	4.000" (101.60)	2.750" (69.85)	1.875" (47.63)	2¼" (57.15)	1 15/16" (49.21)	1 37/64" (40.08)
WARNER & SWASEY: Emergency Universal Solid Collets												
#3 #4 1½"	2621-10[4]		1		2.058" (52.27)	4.750" (120.65)	2.830" (71.88)			1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
#3 #4 1½"	2621-14-10		1		2.058" (52.27)	4.750" (120.65)	2.830" (71.88)			1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
#4 1¾"	MP2180E		1		2.308" (58.62)	6.000" (152.40)	3.630" (92.20)			1¾" (44.45)	1 33/64" (38.50)	1 15/64" (31.35)
#4 2"	MP2716E		1		2.744" (69.70)	6.000" (152.40)	3.630" (92.20)			2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
WARNER & SWASEY: 3-Split Emergency Universal Master Collet Pads												
#3 #4 1½"	5837-14	461E	2	5837				1.875" (47.63)	1.375" (34.93)	1½" (38.10)	1 19/64" (32.94)	1 3/64" (26.59)
#4 2"	5841-14	1129E	2	5841				2.375" (60.33)	1.750" (44.45)	2" (50.80)	1 23/32" (43.66)	1 13/32" (35.72)
WARNER & SWASEY: 3-Split Emergency Master Collet Pads												
#5 #1A	5845-14	471E	2	5845				3.000" (76.20)	1.875" (47.63)	2½" (63.50)	2 5/32" (54.77)	1¾" (44.45)
Micro-Cut #2 Draw In	MP3696E		2	MP3696E				1.625" (41.28)	1.375" (34.93)	1¼" (31.75)	1 5/64" (27.38)	7/8" (22.23)
WARNER & SWASEY: 6-Split Emergency Master Collet Pad												
#5, 2¼" #6 NS	MP1456E	357	2	MP1456E				2.750" (69.85)	1.875" (47.63)	2¼" (57.15)	1 15/16" (49.21)	1 37/64" (40.08)

4 - Customer blank — no slots; no holes

NOTE: Millimeters in parentheses.
Collets available in smooth or serrated order holes.





Conventional Style Master Collet & Pad

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Notes:

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Master Collet & Feed Finger

Pads

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EXPECT MORE™

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Pads for Master Collets & Feed Fingers

Master collets, master feed fingers and pads

Hardinge has manufactured collets for over a century. Using those years of expertise, Hardinge designs master collets and master feed fingers that perform better than other products in the marketplace.

Laser etching process in the B-pad cell at Hardinge in Elmira, New York.

Why purchase master collets and feed fingers rather than solids?

While the initial investment will be slightly more, the advantage of achieving more versatility at a lower net cost assures the user of a profitable return. Master collets and feed fingers are capable of holding and feeding bar stock in a variety of sizes and shapes by using interchangeable pads. Thus, the same workholding tool can be used for more than one job to reduce tooling cost, provide greater flexibility in operation, and save on storage space.

Pads for master collets and feed fingers are available from stock in round, hexagon, and square shapes. Extruded and unique shapes can be custom-made through our Special Collet Department. B-pads are available in a variety of materials, including hardened steel, cast iron, bronze, and nylon to meet specific workholding and work-feeding needs.

Master pads made from Nylatron help eliminate marking the workpiece. Made to order.

Chapter Three
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Refer to pages 134 and 135 for master collet and feed finger part numbers. See chapters 1 and 2 for detailed information on master collets and feed fingers.

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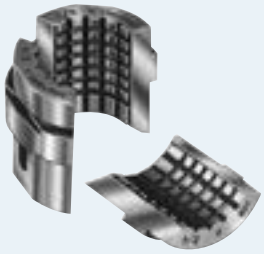
Pads for Master Collets & Feed Fingers



Style "S" Master Collet Pads

The Style "S" master collets and pads overcome all the problems associated with master collets. When loading bars, the rugged shoulder of the pad locates against the front of the groove in the master collet. There are no set screws or clamps to be damaged or loosened. When a part is machined, the working forces are against the rear shoulder of the pad which is located against the rear shoulder of the groove in the master collet. Again, there are no screws or clamps to wear or break. The clamp which holds the pads captivated in the collet literally floats longitudinally, assuring that there is never any pressure on the clamp. There are no holes in the OD of the master collet, or on the ID of the pads, resulting in maximum bearing on the workpiece and the spindle collet seat. When Style "S" collets are used, there will never be high spots on the spindle collet seat caused by the master collet and pad design. When selecting master collets from this catalog, remember the Style "S" design has been in existence for over 50 years and is the preferred system.

Style "AF" Master Feed Finger Pads

The "AF" master feed finger pads are designed to give you extreme flexibility with a very small investment. Each set of pads has a range of 1/32" adjustment down, reducing the inventory of pads required. Each click on the adjusting collar adds or subtracts between 5 to 7 pounds of pressure on the bar stock. This master outshines all others when feeding thin-wall tubing. If the stock you run is very abrasive, these pads can be adjusted to maintain the force required to feed your stock when competitive pads would have to be replaced. This master feed finger may not have the full range of your collet, but within its range it will prove to be a real boost to your productivity and it will reduce your overall operating cost.

Style "B" Master Feed Finger Pads

Style "B" master feed finger pads are uniquely designed and proven by over fifty years of use in the machine tool industry. The straight-forward design allows for full bearing of the pad ID on the workpiece. There are no screws or tabs to wear, or to remove bearing area from the pads ID. The master feed fingers are spring tempered to the proper gripping tension for maximum longevity. Custom master feed fingers can be easily and quickly manufactured at Hardinge to give extremely light grip, or heavier grip for nonstandard applications. The use of Style "B" master feed fingers will assure you of minimum downtime on your production floor.

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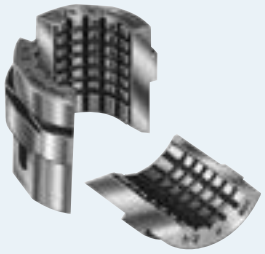
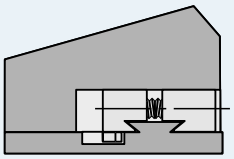
Pads for Master Collets & Feed Fingers





Hardinge® Style "S" Master Collet Pads

Maximum bearing surface between the spindle and head angle. Because there are no holes or slots in the head angle of the collet, uneven wear of the spindle will not result from continuous use. There are no threaded holes in the collet to be stripped or damaged.

Ease of Use. Since the pads are interchangeable without removing the master collet from the spindle, collets do not have to be removed from the machine when changing the bar stock size. Independent clamps slide freely in and out of the master collet so they can be removed with ease.

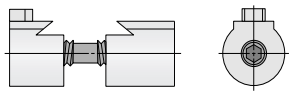
Secure Pad Installation. The unique dovetail anchor system securely holds pads in place while feeding bar stock. This design places the bar thrust on the shoulder of the pad. There is no pressure on the clamp assembly because it is ideally positioned between the pad shoulder and the recess of the collet. The pads cannot dislodge under normal use.

Pad Style	Description	Pad Part Number	Seg-ments	Round Capacity Min.	Round Capacity Max.	Hex Capacity Min.	Hex Capacity Max.	Square Capacity Min.	Square Capacity Max.
S10	Smooth & Serrated	5601-00-	3	⅛" (3.17)	1" (25.40)	¼" (6.35)	⅞" (22.22)	55⁄64" (21.83)	11⁄16" (17.46)
	Emergency	5601-14-10-000000							
S12	Smooth & Serrated	5603-00-	3	⅛" (3.17)	1¼" (31.75)	¼" (6.35)	1 1⁄16" (26.98)	¼" (6.35)	⅞" (22.23)
	Emergency	5603-14-10-000000							
	Semi-Hard Emerg	5603-13-10-000000							
S15	Smooth & Serrated	5605-00-	3	⅛" (3.17)	1½" (38.10)	¼" (6.35)	1 5⁄16" (33.33)	¼" (6.35)	1 1⁄16" (26.98)
	Emergency	5605-14-10-000000							
	Semi-Hard Emerg	5605-13-10-000000							
S16	Smooth & Serrated	5607-00-	3	⅛" (3.17)	1⅝" (41.28)	¼" (6.35)	1 13⁄32" (35.72)	¼" (6.35)	1 5⁄32" (29.36)
	Emergency	5607-14-10-000000							
	Semi-Hard Emerg	5607-13-10-000000							
S20	Smooth & Serrated	5609-00-	3	⅛" (3.17)	2" (50.80)	¼" (6.35)	1 23⁄32" (43.66)	¼" (6.35)	1 13⁄32" (35.72)
	Emergency	5609-14-10-000000							
	Semi-Hard Emerg	5609-13-10-000000							
S22	Smooth & Serrated	5611-00-	3	⅛" (3.17)	2¼" (57.15)	¼" (6.35)	1 15⁄16" (49.21)	¼" (6.35)	1 19⁄32" (40.48)
	Emergency	5611-14-10-000000							
	Semi-Hard Emerg	5611-13-10-000000							
S26	Smooth & Serrated	5613-00-	4	⅛" (3.17)	2⅝" (66.68)	¼" (6.35)	2¼" (57.15)	¼" (6.35)	1 27⁄32" (46.83)
	Emergency	5613-14-10-000000							
	Semi-Hard Emerg	5613-13-10-000000							
S30	Smooth & Serrated	5615-00-	4	⅛" (3.17)	3" (76.20)	¼" (6.35)	2 9⁄16" (60.32)	¼" (6.35)	2⅛" (53.97)
	Emergency Collet	5615-14-10-000000							
	Semi-Hard Emerg	5615-13-10-000000							
S35	Smooth & Serrated	5617-00-	4	⅛" (3.17)	3½" (88.90)	¼" (6.35)	3" (76.20)	¼" (6.35)	2 7⁄16" (61.91)
	Emergency	5617-14-10-000000							
	Semi-Hard Emerg	5617-13-10-000000							
S40	Smooth & Serrated	5619-00-	4	⅛" (3.17)	4" (101.60)	¼" (6.35)	3 7⁄16" (87.31)	¼" (6.35)	2 13⁄16" (71.43)
S50	Smooth & Serrated	5623-00-	4	⅛" (3.17)	5" (127.00)	¼" (6.35)	4 5⁄16" (109.53)	¼" (6.35)	3½" (88.90)

NOTE: Millimeters in parentheses

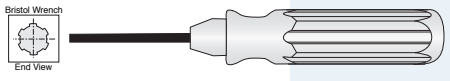
Clamps for Style "S" Master Collets

Spline	Pad Number	Part Number
B Spline - .111"	S10, S12, S15, S16, S20, S26	7619
C Spline - .145"	S22*, S30, S35, S40, S50	7627



Wrenches for Style "S" Clamps

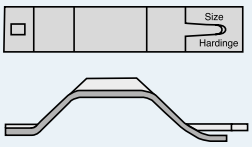
Style "S" Wrenches	Size	Pads	Part Number	Bristol Socket Wrench
Bristol Wrench Assembly	.111"	S10, S12, S15, S16, S17, S20, S26	7909-00-00-000010	
L Wrench: B Spline	.111"	S10, S12, S15, S16, S20, S26	7637-00-00-000000	
Bristol Wrench Assembly	.145"	S22*, S30, S35, S40, S50	7909-00-00-000013	
L Wrench: C Spline	.145"	S22*, S30, S35, S40, S50	7639-00-00-000000	



*For Warner & Swasey 2¼" and Miyano 1¼" capacity, order the .111" wrench

Pads for Master Collets & Feed Fingers

HARDINGE



Hardinge® Style "AF" Master Feed Finger Pads

The Hardinge style "AF" feed finger is versatile, adjusting quickly and easily to the tension you need. The style "AF" feed finger uses inexpensive pads which are readily available from stock. Each master feed finger includes a threaded locking cap which rotates to adjust in five- to seven-pound increments to increase or decrease tension. For thin-wall tubing and delicate stock, extremely light tension can be achieved. Because the style "AF" master feed finger can be adjusted to hold greater variations of bar stock sizes, you'll need to purchase fewer pads than with most other types of master feed fingers. Pads, which are sold separately and are required with each master, are held securely in place without screws. Guide bushings are sold separately and are recommended to minimize bar whip.

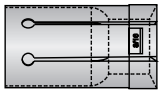
Dependable and **Versatile**. The guide bushings control bar whip to minimize feed "hang-ups" and allow a better finish on the part being machined. A variety of inexpensive pads can be used to adjust to different bar stock diameters. A full 1/32" adjustment can be achieved from the rated size down. This eliminates the need for decimal/millimeter pads and pads in 1/64" increments.

Pad Style	Description	Pad Part No.	Round Capacity Min.	Round Capacity Max.	Hex Capacity Min.	Hex Capacity Max.	Guide Bushing	Cap Wrench
AF3[1]	Steel Chromed	7305 7305-38	3/16" (4.76)	1/2" (12.7)	3/16" (4.76)	7/16" (11.11)	AF-3: 7355 AF-3A: 7357	7553
AF4	Steel Chromed	7309 7309-38	1/4" (6.35)	5/8" (15.87)	1/4" (6.35)	17/32" (13.49)	7359	7555
AF6	Steel Chromed	7313 7313-38	3/8" (9.52)	7/8" (22.22)	1/4" (6.35)	3/4" (19.05)	7361	7557
AF7	Steel Chromed	7317 7317-38	1/2" (12.70)	1 1/8" (28.57)	1/2" (12.70)	15/16" (23.81)	7363	7559
AF10[2]	Steel Chromed	7321 7321-38	1/16" (4.59)	3/8" (9.53)	1/8" (3.18)	5/16" (7.94)	AF-10: 7365 AF-10A: 7367	7561
AF16	Steel Chromed	7325 7325-38	5/8" (15.87)	1 7/16" (36.51)	5/8" (15.87)	1 1/4" (31.75)	7369	7563

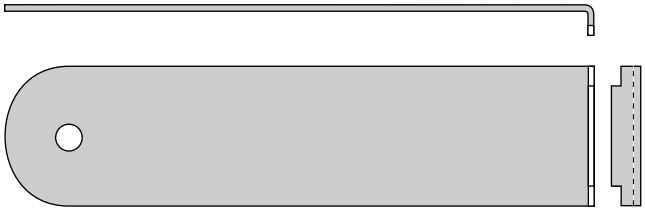
1 - The AF3 Pad is used in the AF3 and the AF3A Feed Fingers
2 - The AF10 Pad is used in the AF10 and the AF10A Feed Fingers

NOTE: Millimeters in parentheses

See chapters 1 and 2 for master collets and feed fingers listed alphabetically by manufacturer, or use the Cross Reference at the end of this chapter.



"AF" Guide Bushing



Cap Wrench

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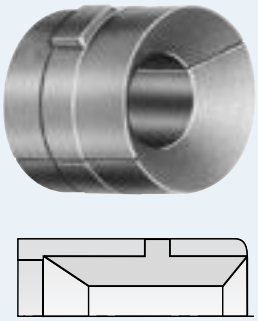
Pads for Master Collets & Feed Fingers



Style "B" Master Feed Finger Pads

Hardinge Style "B" feed fingers and pads are the most practical feed fingers for high production bar machining. Designed and manufactured to be the most reliable on the market today, they offer many advantages over other styles.

Dependable. There are no screws or pins to hold pads in place. Pads cannot come loose and they offer full bearing on the bar stock.

Versatile. Pads are stocked in round, hexagon, and square shapes, in a variety of materials and sizes.

Affordable. The versatility of a master feed finger can be increased by the purchase of inexpensive pads in a variety of sizes and shapes.

See chapters 1 and 2 for master feed fingers listed alphabetically by machine, or use the Cross Reference at the end of this chapter.

Pad Material

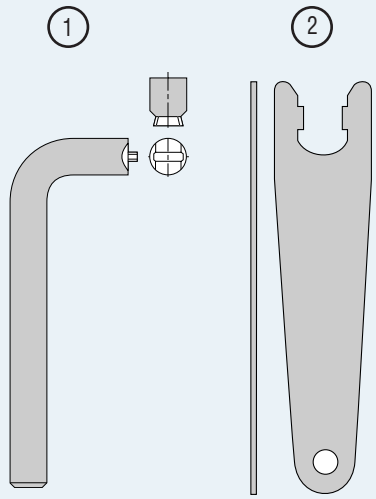
Hardened Steel Pads are for hot-rolled and cold-drawn stock. This style pad is noted for long wear and will give reasonable freedom from scoring minimized by the greater pad hardness. With our Style "B" master feed finger acting as a durable holder, you can select correct pads to meet your exacting requirements.

Nickel Cast Iron Pads are for use on brass, aluminum, polished or plated bars, and special-finish drawn bars to eliminate scoring of stock. Many tests were made for the selection of this material to remove objectionable scoring of stock and to ensure long wear.

Bronze Pads are for ground drill rod, ground bars, and also with the materials listed for nickel cast iron pads, except brass, to eliminate scoring of stock.

Adjustable

Wrenches for Style "B" Feed Fingers & Pads



Description	Part No.
Feed Finger Wrench – figure 1 For B8, B9, B16, B20, B22, B25, B26 (2 Required) For B30, B33, B35 (3 Required)	7607
B1 (this model and all listed below – figure 2)	7575
B2	7577
B3	7579
B4	7581
B5	7583
B6	7585
B7	7587
B10	7589
B10AM	7591
B11	7593
B1X	7595
B10X	7597
DA-2X, B3X	7599
XB4	7601
XB6	7603

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Pads for Master Collets & Feed Fingers

HARDINGE

Style "B" Master Feed Finger Pads

Pad Style	Description	Hardinge Part No.	Round Capacity Min.	Round Capacity Max.	Hex Capacity Min.	Hex Capacity Max.	Square Capacity Min.	Square Capacity Max.
B1	Steel Cast Iron Bronze, Nylon	6601	1/8" (3.17)	5/16" (7.93)	1/8" (3.17)	9/32" (7.14)	1/8" (3.17)	7/32" (5.55)
B2	Steel Cast Iron Bronze, Nylon	6607	1/8" (3.17)	7/16" (11.11)	1/8" (3.17)	3/8" (9.52)	1/8" (3.17)	5/16" (7.93)
B3	Steel Cast Iron Bronze, Nylon	6611	1/8" (3.17)	1/2" (12.70)	1/8" (3.17)	7/16" (11.11)	1/8" (3.17)	3/8" (9.52)
B4	Steel Cast Iron Bronze, Nylon	6617	1/8" (3.17)	5/8" (15.87)	1/8" (3.17)	1/2" (12.70)	1/8" (3.17)	7/16" (11.11)
B5	Steel Cast Iron Bronze, Nylon	6621	1/8" (3.17)	3/4" (19.05)	1/8" (3.17)	5/8" (15.87)	1/8" (3.17)	1/2" (12.70)
B6	Steel Cast Iron Bronze, Nylon	6625	1/8" (3.17)	7/8" (22.22)	1/8" (3.17)	3/4" (19.05)	1/8" (3.17)	5/8" (15.87)
B7	Steel Cast Iron Bronze, Nylon	6631	1/8" (3.17)	1 1/8" (28.57)	1/8" (3.17)	1" (25.40)	1/8" (3.17)	25/32" (19.84)
B8	Steel Cast Iron Bronze, Nylon	6635	1/8" (3.17)	1 3/8" (34.92)	1/8" (3.17)	1 3/16" (30.16)	1/8" (3.17)	15/16" (23.81)
B9	Steel Cast Iron Bronze, Nylon	6639	1/8" (3.17)	1 9/16" (39.68)	1/8" (3.17)	1 3/8" (34.92)	1/8" (3.17)	1 3/32" (27.78)
B10	Steel Cast Iron Bronze, Nylon	6643	1/8" (3.17)	3/8" (9.62)	1/8" (3.17)	5/16" (7.93)	1/8" (3.17)	1/4" (6.35)
B10AM	Steel Cast Iron Bronze, Nylon	6649	1/8" (3.17)	7/16" (11.11)	1/8" (3.17)	3/8" (9.52)	1/8" (3.17)	5/16" (7.93)
B11	Steel Cast Iron Bronze, Nylon	6653	1/8" (3.17)	9/16" (14.28)	1/8" (3.17)	1/2" (12.70)	1/8" (3.17)	13/32" (10.31)
B16	Steel Cast Iron Bronze, Nylon	6657	1/8" (3.17)	1 1/2" (38.10)	1/8" (3.17)	1 9/32" (32.54)	1/8" (3.17)	1 1/16" (26.98)
B20	Steel Cast Iron Bronze, Nylon	6661	1/8" (3.17)	1 3/4" (44.45)	1/8" (3.17)	1 1/2" (38.10)	1/8" (3.17)	1 7/32" (30.95)
B22	Steel Cast Iron Bronze, Nylon	6665	1/8" (3.17)	2" (50.80)	1/8" (3.17)	1 23/32" (43.65)	1/8" (3.17)	1 13/32" (35.71)
B25	Steel Cast Iron Bronze, Nylon	6669	1/8" (3.17)	2 1/4" (57.15)	1/8" (3.17)	1 15/16" (49.21)	1/8" (3.17)	1 19/32" (40.48)
B26	Steel Cast Iron Bronze, Nylon	6673	1/8" (3.17)	2 1/2" (63.50)	1/8" (3.17)	2 5/32" (54.69)	1/8" (3.17)	1 3/4" (44.45)
B30	Steel Cast Iron Bronze, Nylon	6677	1/8" (3.17)	2 5/8" (66.67)	1/8" (3.17)	2 1/4" (57.15)	1/8" (3.17)	1 27/32" (46.83)
B33	Steel Cast Iron Bronze, Nylon	6679	1/8" (3.17)	3 1/8" (79.37)	1/8" (3.17)	2 11/16" (42.86)	1/8" (3.17)	2 3/16" (55.54)
B35	Steel Cast Iron Bronze, Nylon	6681	1/8" (3.17)	3 1/4" (82.55)	1/8" (3.17)	2 13/16" (71.43)	1/8" (3.17)	2 1/4" (57.15)

NOTE: Millimeters in parentheses

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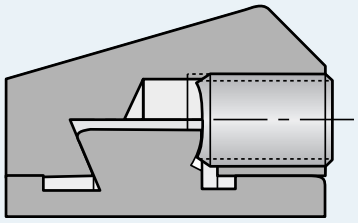
Pads for Master Collets & Feed Fingers



Style "CB" Master Collet Pads

"CB" style master collets and pads were used as original equipment on Acme-Gridley machines. The "CB" master collet has a clamping system designed with one locking screw (cup point) per pad. The back shoulder has a back taper which helps lock the pad into place. The "CB" style offers the following benefits:

Ease of use. Pads can be removed from the collet while the collet is in the machine spindle.

