



WEDEVÅG

Established 1538

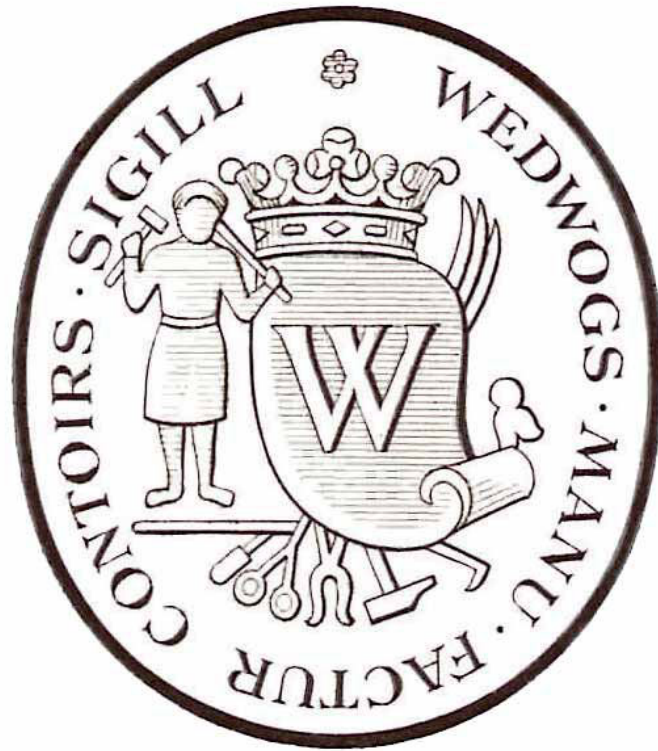
2018 Catalog

High performance quality tools by Wedevåg...



**...when the
end result
means
everything**

Cutting tools in carbide, HSS-Co & HSS for all applications.



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Terms & Conditions

Wedevåg Tools (the “Company”) warrants to original equipment manufacturers, industrial and commercial distributors and users of Wedevåg Tools branded products (the “Products”) purchased from the Company that each new Product shall be free from defects in materials and workmanship.

The Company’s sole obligations under this warranty is limited to furnishing, without additional charge, a replacement for or, at its option, repairing or issuing credit to account, for any Product which shall within one year from the date of sale by the Company be returned freight pre-paid to the warehouse designated by a Company representative and which upon inspection is determined by the company to be defective in materials and workmanship.

Complete information as to operating conditions, machine setup and application of cutting fluid should accompany any returned Product. This warranty shall not apply to any Product which has been subjected to misuse, improper operation conditions, machine setup or application of cutting fluid or which has been repaired or altered if such repair or alteration in the Company’s judgement would adversely affect performance of the Product.

This warranty is in lieu of all other warranties, expressed or implied, including any implied warranties of merchantability of fitness for a particular purpose. The Company’s sole liability on any claim of any kind, whether in contract, tort or otherwise, for any loss of damage arising out of,

connected with, or resulting from the manufacture, sale, delivery, or use of the product shall in no case exceed the cost of replacement or repair as provided herein. In no event shall the company be liable for any special, incidental or consequential damages.

There are no other warranties, expressed or implied, made by the Company to original equipment manufactures or to industrial or commercial distributors or users except the warranty against defects in material and workmanship set forth above, and the Company neither assumes nor authorizes any person or firm to assume for it any other obligations or liability in connection with its Products.

Important Orders:

Orders entered and in process will not be subject to change by addition or deletion. A new “revised” purchase order will be accepted as long as it is clearly stated as “revised”. Wedevåg Tools will endeavor whenever possible to consolidate shipments on a daily basis.

Distributor Minimum Order:

Minimum order value of \$30.00 USD NET shipped to any single location. Orders of less than \$30.00 USD Net will be subject to a \$10.00 USD non-refundable service charge.

Package Quantities:

Most standard package quantities are 10 each, although uncoated tools also may be packed as 5 and 2 each. Drills



are supplied in package quantities and these packages cannot be broken. Coated and Carbide drills are supplied in package quantities of 1 each for all sizes.

Return Goods:

All returns must be processed through an authorized Wedevåg distributor. All requests for return goods must be made to Wedevåg Tools Customer Service. No materials will be accepted without prior agreement and a Return Goods Authorization Number ("RGA"). Clear documentation and reason for return must accompany all returns. Only full, unbroken packages will be accepted.