Storage convenience. Locking screws stay in the master collet; therefore, there are no clamps to lose.

More bearing surface. Since there are no holes through the pads on large capacity sizes, the pads offer a full bearing surface.

Style	Description	Hardinge Part No.	Round Capacity Min.	Round Capacity Max.	Hex Capacity Min.	Hex Capacity Max.	Square Capacity Min.	Square Capacity Max.
CB-10	Smooth Serrated Pad Screws [3]	2201 7711	1/8" (3.17) 1/4" (6.35)	1" (25.40) 1" (25.40)	1/4" (6.35)	7/8" (22.22)	1/4" (6.35)	11/16" (17.46)
CB-12	Smooth Serrated Pad Screws [3]	2203 7713	3/16" (4.76) 3/8" (9.52)	1 1/4" (31.75) 1 1/4" (31.75)	1/4" (6.35)	1 1/16" (26.98)	1/4" (6.35)	7/8" (22.22)
CB-16	Smooth Serrated Pad Screws [3]	2205 7713	1/4" (6.35) 1/2" (12.70)	1 5/8" (41.27) 1 9/16" (39.68)	1/4" (6.35)	1 13/32" (35.71)	1/4" (6.35)	1 5/32" (29.36)
CB-20*	Smooth Pad Screws [4]	2207 7715	1/4" (6.35)	2" (50.80)	1/4" (6.35)	1 23/32" (43.65)	1/4" (6.35)	1 13/32" (35.71)
CB-26	Smooth Std. 3/4" to 1 1/2" 1 3/4", 2", 2 1/4", 2 1/2", 2 5/8" Serrated Pad Screws [4]	2209 2209 7715	3/4" (19.05) 1/2" (12.70)	2 5/8" (66.67) 2 5/8" (66.67)	1/4" (6.35)	2 1/4" (57.15)	1/4" (6.35)	1 27/32" (46.83)
CB-35*	Smooth Pad Screws [4]	2211 7715	1/4" (6.35)	3 1/2" (88.90)	1/4" (6.35)	3" (76.20)	1/4" (6.35)	2 7/16" (61.91)
CB-40*	Smooth Pad Screws [4]	2213 7715	1/4" (6.35)	4" (101.60)	1/4" (6.35)	3 7/16" (87.31)	1/4" (6.35)	2 13/16" (71.43)

* Available on Application

NOTE: Millimeters in parentheses

See chapters 1 and 2 for master collets and feed fingers listed alphabetically by manufacturer, or use the Cross Reference at the end of this chapter.

Pads for Master Collets & Feed Fingers

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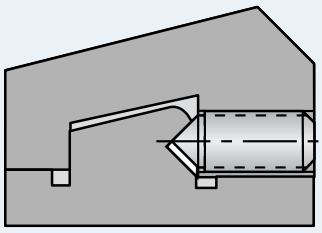

Style "CT" Master Collet Pads

"CT" style master collets and pads were used as original equipment on Acme-Gridley machines. The pad is locked into the collet using two cone point set screws locating into detents in the shoulder of the pad. The threaded holes are in the face of the collet. The "CT" style offers the following benefits:

Ease of use. Pads can be removed from the collet while the collet is in the machine spindle.

Storage convenience. Locking screws stay in the master collet; therefore, there are no clamps to lose.

More bearing surface. Since there are no holes through the pads on large capacity sizes, the pads offer a full bearing surface.

Style	Description	Hardinge Part No.	Round Capacity Min.	Round Capacity Max.	Hex Capacity Min.	Hex Capacity Max.	Square Capacity Min.	Square Capacity Max.
CT-10	Smooth Serrated Pad Screws [6]	2215 7767	1/8" (3.17) 1/4" (6.35)	1" (25.40) 1" (25.40)	1/4" (6.35)	7/8" (22.22)	1/4" (6.35)	11/16" (17.46)
CT-12	Smooth Serrated Pad Screws [6]	2217 7769	3/16" (4.76) 3/8" (9.52)	1 1/4" (31.75) 1 1/4" (31.75)	1/4" (6.35)	1 1/16" (26.98)	1/4" (6.35)	7/8" (22.22)
CT-16	Smooth Serrated Pad Screws [6]	2219 7769	1/4" (6.35) 1/2" (12.70)	1 5/8" (41.27) 1 5/8" (41.27)	1/4" (6.35)	1 13/32" (35.71)	1/4" (6.35)	1 5/32" (29.36)
CT-20*	Smooth Pad Screws [8]	2221 7769	1/4" (6.35)	2" (50.80)	1/4" (6.35)	1 23/32" (43.65)	1/4" (6.35)	1 13/32" (35.71)
CT-26	Smooth Std. 3/4" to 1 1/2" 1 3/4", 2", 2 1/4", 2 1/2", 2 5/8" Serrated Pad Screws [8]	2223 7771	3/4" (19.05) 1/2" (12.70)	2 5/8" (66.67) 2 5/8" (66.67)	1/4" (6.35)	2 1/4" (57.15)	1/4" (6.35)	1 27/32" (46.83)
CT-35*	Smooth Pad Screws [8]	2225 7773	1/4" (6.35)	3 1/2" (88.90)	1/4" (6.35)	3" (76.20)	1/4" (6.35)	2 7/16" (61.91)
CT-40*	Smooth Pad Screws [12]	2227 7775	1/4" (6.35)	4" (101.60)	1/4" (6.35)	3 7/16" (87.31)	1/4" (6.35)	2 13/16" (71.43)

* Available on Application

NOTE: Millimeters in parentheses

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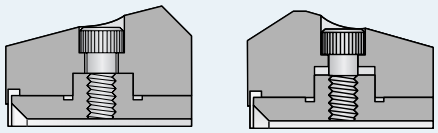
Pads for Master Collets & Feed Fingers



Conventional-Style Standard Master Collet Pads

The pad clamping system on a conventional-style master collet is designed with a screw that goes through the collet head angle and against the side of the pad's shoulder. With this system, the operator must remove the collet from the machine spindle to change the pads. The advantages of this style of master and pads are **Availability** and **Affordability**. These collets are available for most older machines. Pads can be purchased in a variety of sizes, shapes and materials. After the initial purchase of the master collet, pads in a variety of sizes, shapes, and materials can be purchased for less than the cost of solid collets.

Master Collet	Hardinge Pad Part No.	Manufacturer Part Number	Machine Capacity	Machine
3171-0010	5701	Brown & Sharpe - 3 Split	1⅞"	#4 Automatic
3171-0030	5701	Brown & Sharpe - 4 Split	1⅞"	#4 Automatic
3151-0010	5703	Brown & Sharpe - 3 Split	2⅜"	#3 Ultramatic
3151-0030	5703	Brown & Sharpe - 4 Split	2⅜"	#3 Ultramatic
3149-0010	5703	Brown & Sharpe - 3 Split	2⅜"	#3 Ultramatic
3149-0030	5703	Brown & Sharpe - 4 Split	2⅜"	#3 Ultramatic
3193-0010	5703	Brown & Sharpe - 3 Split	2⅜"	#4, #6 Auto
3193-0030	5703	Brown & Sharpe - 4 Split	2⅜"	#4, #6 Auto
4135	MP2728	Cleveland	2½"	Draw In 15°
MP4165	5705	Cleveland	2½"	Push Out
MP1478	MP1432	National Acme	1⅝"	#55
4337	MP3030	Bardons & Oliver	2½"	#2⅞
MP2433	5717	Bardons & Oliver	1½"	#3
MP2866	MP3562	Bardons & Oliver	3¼"	#3
MP2379	MP3146	Bardons & Oliver	2¼"	#3¼
MP3017	5717	Bardons & Oliver	1½"	#5
4331	5721	Bardons & Oliver	2"	#7
MP2463	5721	Bardons & Oliver	2"	#7
4333	MP2524	Bardons & Oliver	2½"	#7
MP1868	MP1933	Bardons & Oliver	2¼"	#8
MP3015	2667A	Bardons & Oliver	3 1/16"	#10
MP2004	MP2005	Foster	2"	#1B
MP3061	MP2005	Foster	2"	#1B
MP3742	MP1887	Foster	3¼"	#2B
MP1497	MP1498	Foster	1 15/16"	#3
MP2044	MP1565	Foster	1 13/16"	#5
MP1556	MP1565	Foster	1 13/16"	#5
MP3055		Garvin	1¼"	#129-G
MP3674	5839	Gisholt- 4y7138A	2"	#3
MP3673	5839	Gisholt- 4y7138B	2"	#4
Emerg	5841	Gisholt-1129	2"	#4
2555	5759	Gisholt- 4-Split-5y7112	2½"	#5, 1L
Emerg	5845	Gisholt- 471	2½"	#5, 1L
MP2599	MP1439	Gisholt- 4-Split-12x6561	3½"	#2L
4341	5763	Gisholt- 4-Split-13x6561	4½"	#3L
MP2743	MP2742	Gisholt- 4-Split-3y7193	3"	#3
2551	5751	Gisholt- 4-Split-3y7112a	1½"	#3
MP1503	MP1561	Gisholt- 4-Split	1⅝"	#4
2553	5755	Gisholt- 4-Split-4y7112	2"	#4
Emerg	5753	Gisholt- 4-Split-3x-7731	1½"	#3
Emerg	5757	Gisholt- 4-Split-4x-7731	2"	#4
Emerg	5761	Gisholt- 4-Split-5x-7731	2½"	#5, 1L
Emerg	MP2622E	Gisholt- 4-Split-13x-7731	4½"	#3L

Master Collet	Hardinge Pad Part No.	Manufacturer Part Number	Machine Capacity	Machine
MP2066	5801	J&L - 10463	1½"	#3
4347	95805	J&L - 11709	1¾"	#4
2523	5821	J&L - 19985	2"	#4
2569	5809	J&L - 10464	2 9/16"	7A, B, D, #5
MP3870	5815	J&L - 15246	3"	#5, 3"
Emerg	5803	J&L - 10482	1½"	#3
Emerg	5807	J&L - 11710	1¾"	#4
Emerg	5821	J&L - 19992	2"	#4
Emerg	5811	J&L - 10481	2 9/16"	71, B, D, #5
Emerg	5817	J&L - 15239	3"	#5, 3"
2625	5835	Morey - 376	1½"	#3
2627	5839	Morey - 476	1¾"	#4, 1¾"
2629	5839	Morey - 476	1 1/16"	#4, 2"
2631	5843	Morey - 576	2½"	#5
Emerg	5837	Morey - 371	1½"	#3
Emerg	5841	Morey - 471	1¾"	#4
Emerg	5845	Morey - 571	2½"	#5
4339	5835	Oster - Draw In	1½"	#601
2625	5835	Oster - Push Out	1½"	#601
MP2776	MP2777	Simmons	15/16"	#2B
2629	5839	W&S	1 1/16"	#4, 2"
MP3740	MP3696	W&S	1¼"	#2 Micro
MP1484	MP1453	W&S-4-Split 377-1015	1¼"	#4
4341	5763	W&S-4-Split 2779	4½"	#5
MP1487	5847	W&S-4-Split 387-1028	2"	#6 OS
MP2639	MP2640	W&S-4-Split	2½"	#24
4335	MP1815	W&S-4-Split	4½"	#32
MP1318	MP1319	W&S-4-Split	2½"	#33
MP1488	MP1456	W&S-6-Split	2¼"	#5,#6 NS
Emerg	5845	W&S-471	2½"	#5, (1A)
Emerg	MP3696E	W&S	1¼"	Micro #2 D-in
Emerg	MP1456E	W&S-6-Split - 357	2¼"	#5, #6 NS
2631	5843	W&S - 471-1001	2½"	#5, (1A)
2625	5835	W&S - 461-1002	1½"	#3, #4
2627	5839	W&S - Push Out	1¾"	#4
MP2950	5835	W&S - Push Out	1½"	#4, 1¾"
2629	5839	W&S - Push Out	2"	#4, 2"
Emerg	5837	W&S - 461E	1½"	#3, #4
Emerg	5841	W&S - 1129	2"	#4
Emerg	5845	W&S - 471	2½"	#5, (1A)
Emerg	MP3696E	W&S - Emerg	1¼"	Micro #2 D-In
Emerg	MP1456E	W&S - 6-Split - 357	2¼"	#5, #6 NS

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Pads for Master Collets & Feed Fingers

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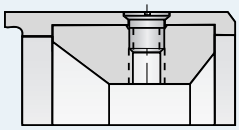

Conventional-Style Standard Master Feed Finger Pads

The pad clamping system on a conventional-style master feed finger is designed with a screw that goes through the OD of the feed finger and against the side of the pad's shoulder. The advantages of this style of master and pads are **Availability** and **Affordability**. These feed fingers are available for most older machines. After the initial purchase of the master collet, pads in a variety of sizes, shapes, and materials can be purchased for less than the cost of solid collets.

Master FF No.	Pad	Pad Description	Hardinge Part No.	Round Capacity Min.	Round Capacity Max.	Hex Capacity Min.	Hex Capacity Max.	Square Capacity Min.	Square Capacity Max.
3195-0010 3195-0030 B&S	26M (3 Split) 26M (4 Split)	Steel Cast Iron Bronze & Nylon	6803	⅛" (3.17)	1¾" (44.45)	⅛" (3.17)	1$^{33}/_{64}$" (38.50)	⅛" (3.17)	1$^{15}/_{64}$" (31.35)
MP1508 Cleveland 2½"	Special	Steel Cast Iron Bronze & Nylon	6847	⅛" (3.17)	2¼" (57.15)	⅛" (3.17)	1$^{15}/_{16}$" (49.21)	⅛" (3.17)	1$^{37}/_{64}$" (40.08)

NOTE: Millimeters in parentheses

See chapters 1 and 2 for master collets and feed fingers listed alphabetically by manufacturer, or use the Cross Reference at the end of this chapter.

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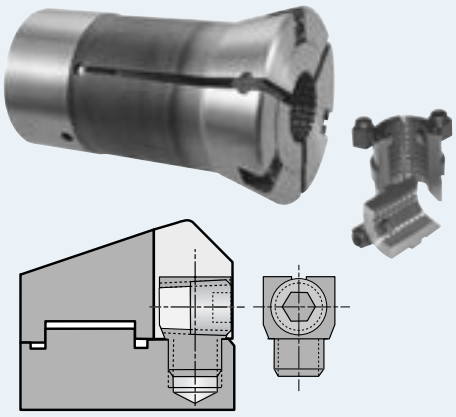
Pads for Master Collets & Feed Fingers



Style "M" Martin Master Collet Pads

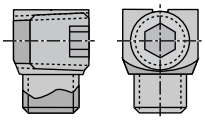
The Martin Master collet has a slot in the face of the collet that goes through to the head angle to allow the pads to be clamped into place. Pads are held in the collet using a square lug which is threaded into the pad and secured by a taper-threaded locking screw. Benefits include **Ease of Use** and **Storage Convenience**. The collets do not have to be removed from the spindle to change the pads. The clamps stay with the pads and cannot be lost.

Style	Description	Hardinge Part No.	Round Capacity Min.	Round Capacity Max.	Serrated Max.	Hex Capacity Min.	Hex Capacity Max.	Square Capacity Min.	Square Capacity Max.
M10	Smooth & Serrated	5901	⅛" (3.17)	1" (25.40)	15⁄16"(23.81)	¼" (6.35)	⅞" (22.22)	¼" (6.35)	11⁄16" (17.46)
M12	Smooth & Serrated	5903	⅛" (3.17)	1¼" (31.75)	1 3⁄16"(30.16)	¼" (6.35)	1 1⁄16" (26.98)	¼" (6.35)	⅞" (22.23)
M15	Smooth & Serrated	5905	⅛" (3.17)	1½" (38.10)	1 7⁄16"(36.51)	¼" (6.35)	1¼" (31.75)	¼" (6.35)	1 1⁄16" (26.98)
M16	Smooth & Serrated	5907	⅛" (3.17)	1⅝" (41.28)	1 9⁄16"(39.68)	¼" (6.35)	1⅜" (34.92)	¼" (6.35)	1 5⁄32" (29.36)
M17	Smooth & Serrated	5931	⅛" (3.17)	1¾" (44.45)	1 11⁄16"(42.86)	¼" (6.35)	1 17⁄32" (38.89)	¼" (6.35)	1¼" (31.75)
M20	Smooth & Serrated	5909	⅛" (3.17)	2 1⁄16" (52.38)	2"(50.80)	¼" (6.35)	1 25⁄32" (45.24)	¼" (6.35)	1 7⁄16" (36.51)
M21	Smooth & Serrated	5911	⅛" (3.17)	2⅛" (53.98)	2 1⁄16"(52.38)	¼" (6.35)	1 27⁄32" (46.83)	¼" (6.35)	1½" (38.10)
M22	Smooth & Serrated	5913	⅛" (3.17)	2¼" (57.15)	2 3⁄16"(55.56)	¼" (6.35)	1 15⁄16" (49.21)	¼" (6.35)	1 9⁄16" (39.68)
M23	Smooth & Serrated	5933	⅛" (3.17)	2" (50.80)	1 15⁄16"(49.21)	¼" (6.35)	1¾" (44.45)	¼" (6.35)	1 21⁄32" (42.06)
M26	Smooth & Serrated	5915	⅛" (3.17)	2⅝" (66.68)	2 9⁄16"(65.08)	¼" (6.35)	2 17⁄64" (57.55)	¼" (6.35)	1 13⁄16" (46.03)
M30	Smooth & Serrated	5917	⅛" (3.17)	3" (76.20)	2 7⁄8"(73.02)	¼" (6.35)	2 9⁄16" (65.08)	¼" (6.35)	2⅛" (53.97)
M32	Smooth & Serrated	5919	⅛" (3.17)	3⅜" (85.73)	3 5⁄16"(84.13)	¼" (6.35)	2⅞" (73.02)	¼" (6.35)	2⅜" (60.33)
M35	Smooth & Serrated	5921	⅛" (3.17)	3½" (88.90)	3⅜"(85.72)	¼" (6.35)	3" (76.20)	¼" (6.35)	2 7⁄16" (61.91)
M40	Smooth & Serrated	5923	⅛" (3.17)	4"(101.60)	3⅞" (98.43)	¼" (6.35)	3 7⁄16" (87.31)	¼" (6.35)	2 13⁄16" (71.43)
M47	Smooth & Serrated	5925	⅛" (3.17)	4¾" (120.65)	4⅝"(117.47)	¼" (6.35)	4⅛" (104.77)	¼" (6.35)	3 5⁄16" (84.13)
M50	Smooth & Serrated	MP4034	⅛" (3.17)	5" (127.00)	4⅞"(123.82)	¼" (6.35)	4 21⁄64" (109.93)	¼" (6.35)	3 17⁄32" (89.69)

NOTE: Millimeters in parentheses

Clamps for Style "M" Martin Master Collet Pads

Style	Martin Master Pad Clamps	Part No.	Wrenches
MB	M10, M12, M15, M16, M17, M23	7751	5⁄32" Hex
MC	M20, M21, M22, M26, M30, M32, M35, M40, M47, M50	7753	3⁄16" Hex



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Pads for Master Collets & Feed Fingers

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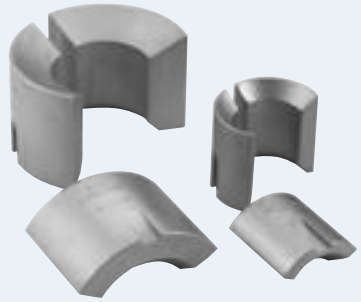


Style "A" Master Feed Finger Pads

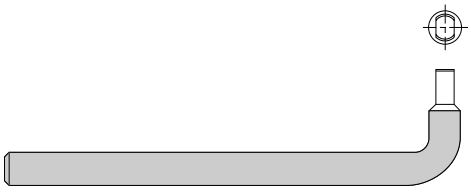
The Style "A" pads are designed with a shoulder locating the pad on both ends in the master feed finger groove. A key holds the pad in place, eliminating pad rotation. There are no pins or screws to hold pads in place. The design of this style puts the thrust of loading bar stock on the shoulder of the feed finger rather than against the pads.

Style	Description	Hardinge Part No.	Round Capacity Min.	Round Capacity Max.	Hex Capacity Min.	Hex Capacity Max.	Square Capacity Min.	Square Capacity Max.
A10	Steel Cast Iron Bronze	6715	⅛" (3.17)	15⁄16" (23.81)	⅛" (3.17)	13⁄16" (20.63)	⅛" (3.17)	21⁄32" (16.66)
A12	Steel Cast Iron Bronze	6719	⅛" (3.17)	1 3⁄16" (30.16)	⅛" (3.17)	1 1⁄32" (26.19)	⅛" (3.17)	27⁄32" (21.43)
A12C	Steel Cast Iron Bronze	6721	⅛" (3.17)	1 5⁄32" (29.36)	⅛" (3.17)	1" (25.40)	⅛" (3.17)	13⁄16" (20.86)
A12W	Steel Cast Iron Bronze	6723	⅛" (3.17)	1¼" (31.75)	⅛" (3.17)	1 1⁄16" (26.99)	⅛" (3.17)	⅞" (22.22)
A16	Steel Cast Iron Bronze	6727	⅛" (3.17)	1½" (38.10)	⅛" (3.17)	1 5⁄16" (33.33)	⅛" (3.17)	1 1⁄16" (26.98)
A17	Steel Cast Iron Bronze	6725	⅛" (3.17)	1¾" (44.45)	⅛" (3.17)	1 17⁄32" (38.89)	⅛" (3.17)	1¼" (31.75)
A22	Steel Cast Iron Bronze	6735	⅛" (3.17)	2⅛" (53.97)	⅛" (3.17)	1 27⁄32" (46.83)	⅛" (3.17)	1½" (38.10)
A22W	Steel Cast Iron Bronze	MP3968	⅛" (3.17)	2⅛" (53.97)	⅛" (3.17)	1 27⁄32" (46.83)	⅛" (3.17)	1½" (38.10)
A26	Steel Cast Iron Bronze	6739	⅛" (3.17)	2 9⁄16" (65.08)	⅛" (3.17)	2 3⁄16" (55.54)	⅛" (3.17)	1 13⁄16" (46.03)
A30	Steel Cast Iron Bronze	MP3969	⅛" (3.17)	2 13⁄16" (71.43)	⅛" (3.17)	2 7⁄16" (61.91)	⅛" (3.17)	2" (50.80)
A35	Steel Cast Iron Bronze	6751	⅛" (3.17)	3¼" (82.55)	⅛" (3.17)	2 13⁄16" (71.43)	⅛" (3.17)	2¼" (57.15)

NOTE: Millimeters in parentheses

Wrenches for Style "A" Feed Finger Pads

Description	Part Number
Feed Finger Wrench - Model AM for A10, A12C (2 Required) for A12, A16, A22, A30 (3 Required)	7763
Feed Finger Wrench - Model AL for A26, A35 (3 Required)	7765



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Cross Reference for Master Collets, Feed Fingers & Pads

Style "S" Master Collets and Pads:

Machine	Style	Collet No.
BROWN & SHARPE		
23	*S16	5207
BSA		
138	S15	5007
168	S20	5009
CONE		
1" - SL, SK, SW, TC, TK	*S10	5219
1" - Previous	S10	5011
1¼"	S12	5013
1½"	S15	5015
1⅝"	S16	5017
1⅞"	S20	5019
2"	S20	5021
2¼"	S22	5023
2½", 2⅝"	*S26	5025
3"	S30	5027
3¼"	S30	5029
3½"	S35	5031
4"	*S40	5033
GILDEMEISTER		
GS20	S10	5737E
GM32, GS32, AS32, AV32	S12	4571A
GM32/6	S12	4571A
AV48, AS48, AA48	S20	3616A
AV67, AS67	S26	5938A
GREENLEE		
1⅝"	S16	5071
2"	S20	5073
2¼"	S20	5059
2⅝"	S26	5077
GRIDLEY		
1" - RA, R, RAN6Y, ACME C	S10	5101
1¼" - RA6, G	S12	5103
1⅜" - RA4, G	*S15	5105
1½" - GA	S15	5001
1⅝" - RA4, RA6, R4, R6, GA	S16	5107
2" - R4, 4A4, RA6	S20	5109
2¼" - R, R6	S22	5111
2⅝" - RA6, RB6, RB8	*S26	5113
2⅝" - R, RA, RB4, G, GA4	S26	5119
3½" - RA4, 4G6, RB4, 6, 8	*S35	5115
3¼" - GA, R4	S35	MP2730
4" - RM6	S40	5117
HERBERT		
1½" - 2D & #3	S10	5195
#5 & #7	S26	5197
#5 and #7 - S26 Master has a large pilot (3²⁹⁄₆₄") (Customer must alter nose cap)		
INDEX		
B42-36	*S10	5205
B60 - SC	*S16	5207-07
MORI-SEIKI (SL-2)		
SL-2B	S20	8185
NEW BRITAIN		
60 - 1", 60, 408 - Blind Keyway	*S10	5219
1" - 172, 226, 410	S10	5221
1¼" - 601	S12	5217
1⅜" - 601	*S15	5105
1⅝" - 42, 61	S16	5223
2" - 415	S20	5225
1¾" - 817	S20	5231
2¼" - 61	S22	5227
2⅝" - 126	*S26	5113
2¾"	S26	5229
3½" - 635	*S35	5115
4" - 640	*S40	5033
TRAUB		
A42	*S10	5205
A60	*S16	5207-07

Style "S" Master Collets and Pads:

Machine	Style	Collet No.
WARNER & SWASEY		
¾"	S10	5251
1¼"	S12	5253
1¾"	S20	5255
2¼"(Five Spindle)	S22	5257
1AB (Single Spindle 2¼")	S22	5257
2AB (Single Spindle 3")	S30	5261
1SC (Single Spindle - Old Style)	S22	5263
1SC (Single Spindle - New Style)	S22	5265
2SC (Single Spindle)	S30	MP3887
WICKMAN		
1" - Blind Keyway	*S10	5219
1⅜"	S12	5301
1¾"	S16	5303
2¼"	S22	5305
2⅝"	*S26	5025
3¼"	S30	5307
3½"	S35	5309

Style "AF" Master Feed Fingers and Pads:

Machine	Style	Finger No.	Bushing No.
ACME-GRIDLEY			
7⁄16" - RA6	AF10	7055	7365
9⁄16" - RA6	AF10A	7057	7367
1" - R & C	AF6	7059	7361
1¼" - R & G	AF7	7061	7363
1⅝" - R & C	AF16	7063	7369
BSA			
1½"	AF16	7021	7369
BROWN & SHARPE			
10	AF10	7005	7365
10A	AF10A	7007	
11	AF3	7009	7355
11A	AF3A	7011	7357
21A	AF4	7013	7359
22	AF6	7015	7361
22D	AF7	7017	7363
22H	AF7	7019	7363
CONE			
9⁄16"	AF3	7039	7355
1", Old Style	AF6	7023	7361
1"	AF6	7073	7361
1¼"	AF7	7025	7363
1½"	AF7	7027	7363
1⅝"	AF16	7075	7369
DAVENPORT			
Standard	AF3	7039	7355
Oversize (3-Split)	AF4	7041	7359
GREENLEE			
1"	AF6	7045	7361
1⅝"	AF16	7047	7369
INDEX			
12	AF10A	7101	7367
18	AF3A	7095	7357
25	AF4	7097	7359
B42	AF7	7099	7363
NEW BRITAIN			
1" - 60, 408	AF6	7073	7361
1¼"	AF7	7061	7363
1⅝" - 41, 61	AF16	7075	7369
WARNER & SWASEY AUTOMATIC			
1¼"	AF7	7083	7363
WICKMAN			
⅝"	AF3A	7089	7355
1"	AF6	7073	7361
1⅜"	AF7	7091	7363
1¾"	AF16	7093	7369

Style "B" Master Collets and Pads:

Machine	Style	Collet No.
BSA		
138 - O/A	B16	6001
168 - O/A	B20	6003
BROWN & SHARPE		
00	B1	6011
00	B1X	6013
00A	B1	6019
10	B10	6021
10	B10X	6023
10A	B10	6029
10A	B10AM	6031
10AA	B4	6033
11	B3	6035
11	B3X	6037
11A	B3	6043
11A	B11	6045
12	B5	6047
21	B4	6049
21A	B4	6051
22	B6	6053
22A	B6	6055
22D	B8	6057
22DD	B8	6059
22H	B7	6061
23	B20	6063
26	B20	6067
CLEVELAND		
⅜"	B1	6081
½"	B2	6083
9⁄16", ⅝"	B3	6085
⅞"	B5	MP3097
1 1⁄16"	B6	MP3107
1¼"	B7	MP3118
1⅜"	B7	6093
1½"	B16	6097
2"	B22	6099
2½"	B25	6101
CONE		
9⁄16"	*B3	6161
9⁄16" - DA2X	B3	6163
⅞"	B5	6121
1" - SK, SL, SW, TC, TK	*B6	6321
1" - Previous	B6	6123
1¼"	B7	6125
1½"	B8	6127
1⅝"	*B8	6129
1⅝"	*B16	6325
1⅞"	B9	MP2913
1⅞"	B20	6131
2"	B20	6133
2¼"	B22	6135
2½", 2⅝"	*B26	6137
3"	B30	6139
3¼"	B33	6143
3½"	*B35	6141
DAVENPORT		
Standard	*B3	6161
Standard DA2X	B3	6163
Oversize	B4	6169
Oversize Rear Booster	B6	8091
GILDEMEISTER		
AS16, AS20, GS20, GM20	B4	0602A
GS28	B6	5738E
GM32, GS32, AS32, AV32	B7	1009A
AV48, AS48, AA48	B20	3617A
AV67, AS67	B26	3910C
GREENLEE		
1"	B6	6173
+1⅝" (REPL)	B8	6175

*Also interchangeable with other machines

CROSS REFERENCE

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HARDINGE

Cross Reference for Master Collets, Feed Fingers & Pads

Style "B" Master Collets and Pads:

Machine	Style	F-Finger No.
1⅝"	B16	6177
2"	B9	4353
2"	B20	6179
2¼"	B22	6181
2⅝"	B25	6183
+1⅝"(REPL)	B9	6087
+When equipping machine, use B16 master feeder Part No.: 6177		
GRIDLEY		
7⁄16" - RA6	B10	6221
9⁄16" - RA6 Acme C	B2	6223
⅝" - RN6	B3	6225
¾" - F (PO)	B4	6227
¾" - RA8 (DI)	B4	6229
⅞" - R, G, (DI)	*B5	6231
⅞" - F (PO)	B5	6233
1" - C, R, RA6, RAN6	*B6	6235
1¼" - RA6, G	*B7	6237
1⅜" - G, GA, R, RA, RQAS4	*B7	6241
1⅝" - RA4, 6, 8	B8	6245
1½" - GA	B8	MP2906
1¾" - G	B8	MP2907
1¾" - G	B9	MP2917
1⅝" - RA4, 6, 8, R4, 6, GA	B16	6247
2" - R4, RA4, RA6	B20	6249
1¾" - G	B20	MP2772
2¼" - R, R6	B22	6251
2⅝" - RA6, RB6, RB8	*B26	6137
3½" - RA4, RG6, RB4, 6, 8	*B35	6253
3½" - GA, R4	B35	6009
INDEX		
12	B10	6287
18	XB4	6289
25	**XB6	6291
C29 & B30	B5	6293
B42	B7	6295
B42 Outside feeder	B16	6297
B60	B20	6299
**B6 Requires adapter, sleeves, etc. Contact Hardinge		
NATIONAL ACME		
515	B2	6311
55	B8	6315
1" - Model C	*B6	6235
NEW BRITAIN		
⅞"	*B5	6231
1" - 60, 408	*B6	6321
1" - 172, 226, 410	B6	6323
1¼"	*B7	6237
1⅜" - 60	*B7	6241
1⅝" - 41, 61	*B16	6325
2" - 61	B20	6327
2¼" - 61	B22	6329
2⅝" - 126	*B26	6137
2¾"	B26	6331
3½" - 635	*B35	6253
1¾" - 817	B20	6333
(Model 816 Same as 1⅝" Gridley 4051 (Solid Feed Finger))		
WARNER & SWASEY - TURRET		
No. 1	B4	6049
No. 2	B4	6049
No. 2	B6	6053

Style "B" Master Collets and Pads:

Machine	Style	F-Finger No.
WARNER & SWASEY - AUTOMATIC		
¾"	B5	6341
1¼"	B7	6343
1¾"	B20	6345
2¼" (Five Spindle)	B22	6347
1AB (Single Spindle 2¼")	B22	6347
2AB (Single Spindle 3")	B30	6349
WICKMAN		
⅝"	B11	6355
1"	*B6	6321
1⅜"	B7	6357
2¼"	B22	6361
2⅝"	*B26	6137
3¼"	B33	6363
3½"	*B35	6141

Style "CB" Master Collets and Pads:

Machine	Style	Collet No.
ACME-GRIDLEY		
1" - R, RA4, RA6, RAS6, C	CB10	2101
1¼" - RA4, RB6, RB8, G, GA4	CB12	2103
1⅝" - R, RA4, RA, RA6, RA8, C	CB16	2105
2" - R4, RA4, RA6	CB20	2107
2⅝" - 4, 5A, 4B6, RA, RB8, M	CB26	2109
3½" - RQA, RB4, RA, RB6, M, MR (4-split)	CB35	2111
4" - RM6	CB40	2113

Style "CT" Master Collets and Pads:

Machine	Style	Collet No.
ACME-GRIDLEY		
1" - R, RA4, RA6, RAS6, C	CT10	2115
1¼" - RA4, RB6, RB8, G, GA4	CT12	2117
1⅝" - R, RA4, RA, RA6, RA8, C	CT16	2119
2" - R4, RA4, RA6	CT20	2121
2⅝" - 4, 5A, RB6, RA, RB8, M	CT26	2123
3½" - RQA, RB4, RA, RB6, M, MR (4-split)	CT35	2125
4" - RM6	CT40	2127

Style "M" Master Collets and Pads:

Machine	Style	Collet No.
ACME-GRIDLEY		
1" - R, RA4, RA6, RAS6, C	M10	5425
1¼" - RA4, RB6, RB8, G, GA4	M12	5427
1⅝" - R, RA4, RA, RA6, RA8, C	M16	5431
2⅝" - 4, 5A, 4B6, RA, RB8, M	M26	5437
3½" - RQA, RB4, RA, RB6, M, MR (4-split)	*M35	5439
CONE		
1" - SL, SK, SW, TC, TK	*M10	5445
1¼"	M12	5401
1½"	M15	5403
1⅝"	M16	5405
2¼"	M22	5463
2½", 2⅝"	*M26	5411
3"	M30	5413
3¼"	M32	5415
3½" - 4-split	M35	5417

Style "M" Master Collets and Pads:

Machine	Style	Collet No.
NEW BRITAIN		
1" - 51, 60, 408	*M10	5445
1¼" - 602, 52	M12	5447
1⅝" - 41, 61, 62	M16	5449
2¼" - 61, 62	M21	5453
2⅝" - 126, 626	M26	5437
3½" - 635 - 4-split	*M35	5439
WARNER & SWASEY		
1" AB (Single Spindle)	M23	5461
2¼" (Five Spindle)	M23	5461
WICKMAN		
1"	*M10	5445
2⅝"	*M26	5411
3½" - 4-split	M35	

Style "A" Master Feed Fingers and Pads:

Machine	Style	F-Finger No.
ACME-GRIDLEY		
1" - R, RA4, RA6, RAS6, C	A10	6425
1¼" - RA4, RB6, RB8, G, GA4	*A12	6443
1⅝" - R, RA4, R, RA, RA6, RA8, C	A16	6429
2⅝" - 4, 5A, RB6, RA, RB8, M	*A26	6449
3½" - RQA, RB4, RA, RB6, M, MR	*A35	6453
CONE		
1" - SL, SK, SW, TC, TK	*A10	6441
1¼"	A12C	6401
1⅝"	*A16	6445
2½", 2⅝"	*A26	6449
3"	A30	6413
3½"	*A35	6417
NEW BRITAIN		
1" - 51, 60, 408	*A10	6441
1¼" - 602, 52	*A12	6443
1⅝" - 41, 61, 62	*A16	6445
2¼" - 61, 62	*A22	6447
2⅝" - 126, 626	*A26	6449
3-½" - 635	*A35	6453
WARNER & SWASEY		
2¼" (Five Spindle)	*A22W	6461
WICKMAN		
1"	*A10	6441
2⅝"	*A26	6449
3½"	*A35	6417

*Also interchangeable with other machines

CROSS REFERENCE

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Collet and Feed Finger

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Accessories for Collets & Feed Fingers

Chapter Four

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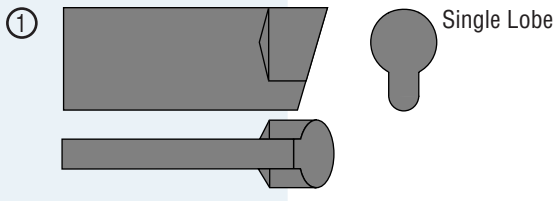
Accessories for Collets & Feed Fingers

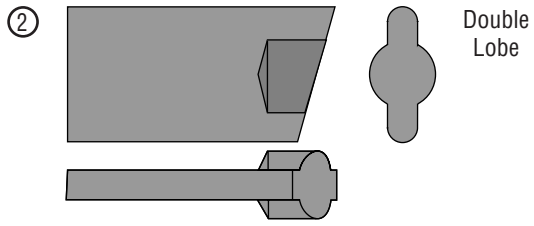
HARDINGE

CHIP AND COOLANT SEALS for Master and Solid Collets

Machine Capacity / Model	Hardinge Part Number	Figure
SEALS FOR MASTER COLLETS		
Master Collet	7643	1
SEALS FOR SOLID COLLETS — ACME-GRIDLEY		
3/8", 7/16"	7645	2
3/4", 7/8", 1", 1 1/4", 1 3/8", 1 1/2"	7647	1
1 5/8", 1 3/4", 2", 2 1/4", 2 5/8"	7649	1
2 7/8", 3 1/2", 4", 4 3/4", 5", 5 1/8"	7651	1
9/16", 9/16" RA6	7653	2
SEALS FOR SOLID COLLETS — BROWN & SHARPE		
00, 00B, 00Y, 2 (1 5/8" capacity), 10, 10B, 10SC, 10SCY, 10Y	7645	2
24, 26	7647	1
2 (1 7/8" capacity), 11, 11B, 11C, 11SC, 11SCY, 11Y, 12, 21, 21SC, 21SCY, 21Y, 22, 22A, 22B, 22C, 22D, 22SC, 22SCY, 22Y	7653	2
SEALS FOR SOLID COLLETS — BROWN & WARD		
5/8"	7645	2
SEALS FOR SOLID COLLETS — BSA		
138, 168	7651	1
SEALS FOR SOLID COLLETS — CASATI		
26, 32	7647	1
SEALS FOR SOLID COLLETS — CLEVELAND		
1 1/2", 1 5/8"	7649	1
2 1/2", 2 1/2" AB	7651	1
SEALS FOR SOLID COLLETS — CONE		
7/8", 1", 1 1/4", 1 1/2", 1 5/8"	7647	1
1 7/8", 2 1/4", 2 1/2", 2 5/8"	7649	1
3 1/2", 3 3/4", 4 3/8", 5", 5 1/4"	7651	1
SEALS FOR SOLID COLLETS — DAVENPORT		
1/2" Standard, 3/4" Oversize	7645	2
SEALS FOR SOLID COLLETS — GARVIN		
103A	7647	1
SEALS FOR SOLID COLLETS — GILDEMEISTER		
AS16, AS20, GS20, GM20	7645	2
AS20, GS20	7653	2
AS20-25, GS25-25	7653	2
GM32, GS32, AS32, AV32	7643	1
GM32/6	7643	1
AV48, AS48, AA48	7643	1
AV67, AS67	7643	1