Product must be new and unused, freight pre-paid. In all cases of "special tools", no returns are authorized unless specified in writing before the tools are ordered.

Standard product stock returns may be made once per year. Returns made without replacement order are subject to a 30% restocking fee. The restocking fee is waived for returns made with a replacement order of 100% value. All sales are final.

***Note:** Every effort has been made to assure the accuracy of the information presented herein. We assume no liability however, for any errors or omissions.*

Specifications and prices are subject to change without notice.

For additional information on Wedevåg Products/distributors, please contact any of our corporate offices or visit our web site at www.wedevag.com

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Wedevåg headquarters. The company is one of the oldest yet active companies in Sweden. In fact, the metal working industry at this geographical place was founded by King Gustav Vasa who ruled Sweden 1523-1560.

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Drill set 750, *EasyCut*, Drill 150-0*

Jobber length drills type 150. DIN338. Cylindrical shank.

HSS-Co

High Performance, Self-centring, Easy Cut. Work

Material: Steel alloys and cast iron

EDP#	Dia. range [mm]	Steps [mm]	Pcs
75001919	1 – 10,0	0,5	19
75002525	1 – 13,0	0,5	25

EDP#	Dia. range [inch]	Steps [inch]	Pcs
75002929	1/16-1/2	1/16	29

* Package subject to change



Drill set 700, Drill 100-5**

Jobber length drills type 100-5. DIN 338. Cylindrical shank.

HSS-Co

Self-centring Work Material: Steel

alloys and cast iron

EDP#	Dia. range [mm]	Steps [mm]	Pcs
70055050	1 – 5,9	0,1	50
70054141	6 – 10,0	0,1	41
70051919	1 – 10,0	0,5	19
70052424	1 – 10,5	0,5*	24
70052525	1 – 13,0	0,5	25

EDP#	Dia. range [inch]	Steps [inch]	Pcs
75052929	1/16-1/2	1/16	29

* + 3,3 - 4,2 - 6,8 och 10,2 mm

** Package subject to change



Drill set 711, *Qvint-X*, Drill 111-0**

Jobber length drills type 111-0. DIN 338. Cylindrical shank.

HSS-Co

High Performance, Self-centring,

Work Material: Steel alloys and stainless steel materials

EDP#	Dia. range [mm]	Steps [mm]	Pcs
71101919	1 – 10	0,5	19
71102424	1 – 10,5	0,5*	24
71102525	1 – 13	0,5	25

* + 3,3 - 4,2 - 6,8 och 10,2 mm

** Package subject to change



Drill set 721, *Double-X*, Drill 121-0**

Stub length drills type 121-0. DIN 1897. Cylindrical shank.

HSS-Co

High Performance, Self-centring

Work Material: Steel alloys and stainless steel materials

EDP#	Dia. range [mm]	Steps [mm]	Pcs
72101919	1 – 10	0,5	19
72102222	2,5 – 13	0,5	22
72102424	1 – 10,5	0,5*	24

* + 3,3 - 4,2 - 6,8 och 10,2 mm

** Package subject to change



DRILLS

HSS-Co

Drill set 740, TiN coated point, Drill 140-0*

Jobber length drills type 140-0. DIN 338. Cylindrical shank.

HSS-Co

Coating length >3,1xD

Self-centring

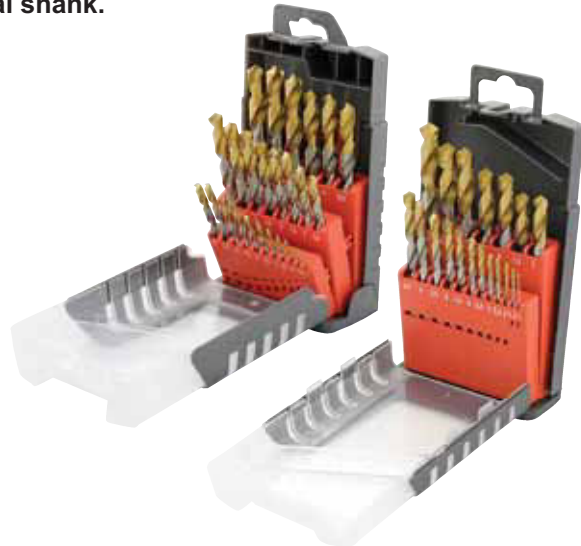
Material: Steel alloys and cast iron

EDP#	Dia. range [mm]	Steps [mm]	Pcs
74001919	1 – 10	0,5	19
74002525	1 – 13	0,5	25

* Package subject to change

EDP#	Dia. range [inch]	Steps [inch]	Pcs
75052929	1/16-1/2	1/16	29

* Package subject to change



Drill set 741, TiN coated point, *Double-X*, Drill 141-0*

Stub length drills type 141. DIN 1897. Cylindrical shank.