Machine Capacity / Model	Hardinge Part Number	Figure
SEALS FOR SOLID COLLETS — GREENLEE		
1", 1 1/4", 1 1/2"	7647	1
1 5/8", 2", 2 5/8"	7649	1
2 1/4", 3 1/8", 3 3/8"	7651	1
SEALS FOR SOLID COLLETS — HERBERT		
0	7645	2
2D	7647	1
4, 7	7651	1
SEALS FOR SOLID COLLETS — INDEX		
12, ON12, OR12, 18	7645	2
B42	7647	1
B60	7649	1
20, 25, B30	7653	2
SEALS FOR SOLID COLLETS — NATIONAL ACME		
9/16"	7653	2
SEALS FOR SOLID COLLETS — NEW BRITAIN		
410, 413, 605, 60-1", 1-5/8", 204, 407, 61	7647	1
415	7649	1
SEALS FOR SOLID COLLETS — ORTLEIB		
1 5/8"	7649	2
SEALS FOR SOLID COLLETS — SMART & BROWN		
L16	7645	1
SEALS FOR SOLID COLLETS — TAREX		
1	7649	2
SEALS FOR SOLID COLLETS — WARD		
7	7651	2
SEALS FOR SOLID COLLETS — WARNER & SWASEY		
2, 3 (1 1/2" capacity)	7647	2
3 (3/4" capacity)	7649	2
2AB, 1 3/4", 2 1/4"	7651	2
1"	7653	1
SEALS FOR SOLID COLLETS — WICKMAN		
1 3/4", 3 1/4"	7649	2
1 3/8", 2 1/4"	7651	2
5/8"	7653	1
2 5/8"	7651	1





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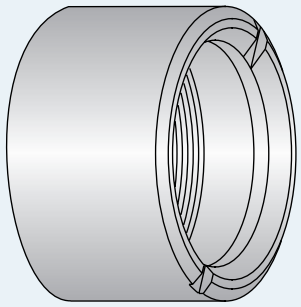
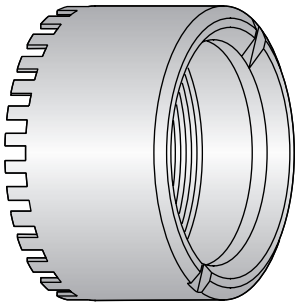
Accessories for Collets & Feed Fingers

HARDINGE

Style	Hardinge Part Number	Figure	Machine Size and Manufacturer
UNSLOTTED LOCKING CAPS for AF-Style Feed Fingers			
AF10	7217	1	10 B & S, 10A B & S, 7/16" Gridley, 9/16" Gridley, ON12 Index
SLOTTED LOCKING CAPS for AF-Style Feed Fingers			
AF3	7203	2	11 B & S, 11A B & S, 18 Index, 5/8" Wickman
AF3	7205	2	1/2" Standard Davenport
AF4	7207	2	21A B & S
AF4	7209	2	3/4" Oversize Davenport, 25 Index
AF6	7211	2	22 B & S
AF6	7213	2	1" Old Style Cone, 1" Greenlee, 1" Gridley, 1" NB
AF7	7215	2	22D B & S, 22H B & S, 1 1/4" Cone, 1 1/2" Cone, 1 1/4" Gridley, B42 Index, 1 1/4" W & S, 1 3/8" Wickman
AF16	7219	2	1 5/8" B.S.A, 1 5/8" Cone, 1 5/8" Acme-Gridley, 1 5/8", #41, #61 New Britain 1 5/8" Wickman

① 

② 

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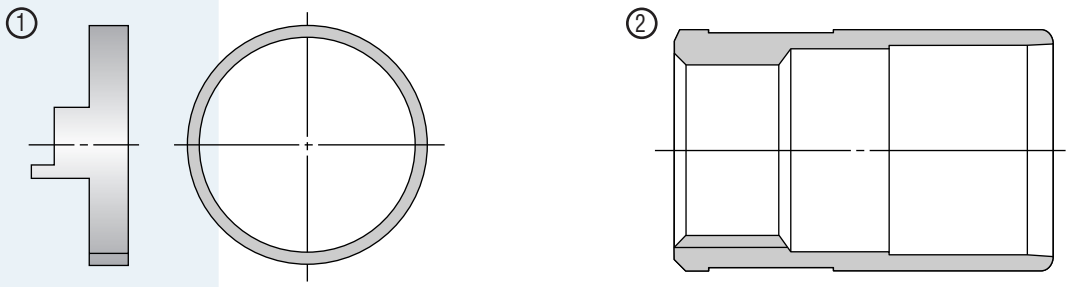
Accessories for Collets & Feed Fingers

HARDINGE

Style	Hardinge Part Number	Figure	Machine Size and Manufacturer
LOCKING SPRINGS for AF-Style Feed Fingers			
AF3	7251	1	11 B & S, 11A B & S, ½" Standard Davenport, 18 Index, ⅝" Wickman
AF4	7253	1	21A B & S, ¾" Oversize Davenport, 25 Index
AF6	7255	1	22 B & S, 1" Old Style Cone, 1" Greenlee, 1" Gridley, 1" NB
AF7	7257	1	22D B & S, 22H B & S, 1¼" Cone, 1½" Cone, 1¼" Gridley, B42 Index, 1¼" W & S, 1⅜" Wickman
AF16	7259	1	1⅝" B.S.A, 1⅝" Cone, 1⅝" Acme-Gridley, 1⅝", #41, #61 New Britain 1⅝" Wickman
SLEEVES FOR ADJUSTABLE TENSION AF-STYLE MASTER FEED FINGERS			
B1X	6017	2	00 B & S
B10X	6027	2	10 B & S
B3X	6041	2	11 B & S
DA-2X	6167	2	½" Standard Davenport

① ②



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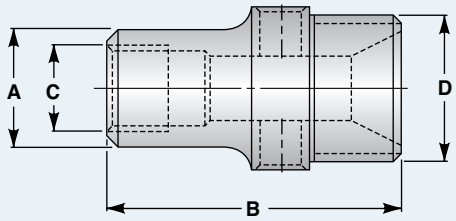
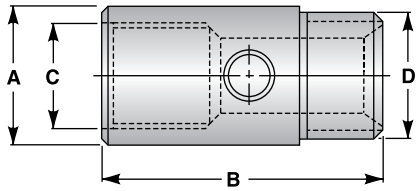
Accessories for Collets & Feed Fingers

HARDINGE

Adapts From — To	Hardinge Part Number	Figure	Dimensions A Back Bearing Diameter	B Overall Length	C Internal Thread	D External Thread
ADAPTERS FOR ACME-GRIDLEY						
1" Acme to 11 B & S	7523	1	1.370" (34.80)	2.437" (61.90)	.687" x 20 LH	1.247" x 20 LH
1¼" Acme to 11 B & S	7525	1	1.545" (39.24)	3.625" (92.08)	.687" x 20 LH	1.435" x 20 LH
1⅝" Acme to #60-1" NB	7527	1	2.030" (51.56)	1.343" (34.11)	1.187" x 24 LH	1.872" x 20 LH
ADAPTERS FOR BROWN & SHARPE						
10 B & S to 00 B & S	MP3484	2	.630" (16.02)	.875" (22.23)	.417" x 32 LH	.560" x 20 LH
10A B & S to 10 B & S	7501	2	.675" (17.15)	1.437" (36.50)	.562" x 20 LH	.623" x 32 LH
10AA B & S to 11 B & S	7503	2	.940" (23.88)	1.312" (33.32)	.687" x 20 LH	.873" x 32 LH
10AA B & S to 11A B & S	7505	2	.940" (23.88)	1.312" (33.32)	.813" x 20 LH	.873" x 32 LH
21A B & S to 11A, 11AA B & S	7531	2	.985" (25.02)	2.250" (57.15)	.812" x 20 LH	.935" x 20 LH
22 B & S to 11 B & S	7507	2	1.300" (33.02)	3.000" (76.20)	.687" x 20 LH	1.185" x 20 LH
22A B & S to 11 B & S	MP3201	2	1.425" (36.20)	3.500" (88.90)	.687" x 20 LH	1.310" x 20 LH
22D B & S to 22 B & S	7509	2	1.785" (45.34)	1.406" (35.71)	1.187" x 20 LH	1.687" x 20 LH
22D B & S to #60-1" NB	7511	2	1.785" (45.34)	1.312" (33.32)	1.187" x 24 LH	1.685" x 20 LH
22H B & S to 11 B & S	7513	2	1.515" (38.48)	3.000" (76.20)	.687" x 20 LH	1.435" x 20 LH
ADAPTERS FOR CONE						
1" Cone to 11 B & S	MP3203	1	1.245" (31.62)	1.500" (38.10)	.687" x 20 LH	1.122" x 24 LH
1¼" Cone to 11 B & S	7515	1	1.535" (38.99)	1.750" (44.45)	.687" x 20 LH	1.434" x 24 LH
1½" Cone to #60-1" NB	7517	1	1.815" (46.10)	1.500" (38.10)	1.187" x 24 LH	1.684" x 24 LH
1⅝" Cone to #60-1" NB	7519	1	1.940" (49.28)	1.500" (38.10)	1.187" x 24 LH	1.872" x 20 LH
ADAPTERS FOR DAVENPORT						
¾" OS Dav. to ½" Std. Dav.	7521	1	.990" (25.15)	1.000" (25.40)	.708" x 20 RH	.938" x 32 RH
¾" OS Dav. Rear Booster to B3X B & S	7533	1	1.312" (33.32)	.875" (22.23)	.687" x 20 LH	1.000" x 32 LH
ADAPTERS FOR GREENLEE						
⅞" Greenlee to 11 B & S	MP3205	1	1.410" (35.81)	2.250" (57.15)	.687" x 20 LH	1.185" x 20 LH
1" Greenlee to 11 B & S	MP3204	1	1.475" (37.47)	2.250" (57.15)	.687" x 20 LH	1.310" x 20 LH
ADAPTER FOR NEW BRITAIN						
1" NB to 11 B & S	7529	1	1.265" (32.13)	2.250" (57.15)	.687" x 20 LH	1.185" x 24 LH

NOTE: Millimeters in parentheses.

① 

② 

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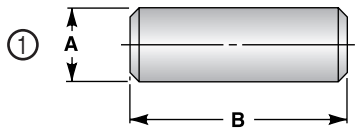
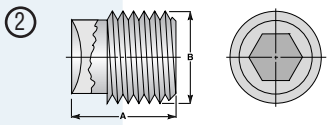
Accessories for Collets & Feed Fingers

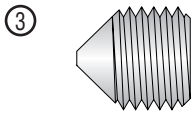
HARDINGE

Description	Hardinge Part Number	Figure	Dimensions A	Dimensions B
PINS FOR EMERGENCY COLLETS, PADS, AND STEP CHUCKS			Diameter	Overall Length
Pin	7723	1	1/8" (3.18)	3/8" (9.53)
Pin	7725	1	3/16" (4.76)	3/8" (9.53)
Pin	7727	1	3/16" (4.76)	1/4" (6.35)
Pin	7729	1	3/16" (4.76)	5/16" (7.94)
Pin	7731	1	1/8" (3.18)	3/4" (19.05)
SCREWS FOR STYLE "CB" AND "CT" MASTER COLLETS			Overall Length	Thread
STYLE — "CB"				
CB10	7711	2	9/32" (7.14)	1/4" x 28 RH
CB12, CB16	7713	2	11/32" (8.73)	5/16" x 24 RH
CB20, CB26, CB35, CB40	7715	2	5/8" (15.88)	3/8" x 24 RH
STYLE — "CT"				
CT10	7767	3	.290" (7.37)	#8 x 32 RH
CT12, CT16, CT20	7769	3	.285" (7.24)	#10 x 32 RH
CT26	7771	3	.578" (14.68)	1/4" x 28 RH
CT35	7773	3	.710" (18.03)	3/8" x 16 RH
CT40	7775	3	.705" (17.91)	5/16" x 18 RH

NOTE: Millimeters in parentheses.
Screws sold individually.







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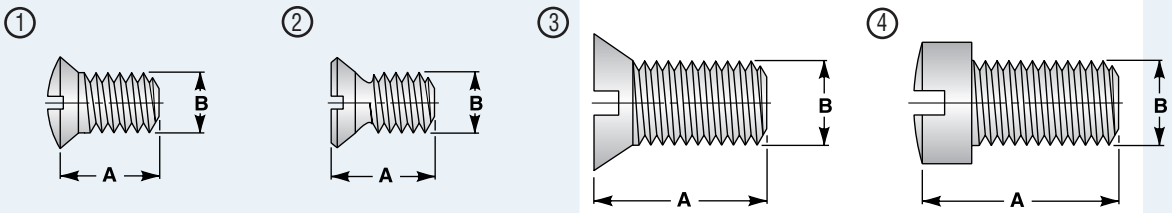
Accessories for Collets & Feed Fingers

HARDINGE

Description	Hardinge Part Number	Figure	Dimensions A Overall Length	B Thread	C Head Diameter
SCREWS FOR CONVENTIONAL MASTER FEED FINGER PADS					
Slotted Pad Screw	7691	1	3/8" (9.53)	#10 x 24 RH	
Slotted Pad Screw	7693	1	1/2" (12.70)	5/16" x 18 RH	
Slotted Pad Screw	7695	1	1/2" (12.70)	5/16" x 24 RH	31/64" (12.30)
Slotted Pad Screw	7697	1	1/2" (12.70)	5/16" x 24 RH	15/32" (11.91)
Slotted Pad Screw	7699	1	1/2" (12.70)	3/8" x 16 RH	
Slotted Pad Screw	7701	1	17/32" (13.50)	7/16" x 20 RH	
Slotted Pad Screw	7703	2	11/32" (8.73)	19/64" x 20 RH	
Slotted Pad Screw	7705	3	7/8" (22.23)	7/16" x 14 RH	
Slotted Pad Screw	7707	2	5/16" (7.94)	19/64" x 20 RH	
Slotted Pad Screw	7709	2	7/16" (11.11)	5/16" x 18 RH	
SCREWS FOR CONVENTIONAL MASTER COLLET PADS					
Slotted Pad Screw	7661	4	5/8" (15.88)	1/4" x 20 RH	
Slotted Pad Screw	7663	4	5/8" (15.88)	1/4" x 24 RH	
Slotted Pad Screw	7665	4	5/8" (15.88)	5/16" x 18 RH	
Slotted Pad Screw	7667	4	5/8" (15.88)	5/16" x 24 RH	
Slotted Pad Screw	7669	4	3/4" (19.05)	3/8" x 16 RH	
Slotted Pad Screw	7671	4	3/4" (19.05)	3/8" x 18 RH	
Slotted Pad Screw	7673	4	7/8" (22.23)	3/8" x 18 RH	
Slotted Pad Screw	7675	4	3/4" (19.05)	3/8" x 24 RH	
Slotted Pad Screw	7677	4	7/8" (22.23)	3/8" x 24 RH	
Slotted Pad Screw	7679	4	1" (25.40)	1/2" x 20 RH	
Slotted Pad Screw	7681	4	15/32" (11.91)	1/4" x 28 RH	
Slotted Pad Screw	7683	4	5/8" (15.88)	#10 x 24 RH	

NOTE: Millimeters in parentheses.
Screws sold individually.



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Custom Application

Manufacturing

HARDINGE®

EXPECT MORE™

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Custom Quote Request – 1 of 3

To place your order or Request a Quote simply fill out this form and send the requested information below. All of this information is necessary for us to process your order quickly. Checking the box in front of each item will help to ensure everything is complete before sending the information to us. The following two pages will assist you in choosing your collet configuration.

- ❑ Your Name _____
- ❑ Company _____
- ❑ Address _____
- ❑ City, State & Zip _____
- ❑ Phone _____
- ❑ Fax _____

- ❑ Machine Make and Model Number on which workholding will be used:
  (Example: 1-1/4" Acme)
- ❑ Collet Required:
  (Example: 1-1/4" Acme, etc.)
- ❑ Spindle Nose:
  (Example: A2-5, A2-8, etc.)

- ❑ **Sample Stock** (6" long - extruded stock), casting, first operation part, finished part
- ❑ **Legible Prints** of the stock, finished part. These must be marked to show the diameters or surfaces to be gripped. Mark the locating surface used for length control. Please mark the surfaces to be machined.
- ❑ **AutoCad Files** or dxf files of the above, if available.
- ❑ **Written Explanation** of any special requirements:
  For example special concentricity or perpendicularity requirements, concerns with chip flushing, requirements for thru-spindle coolant, customer concerns with part being deformed by gripping, large variation of gripping surface or locating dimensions, etc.

Explanation:

_____

_____

_____

_____

_____

_____

_____

_____

— This page may be duplicated —

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Custom Quote Request – 2 of 3

Type of Collet or Special:

(example: 1-1/4" Acme, etc.)

- Fill in the Type of Collet or Special (example 1-1/4" Acme)
- Find the illustration of the feature needed in one of the boxes
- Put a Bold "X" in the box to indicate that feature
- Write the required dimensions next to their numbers in the chart to the right

Note: Only fill in the dimensions for the numbers on one illustration

Today's Date _____
Date Order Required _____
Customer Number _____
Purchase Order Number _____
Method of Shipping _____

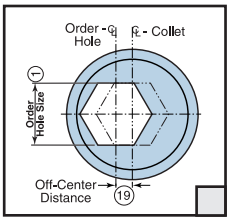
Bill To:
Name _____
Title/Dept. _____
Company _____
Address _____
City, State, Zip _____
Phone _____ Fax _____

Ship To: (If different from Bill To)
Name _____
Title/Dept. _____
Company _____
Address _____
City, State, Zip _____
Phone _____ Fax _____

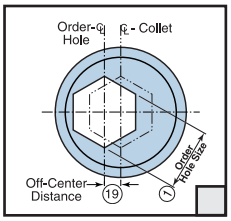
Numbers below correspond to dimensions in boxes

(1) Order Hole Size: _____
(2) Order Hole, 2nd: _____
(3) Number of Slots: _____
(4) Radius: _____
(5) Bearing Length: _____
(6) Bearing Length Front: _____
(7) Back Drill Dia.: _____
(8) Relief Dia.: _____
(9) Relief Length: _____
(10) Depth of Step, 1st: _____
(11) Depth of Step, 2nd.: _____
(12) Auxiliary Hole Size: _____
(13) Length of Extension: _____
(14) Dia. at Face: _____
(15) Degrees Taper/Chamfer: _____
(16) Front Dimension of Taper: _____
(17) Rear Dimension of Taper: _____
(18) Taper-Industrial Std: _____
(19) Off Center Distance: _____
(20) Order Hole - Width: _____
(21) Order Hole - Length: _____
(22) Thread Length: _____
(23) Threads Per Inch: _____
(24) Right/Left Hand Thrd.: _____
(25) Class Thread (1), (2), (3): _____
(26) Chamfer Depth: _____
(27) Inscribed Circle: _____
(28) Circumscribed Circle: _____
(29) Clearance Bore: _____
(30) Actuator Stroke: _____

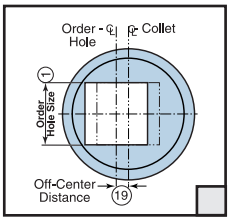
Hexagon Eccentric to Corner



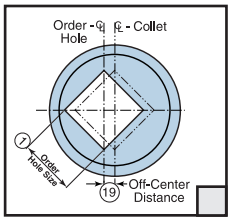
Hexagon Eccentric to Flats



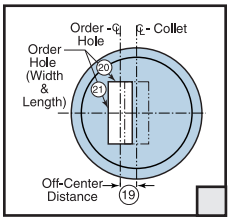
Square Eccentric to Flats



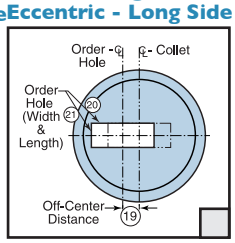
Square Eccentric to Corner



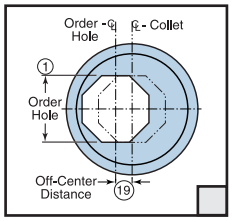
Rectangular Eccentric - Short Side



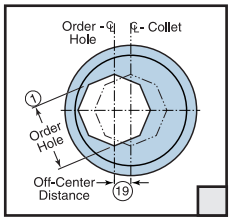
Rectangular Eccentric - Long Side



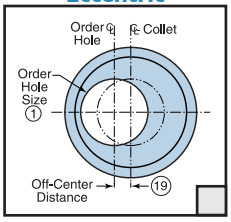
Octagon Eccentric to Flat



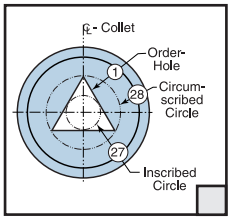
Octagon Eccentric to Corner



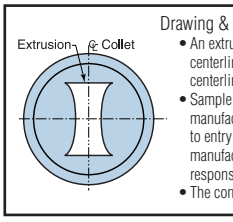
Round Eccentric



Triangular



Special Extruded Shape



Drawing & Sample Stock Required

- An extrusion drawing must indicate the centerline of the shape in relationship to the centerline of the collet.
- Sample stock required.* If not available, manufacturing authorization is required prior to entry of order. If approved, item(s) will be manufactured with customer assuming full responsibility.
- The confirming order.

*One 6" length of stock required when ordering 1 to 3 collets; two 6" lengths for 4 to 7 collets; three 6" lengths for 8 to 11 collets; four 6" lengths for 12 to 15 collets ordered.

Send Drawings, Sample Parts and this form to:

Hardinge Inc.
Collet Sales Dept.
One Hardinge Drive
Elmira, New York 14902-1507

Phone: 800-843-8801
Fax: 607-734-3886
Email: info@hardingetooling.com
Canada: 800-468-5946
Other countries: 607-378-4022
International Fax: 607-734-1701

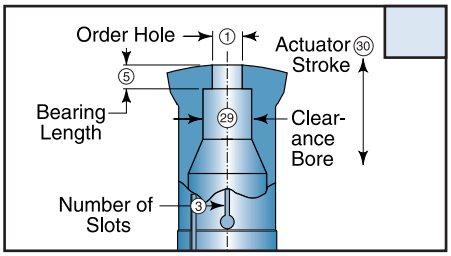
Return Material Authorization (RMA#) required for Hardinge to receive your Sample Part

To Order Contact: Exact Tooling / www.exacttooling.com / sales@exacttooling.com / 888-988-8820

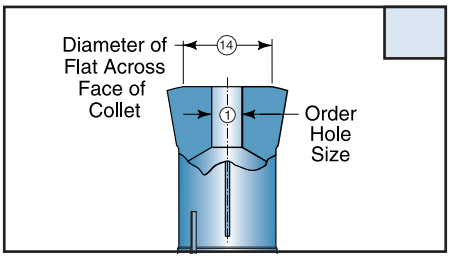
Custom Quote Request – 3 of 3

Check mark the box with the feature you require and record the dimensions on the corresponding lines 1-30 on the previous page.

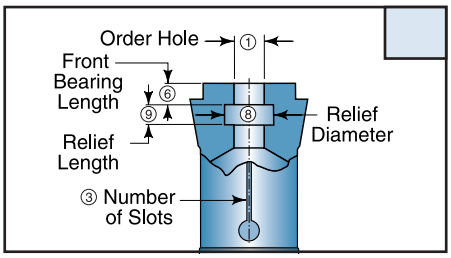
Over-the Shoulder



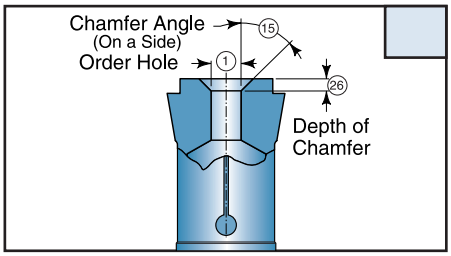
Flat Face



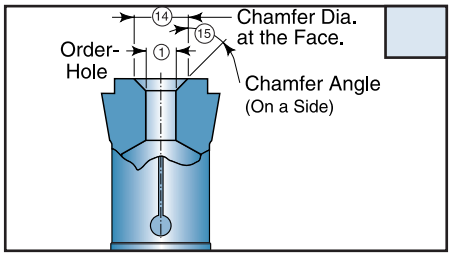
Bearing Relief



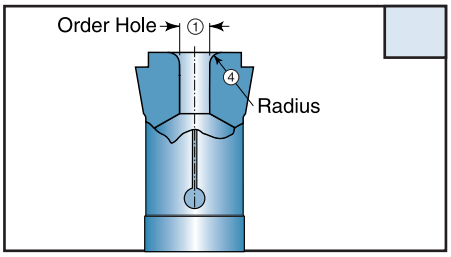
Chamfer - Depth



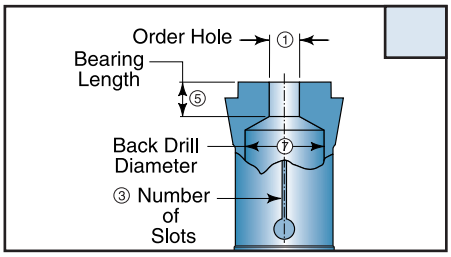
Chamfer - Diameter



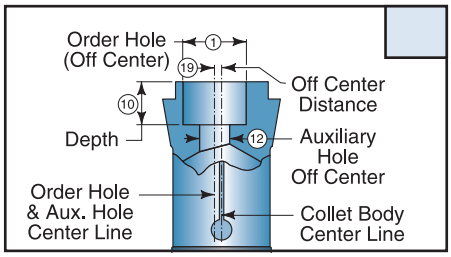
Radius



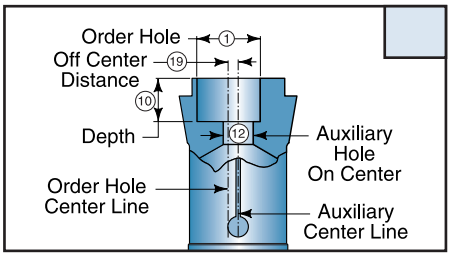
Special Bearing Length



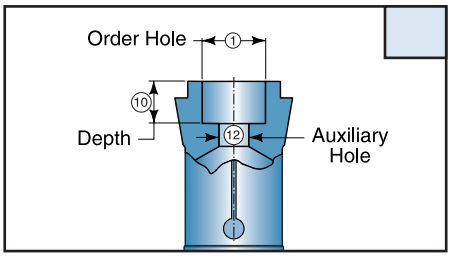
Eccentric Step - Aux. Off Center



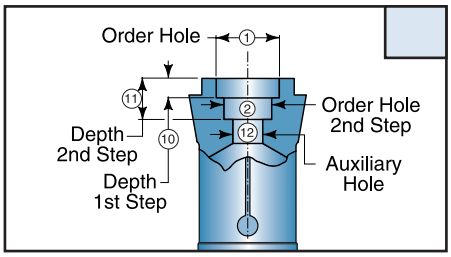
Eccentric Step - Aux. On Center



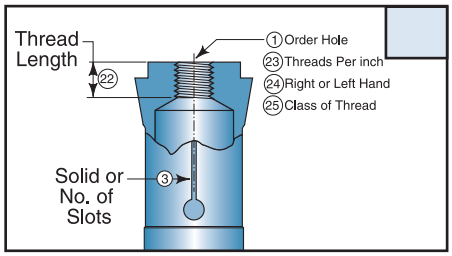
Single-Stepped



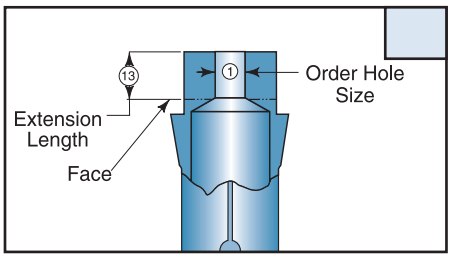
Double-Stepped



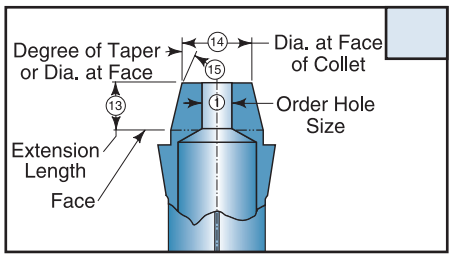
Threaded Order Hole



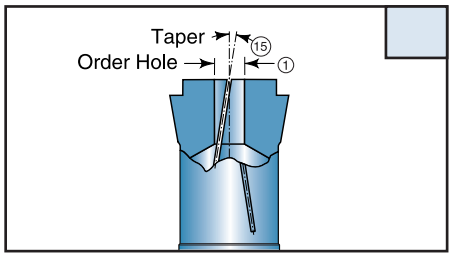
Extended Nose - Straight



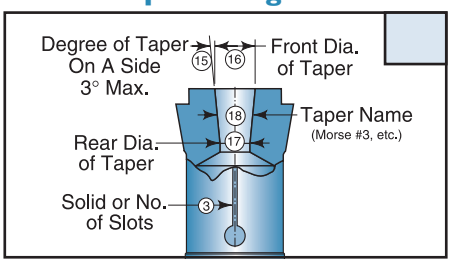
Extended Nose - Tapered



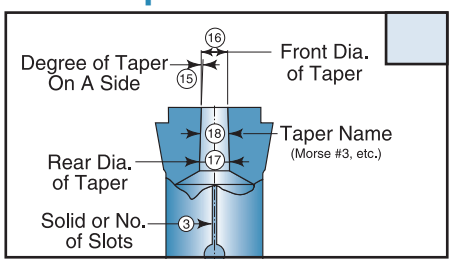
Angular Slotted



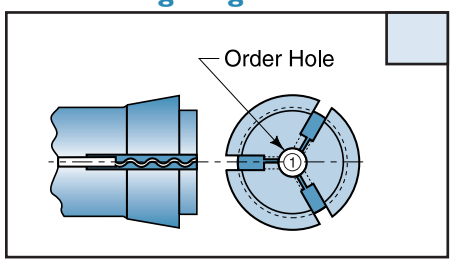
Taper - Regular



Taper - Reverse



Zig-Zag Slots



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Catalog Index

COLLETS AND FEED FINGERS

ACME GRIDLEY

Machine	Style	Part #	Pg
Burring Collets			
7/16" – RA6 Burring – Mechanical		4003	14
7/16" – RAN6 Air Operated [AH2570]		4005	14
5/16", 5/8" – Air Operated [AJ2450]		4015	14
5/8" – RN6 2nd Generation [AK2920]		4083	14
3/4" – RA8 – Air Operated [AL2450]		4069	14
1" – RA6 Mechanical		4037	14
1" – RA6, RAN6 – Air Operated [AO2450]		4039	14
1" – RA6, 2nd Generation [AO2920]		4079	14
1 1/4" – R6, RA6, RB6, RB8, G4, GA4 Air Operated [JM2450]		4045	14
1 1/4", 1 3/8" – AG6 – [JM2929]		4085	14
Collets – Solid			
7/16" – RA6		4001	4
5/16" – G, R6 (Prior 22068) Ext Thread		4011	4
9/16" – R6 (After 22068), RA6, C Int Thread		4013	5
5/8" – RN6		4021	5
3/4" – F – Push Out		MP1085	5
3/4" – RA8 – Draw In		4027	6
7/8" – F – Push Out		MP1086	6
7/8" – G, R, R4, RA4 – Draw In		4031	6
1" – C, R, R4, R6, RA, RA4, RA6, RAN6, RAS6		4035	7
1 1/4" – G, G4, GA4, R, R6, RA, RA4, RA6, RB6, RB8		4043	8
1 3/8" – G, GA, R, R4, RA, RA4, RAS4		4065	9
1 1/4", 1 3/8" – AG6		4289	9
1 1/2" – GA		MP1768	9
1 5/8" – C, G, GA, GA4, R, R4, R6, RA, RA4, RA6, RA8, RAS4, RB, RB6 RB8		4051	10
1 3/4" – G, GAR, R		MP1109	11
2" – B, R, R4, R6, RA, RA4, RA6, RAS, RAS4, RAS6, RB, RB6, RL		4067	11
2 1/4" – B, G, R, R4, R6, R8, RA, RA4, RA6, RA8, RL		4057	11
2 5/8" – G, G4, GA4, GR, R, R4, RA, RA4, RB4 – External Thread		4089	12
2 5/8" – M, R, R6, R8, RA, RA6, RA8, RB6, RB8 – Internal Thread		4059	12
2 7/8" – C, G, GA		MP1438	12
3" – GA, R, R4, RA4, RA6		MP1114	13
3 5/16" – B, GA, R, R4		MP1963	13
3 1/2" – G, GA, R4		MP2587	13
3 1/2" – M, MR, R6, R8, RA, RA4, RA6, RB4, RB6, RB8		4063	13
4" – RB6, RB8		4173	14
Collets – Style "S"			
1" – RA, R, RAN6Y, ACME C	S10	5101	7
1 1/4" – RA6, G	S12	5103	8
1 3/8" – RA4, G	*S15	5105	9
1 1/2" – GA	S15	5001	9
1 5/8" – RA4, RA6, R4, R6, GA	S16	5107	10
2" – R4, RA4, RA6	S20	5109	11
2 1/4" – R, R6	S22	5111	11
2 5/8" – RA6, RB6, RB8	*S26	5113	12
2 5/8" – R, RA, RB4, G, GA4	S26	5119	12
3 1/2" – RA4, RA6, RB4, RB6, RB8	*S35	5115	13
3 1/2" – GA, R4	S35	MP2730	13
4" – RB6, RB8	S40	5117	14
Collets – Style "CB"			
1" – R, RA4, RA6, RAS6, C	CB10	2101	7
1 1/4" – RA4, RB6, RB8, G, GA4	CB12	2103	8
1 5/8" – R, RA, RA4, RA6, RA8, C	CB16	2105	10
2" – R4, RA4, RA6	CB20	2107	11
2 5/8" – R, RA, RB6, RB8, M	CB26	2109	12
3 1/2" – RA, RB4, RB6, M, MR	CB35	2111	13
4" – RB6, RB8	CB40	2113	14
Collets – Style "CT"			
1" – R, RA4, RA6, RAS6, C	CT10	2115	7
1 1/4" – RA4, RB6, RB8, G, GA4	CT12	2117	8
1 5/8" – R, RA, RA4, RA6, RA8, C	CT16	2119	10
2" – R4, RA4, RA6	CT20	2121	11
2 5/8" – R, RA, RB6, RB8, M	CT26	2123	12
3 1/2" – RA, RB4, RB6, M, MR	CT35	2125	13
4" – RB6, RB8	CT40	2127	14
Collets – Martin			
1" – R, RA4, RA6, RAS6, C	M10	5425	7
1 1/4" – RA4, RB6, RB8, G, GA4	M12	5427	8
1 5/8" – R, RA, RA4, RA6, RA8, C	M16	5431	10
2 5/8" – R, RA, RB6, RB8, M	M26	5437	12
3 1/2" – RA, RB4, RB6, M, MR	*M35	5439	13
Feed Fingers – Solid			
7/16" – RA6		4007	4
7/16" – RA6 Sweat-In		4009	4
9/16" – G, R6 [Prior 22068] Ext. Thrd.		4017	4
9/16" – G, R6 [Prior 22068] Sweat-In		4019	4
9/16" – R6 [After 22068], RA6, C - Int. Thrd.		4017	5
9/16" – R6 [After 22068], RA6, C - Sweat-In		4019	5
5/8" – RN6		4025	5
3/4" – F – Push Out		MP1394	5
3/4" – RA8 – Draw In		4029	6
7/8" – R, G – Draw In		4033	6
7/8" – F – Push Out		MP1396	6
1" – C, R, RA6, RAN6		4041	7
1 1/4" – RA6, G		4047	8
1 3/8" – G, GA, R, RA, RAS4		4049	9
1 1/4", 1 3/8" – AG6		4504A	9
1 5/8" – C, G, R		4053	10
1 3/4" – G		MP1402	11
2" – R4, RA4, RA6		4055	11
2 1/4" – R, R6		MP2272	11
2 5/8" – RA6, RB6, RB8		MP1405	12
2 7/8" – C, G, GA		MP1406	12
3" – GA, R, R4, RA4		MP2136	13
3 5/16" – B, GA, R, R4		MP1964	13
3 1/2" – RA4, RG6, RB4, 6, 8		4061	13
4" – RB6, RB8		4239	14
Feed Fingers – Style "B"			
7/16" – RA6	B10	6221	4
9/16" – RA6 Acme C	B2	6223	5
5/8" – RN6	B3	6225	5
3/4" – F – Push Out	B4	6227	5
3/4" – RA8 – Draw In	B4	6229	6
7/8" – R, G – Draw In	*B5	6231	6
7/8" – F – Push Out	B5	6233	6
1" – C, R, RA6, RAN6	*B6	6235	7
1 1/4" – RA6, G	*B7	6237	8
1 3/8" – G, GA, R, RA, RQAS4	*B7	6241	9
1 1/2" – GA	B8	MP2906	9
1 5/8" – RA4, 6, 8	B8	6245	10
1 5/8" – RA4, 6, 8, R4, 6, GA	B16	6247	10
1 3/4" – G	B8	MP2907	11
1 3/4" – G	B20	MP2917	11
1 3/4" – G	B20	MP2772	11
2" – R4, RA4, RA6	B20	6249	11
2 1/4" – R, R6	B22	6251	11
2 5/8" – RA6, RB6, RB8	*B26	6137	12
3 1/2" – RA4, RG6, RB4, RB6, RB8	*B35	6253	13
3 1/2" – GA, R4	B35	6009	13
Feed Fingers – Style "A"			
1" – R, RA4, RA6, RAS6, C	A10	6425	7
1 1/4" – RA4, RB6, RB8, G, GA4	*A12	6443	8
1 5/8" – R, RA, RA4, RA6, RA8, C	A16	6429	10
2 5/8" – R, RA, RB6, RB8, M	*A26	6449	12
3 1/2" – RA, RB4, RB6, M, MR	*A35	6453	13
Feed Fingers – Squirrel Cage			
7/16" – RA6	Steel	4007-88	15
9/16" – G, R6 [Prior 22068] Ext. Thrd.	Steel	4017-88	15
5/8" – RN6	Steel	4025-88	15
3/4" – RA8 – Draw In	Steel	4029-88	15
1" – C, R, RA6, RAN6	Steel	4041-88	15
1 1/4" – RA6, G	Steel	4047-88	15
1 3/8" – G, GA, R, RA, RAS4	Steel	4049-88	15
2" – R4, RA4, RA6	Steel	4055-88	16
2 5/8" – RA6, RB6, RB8	Steel	4201-88	16
3 1/2" – RA4, RA6, RB4, 6, 8	Steel	4061-88	16
Feed Fingers – Stock-Savers			
7/16" – RA6	Steel	4007-88	15
9/16" – G, R6 [Prior 22068] Ext. Thrd.	Steel	4017-88	15
5/8" – RN6	Steel	4025-88	15
3/4" – RA8 – Draw In	Steel	4029-88	15
1" – C, R, RA6, RAN6	Steel	4041-88	15
1 1/4" – RA6, G	Steel	4047-88	15
1 3/8" – G, GA, R, RA, RAS4	Steel	4049-88	15
2" – R4, RA4, RA6	Steel	4055-88	16
2 5/8" – RA6, RB6, RB8	Steel	4201-88	16
3 1/2" – RA4, RA6, RB4, RB6, RB8	Steel	4061-88	16
Feed Fingers – Style "AF"			
7/16" – RA6	AF10	7055	7365	4
9/16" – RA6	AF10A	7057	7367	5
1" – R & C	AF6	7059	7361	7
1 1/4" – R & G	AF7	7061	7363	8
1 5/8" – R & C	AF16	7063	7369	10