HSS-Co

Coating length >3,1xD

High Performance, Self-centring

Work Material: Steel alloys and stainless steel materials

EDP#	Dia. range [mm]	Steps [mm]	Pcs
74101919	1 – 10	0,5	19
74102222	2,5 – 13	0,5	22

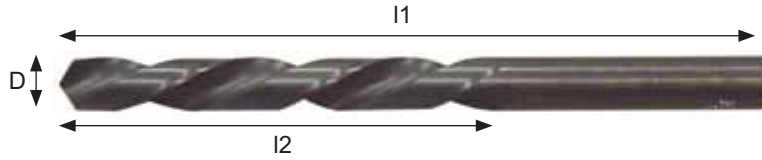
* Package subject to change



Drill 100-2

HSS

Left cutting



Work Material: Steel and cast iron

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
10020100	01,00	12	34
10020110	01,10	14	36
10020120	01,20	16	38
10020130	01,30	16	38
10020140	01,40	18	40
10020150	01,50	18	40
10020160	01,60	20	43
10020170	01,70	20	43
10020180	01,80	22	46
10020190	01,90	22	46
10020200	02,00	24	49
10020210	02,10	24	49
10020220	02,20	27	53
10020230	02,30	27	53
10020240	02,40	30	57
10020250	02,50	30	57
10020260	02,60	30	57
10020270	02,70	33	61
10020280	02,80	33	61
10020290	02,90	33	61

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
10020300	03,00	33	61
10020320	03,20	36	65
10020340	03,40	39	70
10020350	03,50	39	70
10020380	03,80	43	75
10020400	04,00	43	75
10020420	04,20	43	75
10020450	04,50	47	80
10020480	04,80	52	86
10020500	05,00	52	86
10020550	05,50	57	93
10020600	06,00	57	93
10020650	06,50	63	101
10020680	06,80	69	109
10020700	07,00	69	109
10020750	07,50	69	109
10020800	08,00	75	117
10020900	09,00	81	125
10021000	10,00	87	133

Drill 100-3, TiN

HSS-Co



≤2,45 mm >2,45 mm

Work Material: Steel and cast iron

EDP#	D h8 [mm]	[inch]	I2 [mm]	I1 [mm]
10030100	01,00		12	34
10030110	01,10		14	36
10030120	01,20		16	38
10030130	01,30		16	38
10030140	01,40		18	40
10030150	01,50		18	40
100301588	01,588	1/16	20	43
10030160	01,60		20	43
10030170	01,70		20	43
10030175	01,75		22	46
10030180	01,80		22	46
10030190	01,90		22	46
100301984	01,984	5/64	24	49
10030200	02,00		24	49
10030210	02,10		24	49
10030220	02,20		27	53
10030230	02,30		27	53

EDP#	D h8 [mm]	[inch]	I2 [mm]	I1 [mm]
100302381	02,381	3/32	30	57
10030240	02,40		30	57
10030250	02,50		30	57
10030260	02,60		30	57
10030270	02,70		33	61
100302778	02,778	7/64	33	61
10030280	02,80		33	61
10030290	02,90		33	61
10030300	03,00		33	61
10030310	03,10		36	65
100303175	03,175	1/8	36	65
10030320	03,20		36	65
10030330	03,30		36	65
10030340	03,40		39	70
10030350	03,50		39	70
100303572	03,572	9/64	39	70
10030360	03,60		39	70