BARDONS & OLIVER - TURRET LATHE

Machine	Part #	Pg
Collet – Solid		
#0	2511	105
#1	2501	105
#3	MP2011	105
#3	MP2506	105
#3 1/2	MP1349	105
#4	2505	105
#4 – Emergency	MP2535E	105
#4 1/2	2507	105
#5	2509	105
#6	MP1046	105
#7	MP1048	105
#8	MP2338	105
#8	MP2647	105
#10	MP3014	105

Collet – Conventional Masters & Pads

Machine	Part#	Pad#	Pg
2 7/8"	4337	MP3030	106
#3	MP2433	5717	106
#3	MP2866	MP3562	106
3 1/4"	MP2379	MP3146	106
#5	MP3017	5717	106
#7	4331	MP2465	106
#7	MP2463	MP2465	106
#7	4333	MP2524	106
#8	MP1868	MP1933	106
#10	MP3015	2667A	106

Collet – Emergency Pads

#3	5719	106
#5	5719	106
#7	5721	106
#7	MP2524E	106

BROWN & SHARPE

Machine	Style	Part #	Pg
Burring Collets			
Burring	00G	3005	48
Burring	0G	3059	48
Burring	2G	3113	48
Collet – Solid			
3/8" – #00, #00G	00	3003	18
3/8" – #00, #00G	00Y	3001	18
3/8" – #00, #00G	00B	MP1124	18
3/8" – #2G	22	3111	19
3/8" – #2G	22Y	3109	19
3/8" – #2G	22SC	3227	19
1/2" – #00, #00B, #00C, #00G	10	3033	20
1/2" – #00, #00B, #00C, #00G	10Y	3031	20

*Also interchangeable with other machines

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½" – #00, #00B, #00C, #00G 10SC 3213 20

BROWN & SHARPE (cont'd)

Machine	Style	Part #	Pg
½" – #00, #00B, #00C, #00G	10SCY	3211	20
⅝" – #0, #0G	11	3057	21
⅝" – #0, #0G	11Y	3055	21
⅝" – #0, #0G	11SC	3217	21
⅝" – #0, #0G	11SCY	MP3591	21
⅝" – #0, #0G	11B	3067	21
⅝" – #2G	22	3111	22
⅝" – #2G	22Y	3109	22
⅝" – #2G	22SC	3227	22
¾" – #0, #0G, #00B, #2	11	3057	22
¾" – #0, #0G, #00B, #2	11Y	3055	22
¾" – #0, #0G, #00B, #2	11SC	3217	22
¾" – #0, #0G, #00B, #2	11SCY	MP3591	22
¾" – #0, #0G, #00B, #2	11C	3071	22
¾" – #0, #0G, #00B, #2	11B	MP1727	22
¾" – #00	11	3057	23
¾" – #00	11C	3071	23
¾" – #00	11SC	3217	23
¾" – #00	11Y	3055	23
¾" – #00	11SCY	MP3591	23
1" – #2, #2G	22	3111	24
1" – #2, #2G	22Y	3109	24
1" – #2, #2G	22SC	3227	24
1⅛" – #2, #2G	22B	3121	25
1¼" – #2, #2G	22C	3125	25
1⅜" – #2, #2G (1⅝" Spindle)	22A	3117	25
1⅜" – #2, #2G (1⅞" Spindle)	22B	3121	25
1½" – #2, #2G	22	3111	26
1½" – #2, #2G	22Y	3109	26
1½" – #2, #2G	22SC	3227	26
1½" – #2, #2G	22C	3125	26
1½" – #2, #2G	22D	3127	26
1⅝" – #2 Ultramatic	22	3111	28
1⅝" – #2 Ultramatic	22Y	3109	28
1⅝" – #2 Ultramatic	22SC	3227	28
1⅝" – #2 Ultramatic	22D	3127	28
1⅞" – #4 Automatic	24	3167	30
2⅜" – #3 Ultramatic	23	3725	30
2⅜" – #3 Ultramatic – Outside	23A	3147	30
2⅜" – #4, #6 Automatic	26	3187	32
Wire Feed			
⅜" – #0 Wire	10	3033	33
⅜" – #0 Wire	10Y	3031	33
⅜" – #0 Wire	10SC	3213	33
⅜" – #0 Wire	10SCY	3211	33
⅝" – #0 Wire	10B	3041	34
⅜" – #1 Wire	21	3089	35
⅜" – #1 Wire	21Y	3087	35
⅜" – #1 Wire	21SC	3221	35
⅜" – #1 Wire	21SCY	3219	35
⅝" – #1 Wire	21	3089	36
⅝" – #1 Wire	21Y	3087	36
⅝" – #1 Wire	21SC	3221	36
⅝" – #1 Wire	21SCY	3219	36
¾" – #1 Wire	21	3089	37
¾" – #1 Wire	21Y	3087	37
¾" – #1 Wire	21SC	3221	37
¾" – #1 Wire	21SCY	3219	37
⅞" – #1 Wire	21	3089	37
⅞" – #1 Wire	21Y	3087	37
⅞" – #1 Wire	21SC	3221	37
⅞" – #1 Wire	21SCY	3219	37
⅜" – #2 Wire	22	3111	38
⅜" – #2 Wire	22Y	3109	38
⅜" – #2 Wire	22SC	3227	38
⅝" – #2 Wire	22	3111	38
⅝" – #2 Wire	22Y	3109	38
⅝" – #2 Wire	22SC	3227	38
1" – #2 Wire	22	3111	39
1" – #2 Wire	22Y	3109	39
1" – #2 Wire	22SC	3227	39
1⅛" – #2 Wire	22B	3121	39
1¼" – #2 Wire	22C	3125	40

BROWN & SHARPE (cont'd)

Machine	Style	Part #	Pg
Hand			
⅜" – #00 Hand	10	3033	41
⅜" – #00 Hand	10Y	3031	41
⅜" – #00 Hand	10SC	3213	41
⅜" – #00 Hand	10SCY	3211	41
½" – #00 Hand	10	3033	42
½" – #00 Hand	10Y	3031	42
½" – #00 Hand	10SC	3213	42
½" – #00 Hand	10SCY	3211	42
⅜" – #0 Hand	11	3057	43
⅜" – #0 Hand	11Y	3055	43
⅜" – #0 Hand	11SC	3217	43
⅜" – #0 Hand	11SCY	MP3591	43
⅝" – #0 Hand	11	3057	44
⅝" – #0 Hand	11Y	3055	44
⅝" – #0 Hand	11SC	3217	44
⅝" – #0 Hand	11SCY	MP3591	44
¾" – #0 Hand	11C	3071	44
⅜" – #2 Hand	22	3111	45
⅜" – #2 Hand	22Y	3109	45
⅜" – #2 Hand	22SC	3227	45
⅝" – #2 Hand	22	3111	46
⅝" – #2 Hand	22Y	3109	46
⅝" – #2 Hand	22SC	3227	46
1" – #2 Hand	22	3111	46
1" – #2 Hand	22Y	3109	46
1" – #2 Hand	22SC	3227	46
1¼" – #2 Hand	22C	3125	47
Stop Nut			
Burring Nut	00G	3005-36	48
Burring Nut	0G	3059-36	48
Burring Nut	2G	3113-36	48
Collet – Style "S"			
2⅜" – #3 Ultramatic	S16	5207	30
Feed Finger – Solid			
⅜" – #00, #00G	00A	3011	18
⅜" – #00, #00G	00	3009	18
⅜" – #00, #00G	00Y	3007	18
⅜" – #2G	10	3035	19
½" – #00, #00B, #00C, #00G	10	3035	20
½" – #00, #00B, #00C, #00G	10A	3037	20
⅝" – #0, #0G	11	3061	21
⅝" – #0, #0G	11A	3063	21
⅝" – #0, #0G	11AA	3065	21
⅝" – #2G	11AA	3061	22
¾" – #0, #0G, #00B, #2	21A	3095	22
¾" – #00	10	3035	23
¾" – #00	10A	3037	23
¾" – #00	10AA	3039	23
1" – #2, #2G	10	3035	24
1" – #2, #2G	11AA	3065	24
1" – #2, #2G	22	3115	24
1⅛" – #2, #2G	22A	3119	25
1¼" – #2, #2G	22H	3133	25
1⅜" – #2, #2G	22B	3123	25
1½" – #2, #2G	10	3035	26
1½" – #2, #2G	11AA	3065	26
1½" – #2, #2G	22	3115	26
1½" – #2, #2G	22H	3133	26
1½" – #2, #2G	22D	3129	26
1⅝" – #2 Ultramatic	10	3035	28
1⅝" – #2 Ultramatic	11AA	3065	28
1⅝" – #2 Ultramatic	22	3115	28
1⅝" – #2 Ultramatic	22H	3133	28
1⅝" – #2 Ultramatic	22D	3129	28
1⅝" – #2 Ultramatic	22DD	3131	28
1⅞" – #4 Automatic	24	3169	30
2⅜" – #3 Ultramatic	22	3115	31
2⅜" – #3 Ultramatic	22H	3133	31
2⅜" – #3 Ultramatic	22D	3129	31
2⅜" – #3 Ultramatic	22DD	3131	31
2⅜" – #3 Ultramatic	23	3153	31
2⅜" – #3 Ultramatic – Outside	23	3729	31
2⅜" – #4, #6 Automatic	26	3191	32

BROWN & SHARPE (cont'd)

Machine	Style	Part #	Pg
Wire Feed			
⅜" – #0 Wire	10	3035	33
⅝" – #0 Wire	11A	3063	34
⅜" – #1 Wire	10	3035	35
⅝" – #1 Wire	11A	3063	36
⅝" – #1 Wire	11AA	3065	36
⅝" – #1 Wire	21	3093	36
¾" – #1 Wire	21A	3095	37
⅞" – #1 Wire	—	3073	37
⅜" – #2 Wire	10	3035	38
⅝" – #2 Wire	11AA	3065	38
1" – #2 Wire	22	3115	39
1⅛" – #2 Wire	22A	3119	39
1¼" – #2 Wire	22H	3133	40
Hand			
⅜" – #00 Hand	10	3035	41
½" – #00 Hand	10A	3037	42
⅜" – #0 Hand	10	3035	43
⅝" – #0 Hand	11AA	3065	44
¾" – #0 Hand	21A	3095	44
⅜" – #2 Hand	10	3035	45
⅝" – #2 Hand	11AA	3065	46
1" – #2 Hand	22	3115	46
1¼" – #2 Hand	22H	3133	47
Feed Finger – Style "B"			
Machine	Style	Part#	Pg
00	B1	6011	18
00	B1X	6013	18
00A	B1	6019	18
10	B10	6021	19,23,24,26,28,33 35,41,43,45
10	B10X	6023	19,23,24,26,28,35 38,41,43,45
10A	B10	6029	20,23,42
10A	B10AM	6031	20,23,42
10AA	B4	6033	20,23
11	B3	6035	21
11	B3X	6037	21
11A	B3	6043	21,34,36
11A	B11	6045	21,34,36
12	B5	6047	37
21	B4	6049	36
21A	B4	6051	22,37,44
22	B6	6053	26,28,31,39,46
22A	B6	6055	25,39
B22D	B8	6057	26,28,31
22DD	B8	6059	28,31
22H	B7	6061	25,26,28,3,40,47,
23	B20	6063	31
26	B20	6067	32
Feed Finger – Style "AF"			
Machine	Style	Part #	Bush#	Pg
10	AF10	7005	7365	19,23,24,27,29 33,35,38,41,43,45
10A	AF10A	7007	7367	20,23,42
11	AF3	7009	7355	21
11A	AF3A	7011	7357	21,34,36
21A	AF4	7013	7359	22,37,44
22	AF6	7015	7361	24,27,29,31,39,46
22D	AF7	7017	7363	27,29,31
22H	AF7	7019	7363	25,27,29,31,40,47
Machine		Style	Part #	Pg
Ejector Collet Stop				
SE10		10SC	3249	49
SE11		11SC	3265	49
SE21		21SC	1057	49
SE22		22SC	3273	49
Solid Collet Stop				
SS10		10SC	3241	50
SS11		11SC	3259	50
SS21		21SC	1049	50
SS22		22SC	3269	50
Solid Stop				
LS21		21SC	1067	50

*Also interchangeable with other machines

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COLLETS AND FEED FINGERS

BROWN & WARD

Machine	Style	Part #	Pg
Collet – Solid			
⅝"		MP3563	51
¾"		MP3463	51

BSA

Machine	Style	Part #	Pg
Collet – Solid			
1 1/16" – #98		3301	51
1½" – #138		3305	51
2" – #168		3309	52
Collet – Style "S"			
1½" – #138	S15	5007	51
2" – #168	S20	5009	52
Feed Finger – Solid			
1 1/16" – #98		3303	51
1½" – #138		3307	51
1½" – #138 – Outside		MP3501	51
2" – #168		3311	52
2" – #168 – Outside		MP3885	52
Feed Finger – Style "B"			
1 1/16" – #98	B6	MP3699	51
1½" – #138	B16	6001	51
2" – #168	B20	6003	52

Feed Finger – Style "AF"

Machine	Style	Part No.	Bush No.	Pg
1½" – #138	AF16	7021	7369	51

CLEVELAND

Machine	Style	Part #	Pg
Collet – Solid			
⅜" – Push Out		4097	52
½" – Push Out		MP1073	52
9/16" – Push Out		MP2720	52
⅝" – Push Out		MP1074	53
⅞" – Push Out		4113	53
1 1/16" – Push Out		4117	53
1¼" – Push Out		4121	53
1⅜" – Push Out		4121	53
1½" – Push Out		4129	54
2" – Push Out		MP1081	54
2½" – AB – Draw In (10° Head Angle)		4133	54
2½" – Draw In (15° Head Angle)		MP2709	54
2½" – Push Out		MP1082	54
3" – 3AB – Draw In		MP3727	54
Collet – Convention Master			
2½" – Draw In (15° Head Angle)		4135	54
2½" – Push Out		MP1465	54
Feed Finger – Solid			
⅜" – Push Out		MP1265	52
½" – Push Out		4103	52
9/16" – Push Out		MP2721	52
⅝" – Push Out		MP1372	53
⅞" – Push Out		4115	53
1 1/16" – Push Out		4119	53
1¼" – Push Out		MP1375	53
1⅜" – Push Out		4126	53
1½" – Push Out		MP1377	54
2" – Push Out		MP1812	54
2½" – Push Out		4137	54
3" – Draw In – 3AB		MP3698	54
Feed Finger – Convention Master			
2½" – Draw In (15° Head Angle)		MP1508	54
Feed Finger – Style "B"			
⅜" – Push Out	B1	6081	52
½" – Push Out	B2	MP3075	52
9/16", ⅝" – Push Out	B3	6085	52,53
⅞" – Push Out	B5	MP3097	53
1 1/16" – Push Out	B6	MP3107	53

CLEVELAND (cont'd)

Machine	Style	Part #	Pg
1¼" – Push Out	B7	MP3118	53
⅜" – Push Out	B7	6093	53
1½" – Push Out	B16	6097	54
2" – Push Out	B22	6099	54
2½" – Draw In [15° Head Angle]	B25	6101	54

CONE

Machine	Style	Part #	Pg
Collet – Solid			
9/16" Burring		4243	55
9/16" Burring	TK	4259	55
9/16" Burring	QE	4175	55
⅞"		4177	55
1" – 4 Spindle – Vertical – Old Style		4205	56
1" – SL, SK, SW, TC, TK, TB, TS – 6 Spindle		4361	56
1¼"		4183	57
1½"		4187	57
1⅝"		4191	58
1⅞"		4209	58
2"		MP2023	59
2¼"		4207	59
2½", 2⅝"		4199	60
3"		MP3163	60
3¼"		MP3758	61
3½"		4217	61
4"		MP1657	61
Collet – Style "S"			
1" – SL, SK, SW, TC, TK, TB, TS	*S10	5219	56
1" – 4 Spindle – Vertical – Old Style	S10	5011	56
1¼"	S12	5013	57
1½"	S15	5015	57
1⅝"	S16	5017	58
1⅞"	S20	5019	58
2"	S20	5021	59
2¼"	S22	5023	59
2½", 2⅝"	*S26	5025	60
3" S	30	5027	60
3¼"	S30	5029	61
3½"	S35	5031	61
4"	*S40	5033	61
Collet – Style "M"			
1" – SL, SK, SW, TC, TK, TB, TS	*M10	5445	56
1¼"	M12	5401	57
1½"	M15	5403	57
1 ⅝"	M16	5405	58
2¼"	M22	5463	59
2½", 2 ⅝"	*M26	5411	60
3"	M30	5413	60
3¼"	M32	5415	61
3½" – 4-split	M35	5417	61
Feed Finger – Solid			
9/16"		4245	55
9/16" – Sweat In		4247	55
⅞"		4179	55
1" – SK, SL, SW, TC, TK, TB, TS		4363	56
1" – 4 Spindle – Vertical – Old Style		4181	56
1¼"		4185	57
1½"		4189	57
1⅝"		4369	58
1⅞"		4193	58
2"		4195	59
2¼"		4197	59
2½", 2⅝"		4201	60
3"		MP3165	60
3¼"		MP3756	61
3½"		MP1389	61
4"		4221	61
Feed Finger – Conventional			
4"		MP1832	61
Feed Finger – Style "B"			
9/16"	*B3	6161	55
9/16" – DA2X	B3	6163	55
⅞"	B5	6121	55

CONE (cont'd)

Machine	Style	Part #	Pg
1" – SK, SL, SW, TC, TK, TB, TS	*B6	6321	56
1" – 4 Spindle – Vertical – Old Style	B6	6123	56
1¼"	B7	6125	57
1½"	B8	6127	57
1⅝"	*B8	6129	58
1⅝"	*B16	6325	58
1⅞"	B20	6131	58
2"	B20	6133	59
2¼"	B22	6135	59
2½", 2⅝"	*B26	6137	60
Feed Finger – Style "B"			
3"	B30	6139	60
3¼"	B33	6143	61
3½"	*B35	6141	61
Feed Finger – Style "A"			
1" – SL, SK, SW, TC, TK, TB, TS	*A10	6441	56
1¼"	A12C	6401	57
1⅝"	*A16	6445	58
2½", 2⅝"	*A26	6449	60
3"	A30	6413	60
3½"	*A35	6417	61
Feed Finger – Squirrel Cage			
1" – 6SW, SL, TC, TS	Steel	4181–88	62
1¼"	Steel	4185–88	62
1½"	Steel	4189–88	62
1⅝"	Steel	4369–88	62
2¼"	Steel	4197–88	62
2½", 2⅝"	Steel	4201–88	62
3½"	Steel	4203–88	62
Feed Finger – Stock–Saver			
1" – 6SW, SL, TC, TS	Steel	4181–89	62
1¼"	Steel	4185–89	62
1½"	Steel	4189–89	62
1⅝"	Steel	4369–89	62
2¼"	Steel	4197–89	62
2½", 2⅝"	Steel	4201–89	62
3½"	Steel	4203–89	62

Feed Finger – Style "AF"

Machine	Style	Part#	Bush#	Pg
9/16"	AF3	7039	7355	55
1" – Old Style	AF6	7023	7361	56
1"	AF6	7073	7361	56
1¼"	AF7	7025	7363	57
1½"	AF7	7027	7363	57
1⅝"	AF16	7075	7369	58

CVA

Machine	Part #	Pg
Collet – Solid		
#33	MP3672	63

DAVENPORT

Machine	Style	Part #	Pg
Collet – Solid			
½" – Standard		4243	63
½" – Extended Nose		8281	63
½" – Burring		4259	63
½" – Burring – Quick Close		4263	63
¾" – Oversize		4251	64
¾" – Burring		4259	64
¾" – Burring – Quick Close		MP3697	64
¾" – Master Burring		8107	64
Jam Nut		8093	64
Feed Finger – Solid			
½" – Standard		4245	63
½" – Standard – Sweat In		4247	63
¾" – Oversize		4255	64
Feed Finger – Style "B"			
½" – Standard	*B3	6161	63
½"	DA2X, B3	6163	63
¾" – Oversize	B4	6169	64
2" – Oversize – Rear Booster	B6	8091	64

* Also interchangeable with other machines

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COLLETS AND FEED FINGERS

DAVENPORT (cont'd)

Machine	Style	Part #	Pg
Feed Finger – Squirrel Cage			
½", ⅝"	Steel	4245–88	65
¾" – Oversize	Steel	4255–88	65
Feed Finger – Stock–Saver			
½", ⅝"	Steel	4245–89	65
¾" – Oversize	Steel	4255–89	65