Drill 100-3, TiN

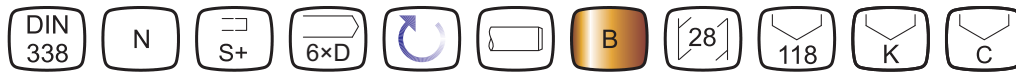
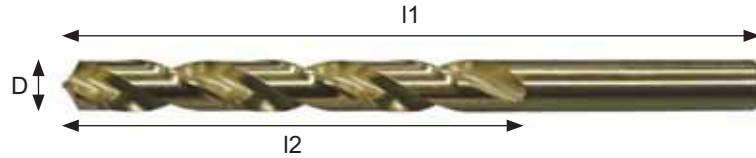
EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
10030370	03,70	39	70
10030380	03,80	43	75
10030390	03,90	43	75
100303969	03,969	43	75
10030400	04,00	43	75
10030410	04,10	43	75
10030420	04,20	43	75
10030430	04,30	47	80
100304366	04,366	47	80
10030440	04,40	47	80
10030450	04,50	47	80
10030460	04,60	47	80
10030470	04,70	47	80
100304763	04,763	52	86
10030480	04,80	52	86
10030490	04,90	52	86
10030500	05,00	52	86
10030510	05,10	52	86
100305159	05,159	52	86
10030520	05,20	52	86
10030530	05,30	52	86
10030540	05,40	57	93
10030550	05,50	57	93
100305556	05,556	57	93
10030560	05,60	57	93
10030570	05,70	57	93
10030580	05,80	57	93
10030590	05,90	57	93
100305953	05,953	57	93
10030600	06,00	57	93
10030610	06,10	63	101
10030620	06,20	63	101
10030630	06,30	63	101
100306350	06,350	63	101
10030640	06,40	63	101
10030650	06,50	63	101
10030660	06,60	63	101
10030670	06,70	63	101
100306747	06,747	69	109
10030680	06,80	69	109
10030690	06,90	69	109
10030700	07,00	69	109
10030710	07,10	69	109
100307144	07,144	69	109
10030720	07,20	69	109
10030730	07,30	69	109
10030740	07,40	69	109
10030750	07,50	69	109
100307541	07,541	75	117
10030760	07,60	75	117
10030770	07,70	75	117
10030780	07,80	75	117
10030790	07,90	75	117
100307938	07,938	75	117
10030800	08,00	75	117
10030810	08,10	75	117
10030820	08,20	75	117
10030830	08,30	75	117
100308334	08,334	75	117
10030840	08,40	75	117
10030850	08,50	75	117

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
10030860	08,60	81	125
10030870	08,70	81	125
100308731	08,731	81	125
10030880	08,80	81	125
10030890	08,90	81	125
10030900	09,00	81	125
10030910	09,10	81	125
100309128	09,128	81	125
10030920	09,20	81	125
10030930	09,30	81	125
10030940	09,40	81	125
10030950	09,50	81	125
100309525	09,525	87	133
10030960	09,60	87	133
10030970	09,70	87	133
10030980	09,80	87	133
10030990	09,90	87	133
100309922	09,922	87	133
10031000	10,00	87	133
10031020	10,20	87	133
10031030	10,30	87	133
100310319	10,319	87	133
10031050	10,50	87	133
100310716	10,716	94	142
10031080	10,80	94	142
10031100	11,00	94	142
100311113	11,113	94	142
10031120	11,20	94	142
10031150	11,50	94	142
100311509	11,509	94	142
10031160	11,60	94	142
10031170	11,70	94	142
10031180	11,80	94	142
100311906	11,906	101	151
10031200	12,00	101	151
10031220	12,20	101	151
100312303	12,303	101	151
10031250	12,50	101	151
100312700	12,700	101	151
10031280	12,80	101	151
10031300	13,00	101	151
100313097	13,097	101	151
100313494	13,494	108	160
10031350	13,50	108	160
100313891	13,891	108	160
10031400	14,00	108	160
10031425	14,25	114	169
100314288	14,288	114	169
10031450	14,50	114	169
100314684	14,684	114	169
10031500	15,00	114	169
100315081	15,081	120	178
100315478	15,478	120	178
10031550	15,50	120	178
100315875	15,875	120	178
10031600	16,00	120	178

DRILLS**HSS
-Co**

Drill 100-5

HSS-Co



≤2,45 mm >2,45 mm

Self-centring.