Feed Finger – Style "AF"

Machine	Style	Part #	Bush#	Pg
½" – Standard	AF3	7039	7355	63
¾" – Oversize (3–Split)	AF4	7041	7359	64

DIN 6343

Machine	Style	Part #	Pg
Collet – Solid			
Special		7708E	66
#12 Index		3701	66
#18 Index		3705	66
#20 Index		3731	66
B30 Index		3713	66
Special		5115C	66
B42 Index		3719	66
Special		7709E	66
B60 Index		3725	66
Special		3662E	66
Collet – Style "S"			
B42 Index	S10	5205	66
B60 Index	S16	5207	66
Collet	S26	5211	66

EUROTURN

Machine	Style	Part #	Pg
Collet – Solid			
1" – SAY 6/25		4361	67
1¼" – SAY 6/32 and 8/32		4043	67
Collet – Style "S"			
1" – SAY 6/25		5219	67
1¼" – SAY 6/32 and 8/32		5103	67
Feed Finger – Solid			
1" – SAY 6/25		4363	67
1¼" – SAY 6/32 and 8/32		4047	67

Feed Finger – Style "AF"

Machine	Style	Part#	Bush#	Pg
1"	AF6	7073	7361	67
1¼"	AF7	7061	7363	67

FOSTER - Turret Lathe

Machine	Style	Part #	Pg
Collet – Solid			
#0 NS		MP1682	107
#0		MP1031	107
#1 OS		MP1033	107
#1		MP1032	107
#1B		MP2570	107
#2		MP1034	107
#3 OS		MP1036	107
#3		MP1035	107
#4		MP1037	107
#4		MP2643	107
#5		MP2930	107
#5 NS		MP1038	107
#5 OS*		MP1039	107
#6		MP1040	107
#7		MP1823	107

Collet – Conventional Master & Pads

Machine	Part#	Pad#	Pg
#1B	MP2004	MP2005	108
#1B	MP3061	MP2005	108
#2B	MP3742	MP1887	108
#3	MP1497	MP1498	108
#5	MP2044	MP1565	108
#5	MP1556	MP1565	108

GARVIN - Turret Lathe

Machine	Part #	Pg
Collet – Solid		
#103-A	MP2613	109
#00, #106½	MP1332	109
#1, #107-B	MP1749	109
#2, #108-B	MP1765	109
#2½, #109-B	MP1766	109
#3, #110-B	MP1578	109
#117	MP2552	109
#123, ½	MP1967	109
#123-E	MP2460	109
Machine	Part #	Pg
#140K	MP1757	109
#2, #41-K	MP1295	109
#2, #140-K – Emergency	MP1757E	109

Collet – Conventional Master & Pads

Machine	Part#	Pad#	Pg
#129-G	MP3055	–	109

GILDEMEISTER

Machine	Part#	Pad#	Pg
Collet – Solid			
AS16, AS20, GS20, GM20		1900A	68
AS20, GS20 Oversize Spindle		5655A	68
AS20-25, GS20-25		5655A	68
AS-25		9215M	68
GS28		—	68
GM32, GS32, AS32, AV32		1004A	69
GM32/6		1004A	69
GM36/42		—	69
GM42		1172K	69
AV48, AS48, AA48		4130A	70
AV67, AS67		9881A	70
AV/AS82		—	70
AS100		6085H	70
Collet – Style "S"			
GS28	S10	5737E	68
GM32, GS32, AS32, AV32	S12	4571A	69
GM32/6	S12	8583A	69
AS32	S15	8583A	69
AV48, AS48, AA48	S20	3616A	70
AV67, AS67	S26	5938A	70
Feed Finger – Solid			
AS16, AS20, GS20, GM20		1896A	68
AS20, GS20 Oversize Spindle		1010A	68
AS20-25, GS20-25		1010A	68
AS25		—	68
GS28		5735E	68
GM32, GS32, AS32, AV32		1891A	69
GM32/6		5774K	69
GM42		1174K	69
AV48, AS48, AA48		8245A	70
AV67, AS67		9879A	70
AV/AS82		—	70
AS100		5762H	70
Feed Finger – Style "B"			
AS16, AS20, GS20, GM20	B4	0602A	68
GS28	B4	5738E	68
GM32, GS32, AS32, AV32	B7	1009A	69
AV48, AS48, AA48	B20	3617A	70
AV67, AS67	B26	3910C	70

GISHOLT - Turret Lathe

Machine	Part #	Pg
Collet – Solid		
#3	MP3640	110
#4	MP1119	110
#4B	MP1120	110
#5	MP3168	110
#6	MP1122	110

Collet – Conventional Master & Pads – 3 Split

Machine	Part#	Pad#	Pg
#3	MP3674	5839	110
#4	MP3673	5839	110

GISHOLT - Turret Lathe (cont'd)

Machine	Part#	Pad#	Pg
Collet – Emergency Pads, 3 Split			
#4	2629	5841	110
#5, 1L	5845-14	5845	110

Collet – Conventional Master & Pads, 4 Split

Machine	Part#	Pad#	Pg
#5, 1L	2555	5759	111
#2L	MP2599	MP1439	111
#3L	4341	MP2622	111
#3	MP2743	MP2742	111
Machine	Part#	Pad#	Pg
#3	2551	5751	111
#4	MP1503	MP1561	111
#4	2553	5755	111

Collet – Emergency Pads – 4 Split

Machine	Part#	Pad#	Pg
#3	3X-7731	5753	111
#4	4X-7731	5757	111
#5, 1L	5X-7731	5761	111
#3L	13X-7731	MP2622E	111

Collet – Style "S" Master & Pads, 3 Split

Machine		Part#	Pad#	Pg
#3	S15	MP2951	5605	110
#4	S17	MP2959	MP2649	110
#5	S22	MP2963	5611	110

GREENLEE

Machine	Style	Part #	Pg
Collet – Solid			
1" – Six Spindle		4301	71
1⅝" – Six Spindle		4305	71
2" – Six Spindle		4311	72
2¼" – Six Spindle		MP3830	72
2⅝" – Four Spindle		4317	72
Collet – Style "S"			
1⅝" – Six Spindle	S16	5071	71
2" – Six Spindle	S20	5073	72
2¼" – Six Spindle	S20	5059	72
2⅝" – Four Spindle	S26	5077	72
Feed Finger – Solid			
1" – Six Spindle		4303	71
1⅝" – Six Spindle		4307	71
2" – Six Spindle		4309	72
2¼" – Six Spindle		MP3832	72
2⅝" – Four Spindle		4319	72
Feed Finger – Style "B"			
1" – Six Spindle	B6	6173	71
1⅝" – Six Spindle	B8	6175	71
1⅝" – Six Spindle	B9	6087	71
1⅝" – Six Spindle	B16	6177	71
2" – Six Spindle	B9	4353	72
2" – Six Spindle	B20	6179	72
2¼" – Six Spindle	B22	6181	72
2⅝" – Four Spindle	B25	6183	72

Feed Finger – Style "AF"

Machine	Style	Part#	Bush#	Pg
1" – Six Spindle	AF6	7045	7361	71
1⅝" – Six Spindle	AF16	7047	7369	71

HERBERT

Machine	Style	Part #	Pg
Collet – Solid			
1" – #1-SO		MP3792	74
1½" – #2, #2D, #3		2561	74
2" – #4		2519	74
2³⁄₁₆" – #7		2527	74
2½" – #5, #7		MP3546	74
Collet – Style "S"			
1½" – #2, #2D, #3	S10	5195	74

*Also interchangeable with other machines

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2" – #4	S20	2351	74
2½" – #5, #7	S26	5197	74

HYDROMAT Rotary Transfer Machines

Machine	Style	Part #	Pg
Collet – Solid			
25W	5457	1901	75
25W-OS – Stepped Collet	5458	1903	75
B32 – Thru & Stepped Collet	H5873	2249	75
B32/45 – Thru Collet	5547	2239	75
B32/45-OS – Stepped Collet	5548	2241	75
B45 – Thru Collet	5549	2243	75
B45-OS – Stepped Collet	5550	2245	75
PRO20 – Thru Collet	5830	2247	75
PRO20 – Stepped Collet	—	2247	75

INDEX

Machine	Style	Part #	Pg
Collet – Solid			
½" – #12		3701	76
½" – DG-12,DO-12, ON-12, OR-12		MP3587	76
⅝" – ON-16, OR-16		MP3680	76
¾" – #18, #19, #25		3705	76
25/32" – #20		3731	77
15/16" – #24		3713	77
1" – #25		3709	77
1 3/16" – C-29, B-30, GS-30		3713	77
1⅝" – B-42		3719	78
2⅜" – B-60		3725-07	79
Collet – Style "S"			
1⅝" – B-42	*S10	5205	78
2⅜" – B-60	*S16	5207	79
Feed Finger – Solid			
½" – #12, DG-12, DO-12, ON-12, OR-12		3703	76
⅝" – ON-16, OR-16		MP3681	76
¾" – #18, #19, #25		3707	76
25/32" – #20		MP3701	77
15/16" – #24		3715	77
1" – #25		3711	77
1 3/16" – C-29, B-30, GS-30		3715	77
1 3/16" – C-29, B-30, GS-30 – Outside		3717	77
1⅝" – B-42		3721	78
1⅝" – B-42 – Outside		3723	78
2⅜" – B-60		3727	79
2⅜" – B-60 – Outside		3729	79
Feed Finger – Style "B"			
½" – #12, DG-12, DO-12, ON-12, OR-12	B10	6287	76
¾" – #18	XB4	6289	76
15/16" – #24	B5	6293	77
1" – #25	**XB6	6291	77
1 3/16" – C-29, B-30, GS-30	B5	6293	77
1⅝" – B-42	B7	6295	78
1⅝" – B-42 – Outside feeder	B16	6297	78
2⅜" – B-60	B20	6299	79
Feed Finger – Style "AF"			

Machine	Style	Part#	Bush#	Pg
½" – #12	AF10A	7101	7367	76
¾" – #18	AF3A	7095	7357	76
1" – #25	AF4	7095	7357	77
1⅝" – B-42	AF7	7099	7363	78

JONES & LAMSON - Turret Lathe

Machine	Part #	Pg
Collet – Solid		
#7B	MP3572	112

Collet– Conventional Master & Pads

Machine	Part#	Pad#	Pg
#3	MP2066	5801	112
#3 – Emergency Pad	—	5803	112
#4	4347	95805	112
#4 – Emergency Pad	—	5807	112
#4	2523	MP3523	112
#5, 2½", 7A, B, D	2569	5809	112
#5, 3"	MP3870	5815	112

MOREY - Turret Lathe

Machine	Part #	Pg
Collet – Solid		
#2	2613	113
#3, Universal	2621	113
#4, 1¾"	MP2180	113
#4, 2"	MP2716	113
#5	2633	113
Collet – Emergency Solid		
#2	2615-14-10	113
#3, Universal - Blank - no slots	2621-10	113

MOREY - Turret Lathe (cont'd)

Machine	Part #	Pg
#3, Universal	2621-14-10	113
#4, 1¾"	MP2180E	113
#4, 2"	MP2716E	113

Machine	Part#	Pad#	Pg
Collet– Conventional Master & Pads, 3-Split			
#3	2625	5835	113
#4, 1¾"	2627	5839	113
#4, 2"	2629	5839	113
#5	2631	5843	113
Emergency Collet Pads, 3 Split			
#3	—	5837	113
#4	5845-14	5841	113
#5	—	5845	113

MORI-SEIKI (SL-2)

Machine	Style	Part #	Pg
Collet – Style "S"			
SL-2B	S20	8185	134

NATIONAL ACME

Machine	Style	Part #	Pg
Collet – Solid			
9/16" – C		4349	80
#515 – Push Out		MP1063	80
Feed Finger – Solid			
9/16" – C		4017	80
9/16" – C – Sweat-In		4019	80
Feed Finger – Style "B"			
#515 – Push Out	B2	6311	80
#55 – Push Out	B8	6315	80

NEW BRITAIN

Machine	Style	Part #	Pg
Collet – Solid			
9/16"		4349	81
⅞" – #407		MP1949	81
1" – #51, #60, #408		4361	81
1" – Burring Collet		4039	81
1" – #172, #226 - Draw In		MP1953	82
1¼" – #52, #601, SL		4043	82
1⅜" – #52, #60, #601		4065	83
1⅝" – #41, #61, #62 (#816 Ext Thrd)		4367	83
1¾" – #415		MP1987	84
1¾" – #817		4379	84
2" – #61, #415		MP1962	84
2¼" – #61, #62		4371	84
2⅝" – #26 Single Spindle, #126, #626		4059	85
2¾"		4375	85
3½" – #635		4063	85
4" – #640		MP1657	86
Collet – Style "S"			
1" – #51, #60, #408	*S10	5219	81
1" – #172, #226 – Draw In	S10	5221	82
1¼" – #52, #601, SL	S12	5217	82
1⅜" – #52, #60, #601	*S15	5105	83
1⅝" – #41, #61, #62 (#816)	S16	5223	83
1¾" – #817	S20	5231	84
2" – #61, #415	S20	5225	84

NEW BRITAIN (cont'd)

Machine	Style	Part #	Pg
2¼" – #61, #62	S22	5227	84
2⅝" – #26 Single Spindle, #126, #626	*S26	5113	85
2¾"	S26	5229	85
3½" – #635	*S35	5115	85
4" – #640	*S40	5033	85
Collet – Style "M"			
1" – #51, #60, #408	*M10	5445	81
1¼" – #52, #602, SL	M12	5447	82
1⅝" – #41, #61, #62 (Ext. Thrd.)	M16	5449	83
2¼" – #61, #62	M21	5453	84
2⅝" – #26, #626, #126	M26	5437	85
3½" – #635	*M35	5439	85
Feed Finger – Solid			
9/16"		4017	81
9/16" – Sweat In		4019	81
⅞" – #407		4033	81
1" – #51, #60, #408		4363	81
1" – #172, #226 - Draw In		MP1353	82
1¼" – #52, #601, SL		4047	82
1⅜" – #52, #60, #601		4049	83
1⅝" – #41, #61, #62 (#816 Ext Thrd)		4369	83
1¾" – #415		MP2019	84
2" – #61, #415		MP2020	84
2¼" – #61, #62		4373	84
2⅝" – #26 Single Spindle, #126, #626		4201	85
2¾"		4377	85
3½" – #635		4061	85
4" – #640		MP1658	86
4" – #640 – Conventional		MP1832	86
Feed Finger – Style "A"			
1" – #51, #60, #408	*A10	6441	81
1¼" – #52, #601, SL	*A12	6443	82
1⅝" – #41, #61, #62 (#862 Ext Thrd)	*A16	6445	83
2¼" – #61, #62	*A22	6447	84
2⅝" – #26, #626, #126	*A26	6449	85
3½" – #635	*A35	6453	85
Feed Finger – Style "B"			
⅞" – #407	*B5	6231	81
1" – #51, #60, #408	*B6	6321	81
1" – #172, #226 Draw In	B6	6323	82
1¼" – #52, #601, SL	*B7	6237	82
1⅜" – #52, #60, #601	*B7	6241	83
1⅝" – #41, #61, #62 (#816 Ext Thrd)	*B8	6129	83
1⅝" – #41, #61, #62 (#816 Ext Thrd)	*B16	6325	83
1¾" – #415	*B8	MP2911	84
1¾" – #415	*B16	MP3121	84
1¾" – #817	*B20	6333	84
2" – #61, #415	B20	6327	84
2¼" – #61, #62	B22	6329	84
2⅝" – #26, #126, #626	*B26	6137	85
2¾"	B26	6331	85
3½" – #635	*B35	6253	85
Feed Finger – Squirrel Cage			
1" – #40, #60, NB	Steel	4363-88	86
1¼" – #52, #601, NB	Steel	4047-88	86
1⅜" – #52, NB	Steel	4049-88	86
1⅝" – #61, #62, NB	Steel	4369-88	86
2¼" – #61, #62, NB	Steel	4373-88	86
Feed Finger – Stock-Saver			
1" – #40, #60, NB	Steel	4363-89	86
1¼" – #52, #601, NB	Steel	4047-89	86
1⅜" – #52, NB	Steel	4049-89	86
1⅝" – #61, #62, NB	Steel	4369-89	86
2¼" – #61, #62, NB	Steel	4373-89	86
Feed Finger – Style "AF"			

Machine	Style	Part#	Bush#	Pg
1" – #51, #60 # 408	AF6	7073	7361	81

*Also interchangeable with other machines

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1¼" – #52, #601, SL	AF7	7061	7363	82
1⅜" – #41, #61, #62	AF16	7075	7369	83

OSTER - Turret Lathe

Machine			Part #	Pg
Collet – Solid				
1½" – #601 – Draw In			MP2457	114
1½" – #601 – Push Out			2621	114
Collet – Conventional Master & Pads				
Machine	Part#	Pad#		Pg
#601 – Draw In	MP2584	5835		114
#601 – Push Out	2625	5835		114

PRATT & WHITNEY - Turret Lathe

Machine	Part #	Pg
Collet – Solid		
⅝"	MP1284	115
¾"	MP2342	115
1"	MP1283	115
2½"	MP1649	115
2½" – OS	MP1898	115
#0	MP2381	115
#1	MP1286	115
#2	MP1287	115
#2	MP2609	115
#2	MP2646	115
#2	MP2667	115
#2 Shaver - Draw In	MP1865	115
#3	MP1655	115

RIVETT - Turret Lathe

Machine	Part #	Pg
Collet – Solid		
#7R	MP3063	116
#5R, 918	MP2724	116

SCHUTTE

Machine	Part #	Pg
Collet – Solid		
SE16	2651	87
Feed Finger – Solid		
SE16	4279	87
Feed Finger – Style "B"		
SE16	MP3694	87

SIMMONS - Turret Lathe

Machine	Part #	Pg
Collet – Solid		
2B	2599	116
2B Emergency - Solid No Slots	MP2201-BC	116
2B Emergency - With Slots	MP2201E	116
Collet – Conventional Master & Pad		
Machine	Part#	Pad# Pg
2B	MP2776	MP2777 116

S&M

Machine	Style	Part #	Pg
Collet – Solid			
1¼" – #654		4043	87
1⅜" – #654L		MP1680	88
1⅜" – #654L – Burring Collet		MP3772	88
1⅜" – #664		0327L	88
Collet – Style "S"			
1¼" – #654	S12	5217	87
1⅜" – #654L	S15	5105	88
1⅜" – #664	S15	0329L	88
Collet – Style "M"			
1¼" – #654	M12	5447	87
1⅜" – #664	M15	—	87

S&M (cont'd)

Machine	Style	Part #	Pg
Feed Finger – Solid			
1¼" – #654		4047	87
1⅜" – #654L		4049	88
1½" – #664		4189	88
Feed Finger – Style "A"			
1¼" – #654	A12	6443	87
Feed Finger – Style "B"			
1¼" – #654	B7	6237	87
1⅜" – #654L	B7	6241	88
1½" – #664	B8	6127	88
Feed Finger – Style "AF"			
Machine	Style	Part#	Bush# Pg
1¼" – #654	AF7	7061	7363 87
1½" – #664	AF7	7027	7363 88

SMART & BROWN

Machine	Part #	Pg
Collet – Solid		
L16	MP3142	89

TORNOS BECHLER

Machine	Style	Part #	Pg
Collet – Solid			
AS14, BS14		4391	89
Pick-Off Collet		4411	89
AS16, SAS16.6		4403	89
Pick-Off Collet	AS-24	4411	89
BS20, BS20.B		4407	89
BS22		4472P	89
Pick-Off Collet	AS-24	4411	89
Feed Finger – Solid			
AS14, BS14		4393	89
AS16, SAS16.6		4401	89
BS20, BS20.B		4407	89
BS22		4405	89
Feed Finger – Style "B"			
AS14, BS14	B10	MP4055	89

TRAUB

Machine	Style	Part #	Pg
Collet – Solid			
A15, A15L, TD16	10	3033	90
A20 11		3057	90
A25, A26	21	3089	90
A36, AH36, TD36	22	3111	90
A36, AH36, TD36	22C	3125	90
A36, AH36, TD36	22CT	MP3712	90
A42, TB42	B42	3719	90
A56, A60, TB60, TS60	B60	3725	90
Style "S" Collet			
A42, TB42	S10	5205	90
A56, A60, TB60, TS60	S16	5207	90

WARNER & SWASEY - Automatics

Machine	Style	Part #	Pg
Collet – Solid			
¾" – Six Spindle		MP3171	91
1¼" – Six Spindle – OAB		4421	91
1¾" – Five Spindle		MP2977	92
2¼" – 1AB Single Spindle & 5 Spindle		4423	92
3" – 2AB (Single Spindle)		MP3605	92
4⁵⁄₁₆" – 3AB (Single Spindle)		MP4049	93
1SC (Single Spindle - New Style)		MP3889	93
Style "S" Collet			
¾" – Six Spindle	S10	MP3183	91
1¼" – Six Spindle – OAB	S12	5253	91
1¾" – Five Spindle	S20	5255	92
2¼" – 1AB – Single & Five Spindle	S22	5257	92
3" – 2AB – Single Spindle	S30	5261	92

WARNER & SWASEY - Automatics (cont'd)

Machine	Style	Part #	Pg
Old Style – 1SC – Single Spindle	S22	5263	93
New Style – 1SC – Single Spindle	S22	5265	93
2SC12 – Single Spindle	S30	MP3887	93
Style "M" Collet			
1¼" – Six Spindle – OAB	M12	5958A	91
1¾" – Five Spindle	M17	5531B	92
2¼" – 1AB – Single & Five Spindle	M23	5461	92
3" – 2AB – Single Spindle	M30	MP3951	92
4⁵⁄₁₆" – 3AB – Single Spindle	M50	MP4033	93
New Style – 1SC – NC – Single Spindle	M23	MP4035	93
2SC15, 2SCL, NC	M47	MP4038	93
2SC12, NC	M30	5409	93
Feed Finger – Solid			
¾" – Six Spindle		MP3177	91
1¼" – Six Spindle OAB		4417	91
1¾" – Five Spindle		MP2981	92
2¼" – 1AB – Single & Five Spindle		4419	92
3" – 2AB – Single Spindle		MP3656	92
4⁵⁄₁₆" – 3AB – Single Spindle		MP4032	93
2SC15, 2SCL, NC		MP4032	93
Feed Finger – "B" Automatics			
¾" – Six Spindle	B5	6341	91
1¼" – OAB – Six Spindle	B7	6343	91
1¾" – Five Spindle	B20	6345	92
2¼" – 1AB – Single & Five Spindle	B22	6347	92
3" – 2AB – Single Spindle	B30	6349	92
New Style – 1SC	B22	6347	93
2SC15, 2SCL, NC	B35	6681	93
Feed Finger Style "A"			
1¼" – OAB – Six Spindle	A12W	MP3963	91
1¾" – Five Spindle	A17	MP3959	92
2¼" – 1AB & Five Spindle	*A33W	6461	92
3" – 2AB Single Spindle	A30	4726D	92
New Style – 1SC – NC	A22W	MP3968	93
2SC15, 2SCL, NC	A47	MP4037	93
2SC12, NC	A35	6417	93
Feed Finger Style "AF"			
Machine	Style	Part#	Bush# Pg
1¼" – 6 Spindle – OAB	AF7	7083	7363 91

WARNER & SWASEY - Turret Lathes

Machine	Style	Part #	Pg
Collet – Solid			
#1		2611	117
#1½", #2¼"		2613	117
#2		MP2012	117
#2-1899, OS		2617	117
#3		MP1053	117
#4, OS		2619	117
#5		MP3616	117
#5-1A		MP1840	117
#6-NS		2633	117
#6, OS		MP1058	117
Collets – Emergency Solid			
#1 – Blank - No Slots		92611-10	117
#1		2611-14-10	117
#1½", #2¼" – Blank – No Slots		2613-10	117
#1½", #2¼"		2615-14	117
#4, OS – Blank - No Slots		2619-10	117
Collet – Solid - Universal			
#4 – Push Out		2621	117
#4, ¾" – Push Out		MP2180	117
#4, 2" – Push Out		MP2716	117
Collet – Conv. Master & Pad, 3-Split, Draw In			
#2, Micro-Cut	MP3740	MP3696	118
Collet – Conv. Master & Pad, 3-Split, Push Out			

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#1A, #5	2631	5843	118

Collet – Style "S" Master & Pad, 4-Split, Push Out

1A	4329	5613	118

Machine	Part#	Pad#	Pg
Collets – Emergency Universal Solid			
#3, #4, 1½" – Blank - No Slots		2621-10	119
#3, #4, 1½" – With Slots		2621-14-10	119
#4, 1¾"		MP2180E	119
#4, 2"		MP2716E	119
Collet – Conv. Master & Pad, 4-Split, Push Out			
#4	MP1484	MP1453	118
#5, 4½", 4Y7142A	MP2601	MP2622	118
#6 OS	MP1487	MP1455	118
#24, ½"	MP2639	M-2640	118
#32	MP2501	MP1815	118
#33	MP1318	MP1319	118
Collet – Conventional Master & Pad, 6-Split, Push Out			
#5, 1¼", #6 NS	MP1488	MP1456	119
#5, 1¼", #6 NS Emergency	MP1488	MP1456E	119
Collet – Universal Master & Pad, 3-Split, Push Out			
#3, #4, 1½"	2625	5834	118
#3, #4, 1½" – Emergency Pads	2625	5837-14	119
#4, 1¾"	2627	5839	118
#4, 1¾"	MP2950	5835	118
#4, 2"	2629	5839	118
#4, 2" – Emergency Pads	2629	5841-14	119

WICKMAN

Machine	Style	Part #	Pg
Collet – Solid			
⅝" – Six Spindle		4461	94
⅝" – Six Spindle – Burring Collet		4463	94
1" – Six Spindle		4361	95
1" – Six Spindle – Burring Collet		4467	95
1⅜" – Five & Six Spindle		4469	96
1⅜" – Burring Collet		4485	96
1⅜" – Master Burring Collet	S10	5045	96
1¾" – Five, Six & Eight Spindle		4473	97
1¾" – Burring Collet		4485	97
1¾" – Master Burriing Collet	S10	5045	97
1¾" – Solid High Speed Drill Collet		MP3787	97
2¼" – Six Spindle		4483	98
2¼" – Burring Collet		4287	98
2⅝" – Single & Six Spindle		4199	98
3¼" – Six Spindle		4779	99
3½" – Single & Four Spindle		MP3773	99
4⅛" – Six Spindle		MP3702	99
Collet – Style "S"			
1" – Six Spindle	*S10	5219	95
1⅜" – Five & Six Spindle	S12	5301	96
1¾" – Five, Six & Eight Spindle	S16	5303	97
2¼" – Six Spindle	S22	5305	97
2⅝" – Single & Six Spindle	*S26	5025	97
3¼" – Six Spindle	S30	5307	99
3½" – Single & Four Spindle	S35	5309	99
4⅛" – Six Spindle	S40	5619	99
Collet – Style "M"			
1" – Six Spindle	*M10	5445	95
2⅝" – Single & Six Spindle	*M26	5411	98
3½" – Single & Four Spindle	M35	MP3955	99
Feed Finger – Solid			
⅝" – Six Spindle		4465	94
1" – Six Spindle		4363	95
1⅜" – Five & Six Spindle		4471	96
1¾" – Five, Six & Eight Spindle		4475	97
2¼" – Six Spindle		4477	98
2⅝" – Single & Six Spindle		4201	98
3¼" – Six Spindle		4481	99
3½" – Single & Four Spindle		4203	99

Feed Finger – Style "B"

⅝" – Six Spindle	B11	6355	94
1" – Six Spindle	*B6	6321	95
1⅜" – Five & Six Spindle	B7	6357	96
1¾" – Five, Six & Eight Spindle	B16	6359	97
2¼" – Six Spindle	B22	6361	98

WICKMAN (cont'd)

Machine	Style	Part #	Pg
2⅝" – Single & Six Spindle	*B26	6137	98
3¼" – Six Spindle	B33	6363	99
3½" – Single & Four Spindle	*B35	6141	99
Feed Finger – Style "A"			
1" – Six Spindle	*A10	6441	95
2⅝" – Single & Six Spindle	*A26	6449	98
3½" – Single & Four Spindle	*A35	6417	99
Feed Finger – Style "AF"			
⅝" – 6 Spindle	AF3	7089	94
1" – 6 Spindle	AF6	7073	95
1⅜" – 5 & 6 Spindle	AF7	7091	96
1¾" – 5,6 & 8 Spindle	AF16	7093	97

STYLE "A" - Master Feed Finger Pads & Wrenches

Pad	Pad#	Wrench# /qty	Pg
A10	6514	7763 / 2 ea	133
A12	6719	7763 / 3 ea	133
A12C9	6721	7763 / 2 ea	133
A12W	6723	7763 / 2 ea	133
A16	6727	7763 / 3 ea	133
A22	6735	7763 / 3 ea	133
A26	6739	7765 / 3 ea	133
A30	6745	7763 / 3 ea	133
A35	6751	7765 / 3 ea	133

STYLE "AF" - Pads, Bushings, Wrenches & Caps

Pad	Master	Type	Part #	Pg
AF3	AF3, AF3A	Steel	7305-00	125
		Chromed	7305-38	125
AF4	AF4	Steel	7309-00	125
		Chromed	7309-38	125
AF6	AF6	Steel	7313-00	125
		Chromed	7313-38	125
AF7	AF7	Steel	7317-00	125
		Chromed	7317-38	125
AF10	AF10, AF10A	Steel	7321-00	125
		Chromed	7321-38	125
AF16	AF16	Steel	7325-00	125
		Chromed	7325-38	125

Guide Bushings

Style	Part #	Pg
AF3	7355	125
AF3A	7357	125
AF4	7359	125
AF6	7361	125
AF7	7363	125
AF10	7365	125
AF10A	7367	125
AF16	7369	125
Wrench – Cap Wrench		
AF3, AF3A	7553	125
AF4	7555	125
AF6	7557	125
AF7	7559	125
AF10, AF10A	7561	125
AF16	7563	125

STYLE "AF" – Feed Finger Caps, Slotted & Unslotted

Style	Cap #	Pg
AF10 – Unslotted Cap, #10, 10A B & S, 7⁄16", 9⁄16" Gridley, ON12 Index	7217	140
AF3 – 11, 11A B & S, 7⁄16", 9⁄16" Gridley	7203	140
AF3 – ½" Std. Davenport	7205	140
AF4 – 21A B & S	7207	140
AF4 – ¾" Oversize Davenport, 25 Index	7209	140
AF6 – #22 B&S	7211	140
AF6 – 1" Old Cone, 1" Greenelee, 1" Gridley, 1" NB	7213	140
AF7 – 22D, 22H B&S, 1¼", 1½" Cone, 1¼" Gridley, B42 Index, 1¼" W&S, ⅜" Wickman	7215	140
AF16 – 1⅝" BSA, Acme-Gridley, Cone, New Britain, #41, #61 New Britain, 1⅜" Wickman	7219	140

STYLE "AF" – Locking Springs

Style	Spring #	Pg
AF3	7251	141
AF4	7253	141
AF6	7255	141
AF7	7257	141
AF16	7259	141

STYLE "B" – Pads & Wrenches

Style	Pad #	Wrench#	Pg
B1	6601	7575	126, 127
B2	6607	7577	126, 127
B3	6611	7579	126, 127
B4	6617	7581	126, 127
B5	6621	7583	126, 127
B6	6625	7585	126, 127
B7	6631	7587	126, 127
B8	6635	7607 2 ea	126, 127
B9	6639	7607 2 ea	126, 127
B10	6643	7589	126, 127
B10AM	6649	7591	126, 127
B11	6653	7593	126, 127
B16	6657	7607 2 ea	126, 127
B20	6661	7607 2 ea	126, 127
B22	6665	7607 2 ea	126, 127
B25	6669	7607 2 ea	126, 127
B26	6673	7607 2 ea	126, 127
B30	6677	7607 3 ea	126, 127
B33	6679	7607 3 ea	126, 127
B35	6681	7607 3 ea	126, 127

STYLE "B" (Master) Wrench

Adjustable Wrench	Wrench #	Pg
B1X	7595	126
B10X	7597	126
DA-2X, B3X	7599	126
XB4	7601	126
XB6	7603	126

STYLE "CB" – Pads & Screws

Pad Style	Pad#	Screw#	Pg
CB10	2201	7711	128
CB12	2203	7713	128
CB16	2205	7713	128
CB20	2707	7715	128
CB26	2209	7715	128
CB35	2111	7715	128
CB40	2213	7715	128

STYLE "CT" – Pads & Screws

Pad Style	Pad#	Screw#	Pg
CT10	2215	7767	129
CT12	2217	7769	129
CT16	2219	7769	129
CT20	2221	7769	129
CT26	2223	7771	129
CT35	2225	7773	129
CT40	2227	7775	129

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Catalog Index

STYLE "M" – Master Collet Pads & Clamps

Pad Style	Pad #	Clamp #	Pg
M10	5901	7751	132
M12	5903	7751	132
M15	5905	7751	132
M16	5907	7751	132
M17	5931	7751	132
M20	5909	7753	132
M21	5911	7753	132

STYLE "M" – Master Collet Pads & Clamps

Pad Style	Pad #	Clamp #	Pg
M22	5913	7753	132
M23	5933	7751	132
M26	5915	7753	132
M30	5917	7753	132
M32	5919	7753	132
M35	5921	7753	132
M40	5923	7753	132
M47	5925	7753	132
M50	MP4034	7753	132

STYLE "S" – Pads

Pad Style	Part #	Pg
S10	5601	124
S12	5603	124
S15	5605	124
S16	5607	124
S20	5609	124
S22	5611	124
S26	5613	124
S30	5615	124
S35	5617	124
S40	5619	124
S50	5623	124

Wrenches – Style "S" Bristol

Socket Handle	7909-00-00-0000	124
.111" Socket Wrench	7909-00-00-0001	124
.145" Socket Wrench	7909-00-00-0002	124
L Wrench .111" – B-Spline	7637	124
L Wrench .145" – C-Spline	7639	124

Clamps – for Style "S" Pads

.111" – B-Spline	7619	124
.145" – C-Spline	7627	124

Conventional Style Pads

Master Collet Pads	130
Feed Finger Pads	131

Adapters For Feed Fingers

Description	Part #	Pg
ACME-GRIDLEY - Adapters		
1" Acme to #11 B&S	7523	142
1¼" Acme to #11 B&S	7525	142
1⅝" Acme to #60-1" New Britain	7527	142
BROWN & SHARPE - Adapters		
#10 B&S to #00 B&S	MP3484	142
#10A B&S to #10 B&S	7501	142
#10AA B&S to #11 B&S	7503	142
#10AA B&S to #11A B&S	7505	142
#21A B&S to #11A, 11AA B&S	7531	142
#22 B&S to #11 B&S	7507	142
#22A B&S to #11 B&S	MP3201	142
#22D B&S to #22 B&S	7509	142
#22D B&S to #60-a" New Britain	7511	142
#22H B&S to #11 B&S	7513	142
CONE - Adapters		
1" Cone to #11 B&S	MP3203	142
1¼" Cone to #11 B&S	7515	142
1½" Cone to #60-1" New Britain	7517	142
1⅝" Cone to #60-1" New Britain	7519	142
DAVENPORT - Adapters		
¾" OS Dav. to ½" Std. Dav.	7521	142
¾" OS Dav.Rear Booster to B3X B&S	7533	142
GREENLEE - Adapters		
⅞" Greenlee to #11 B&S	MP3205	142
1" Greenlee to #11 B&S	MP3204	142
NEW BRITAIN - Adapters		
1" New Britain to #11 B&S	7529	142

CROSS REFERENCE

Collets – Pads – Manufacturer
134-135

Pins for Emergency Collets & Step Chucks

Description	Part #	Pg
⅛" Diameter x ⅜"	7723	143
3⁄16" Diameter x ⅜"	7725	143
3⁄16" Diameter x ¼"	7727	143
3⁄16" Diameter x 5⁄16"	7729	143
⅛" Diameter x ¾"	7731	143

Master Collet Seals

Description	Part #	Pg
Master Collets	7643	139

Solid Collet Seals

Description	Part #	Pg
ACME-GRIDLEY		
⅜", 7⁄16"	7645	139
¾", ⅞", 1", 1¼", 1⅜", 1½"	7647	139
1⅝", 1¾", 2", 2¼", 2⅝"	7649	139
2⅞", 3½", 4", 4¾", 5", 5⅛"	7651	139
9⁄16", 5⁄16" RA6	7653	139
BROWN & SHARPE		
00, 00B, 00Y, 2 [1⅝" capacity], 10, 10B, 10SC, 10SCY, 10Y	7645	139
24, 26	7647	139
2 [1⅞" capacity], 11, 11B, 11C, 11SC, 11SCY, 11Y, 12, 21, 21SC, 21SCY, 21Y, 22, 22A, 22B, 22C, 22D, 22SC, 22SCY, 22Y	7653	139
BROWN & WARD		
⅝"	7645	139
BSA		
138, 168	7651	139
CASATI		
26, 32	7647	139
CLEVELAND		
1½", 1⅝"	7649	139
2½", 2½" AB	7651	139
CONE		
⅞", 1", 1¼", 1½", 1⅝"	7647	139
1⅞", 2¼", 2½", 2⅝"	7649	139
3½", 3¾", 4⅜", 5", 5¼"	7651	139
DAVENPORT		
½" Standard, ¾" Oversize	7645	139
GARVIN		
103A	7647	139
GILDEMEISTER		
AS16, AS20, GS20, GM20	7645	139
AS20, GS20	7653	139
AS20-25, GS25-25	7653	139
GM32, GS32, AS32, AV32	7643	139
GM32/6	7643	139
AV48, AS48, AA48	7643	139
AV67, AS67	7643	139
GREENLEE		
1", 1¼", 1½"	7647	139
1⅝", 2", 2⅝"	7649	139
2¼", 3⅛", 3⅜"	7651	139
HERBERT		
O	7645	139
2D	7647	139
4, 7	7651	139
INDEX		
12, ON12, OR12, 18	7645	139
B42	7647	139
B60	7649	139
20, 25, B30	7653	139

Solid Collet Seals (continued)

Description	Part #	Pg
NATIONAL ACME		
9⁄16"	7653	139
NEW BRITAIN		
410, 413, 605, 60-1", 1⅝", 204, 407, 61	7647	139
415	7649	139
ORTLEIB		
1⅝"	7649	139
SMART & BROWN		
L16	7645	139
TAREX		
1	7649	139
WARD		
7	7651	139
WARNER & SWASEY		
2, 3 [1½" capacity]	7647	139
3 [¾" capacity]	7649	139
2AB, 1¾", 2¼"	7651	139
1"	7653	139
WICKMAN		
1¾", 3¼"	7649	139
1⅜", 2¼"	7651	139
⅝"	7653	139
2 ⅝"	7651	139

Screws – For CB Master Collets

Description	Part #	Pg
CB10	7711	143
CB12, CB16	7713	143
CB20, CB26, CB35, CB40	7715	143

Screws – for CT Master Collets

CT10	7767	143
CT12, CT16, CT20	7769	143
CT26	7771	143
CT35	7773	143
CT40	7775	143

Screws – for Conventional Feed Finger Pads

#10 x 24 RH x ⅜"	7691	144
5⁄16" x 18 RH x ½"	7693	144
5⁄16" x 24 RH x ½" x 3⁄64" Head	7695	144
5⁄16" x 24 RH x ½"x 15⁄32" Head	7697	144
⅜" x 16 RH x ½"	7699	144
7⁄16" x 20 RH x 17⁄32"	7701	144
19⁄64" x 20 RH x 11⁄32"	7703	144
7⁄16" x 14 RH x ⅞"	7705	144
19⁄64" x 20 RH x 5⁄16"	7707	144
5⁄16" x 18 RH x 7⁄16"	7709	144

Screws – for Conventional Master Collet Pads

¼" x 20 RH x ⅝"	7661	144
¼" x 24 RH x ⅝"	7663	144
5⁄16" x 18 RH x ⅝"	7665	144
5⁄16" x 24 RH x ⅝"	7667	144
⅜" x 16 RH x ¾"	7669	144
⅜" x 18 RH x ¾"	7671	144
⅜" x 18 RH x ⅞"	7673	144
⅜" x 24 RH x ¾"	7675	144
⅜" x 24 RH x ⅞"	7677	144
½" x 20 RH x 1"	7679	144
¼" x 28 RH x 15⁄32"	7681	144
#10 x 24 RH x ⅝"	7683	144

STYLE "B" – Adjustable Tension

Style	Sleeve #	Pg
B1X – #00 B&S	6017	141
B10X – #10 B&S	6027	141
B3X – #11 B&S	6041	141
DA-2X – ½" Std. Davenport	6167	141

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