Work Material: Steel and cast iron

EDP#	D h8 [mm] [inch]		L2 [mm]	L1 [mm]
10050030	00,30		3	19
10050035	00,35		4	19
10050040	00,40		5	20
10050045	00,45		5	20
10050050	00,50		6	22
10050055	00,55		7	24
10050060	00,60		7	24
10050065	00,65		8	26
10050070	00,70		9	28
10050075	00,75		9	28
10050080	00,80		10	30
10050085	00,85		10	30
10050090	00,90		11	32
10050095	00,95		11	32
10050100	01,00		12	34
10050105	01,05		12	34
10050110	01,10		14	36
10050115	01,15		14	36
10050120	01,20		16	38
10050125	01,25		16	38
10050130	01,30		16	38
10050135	01,35		18	40
10050140	01,40		18	40
10050145	01,45		18	40
10050150	01,50		18	40
10050155	01,55		20	43
100501588	01,588	1/16	20	43
10050160	01,60		20	43
10050165	01,65		20	43
10050170	01,70		20	43
10050175	01,75		22	46
10050180	01,80		22	46
10050185	01,85		22	46
10050190	01,90		22	46
10050195	01,95		24	49
100501984	01,984	5/64	24	49
10050200	02,00		24	49
10050205	02,05		24	49
10050210	02,10		24	49
10050215	02,15		27	53
10050220	02,20		27	53
10050225	02,25		27	53
10050230	02,30		27	53
10050235	02,35		27	53
100502381	02,381	3/32	30	57
10050240	02,40		30	57
10050245	02,45		30	57
10050250	02,50		30	57
10050255	02,55		30	57
10050260	02,60		30	57
10050265	02,65		30	57
10050270	02,70		33	61
10050275	02,75		33	61

EDP#	D h8 [mm] [inch]		L2 [mm]	L1 [mm]
100502778	02,778	7/64	33	61
10050280	02,80		33	61
10050285	02,85		33	61
10050290	02,90		33	61
10050295	02,95		33	61
10050300	03,00		33	61
10050310	03,10		36	65
100503175	03,175	1/8	36	65
10050320	03,20		36	65
10050325	03,25		36	65
10050330	03,30		36	65
10050340	03,40		39	70
10050350	03,50		39	70
100503572	03,572	9/64	39	70
10050360	03,60		39	70
10050370	03,70		39	70
10050375	03,75		39	70
10050380	03,80		43	75
10050390	03,90		43	75
100503969	03,969	5/32	43	75
10050400	04,00		43	75
10050410	04,10		43	75
10050420	04,20		43	75
10050425	04,25		43	75
10050430	04,30		47	80
100504366	04,366	11/64	47	80
10050440	04,40		47	80
10050450	04,50		47	80
10050460	04,60		47	80
10050470	04,70		47	80
10050475	04,75		47	80
100504763	04,763	3/16	52	86
10050480	04,80		52	86
10050490	04,90		52	86
10050500	05,00		52	86
10050510	05,10		52	86
100505159	05,159	13/64	52	86
10050520	05,20		52	86
10050525	05,25		52	86
10050530	05,30		52	86
10050540	05,40		57	93
10050550	05,50		57	93
100505556	05,556	7/32	57	93
10050560	05,60		57	93
10050570	05,70		57	93
10050575	05,75		57	93
10050580	05,80		57	93
10050590	05,90		57	93
100505953	05,953	15/64	57	93
10050600	06,00		57	93
10050610	06,10		63	101
10050620	06,20		63	101
10050625	06,25		63	101

Drill 100-5

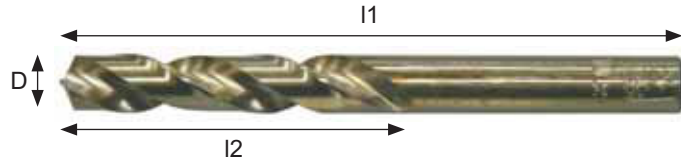
EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
10050630	06,30	63	101
100506350	06,350 1/4	63	101
10050640	06,40	63	101
10050650	06,50	63	101
10050660	06,60	63	101
10050670	06,70	63	101
100506747	06,747 17/64	69	109
10050675	06,75	69	109
10050680	06,80	69	109
10050690	06,90	69	109
10050700	07,00	69	109
10050710	07,10	69	109
100507144	07,144 9/32	69	109
10050720	07,20	69	109
10050725	07,25	69	109
10050730	07,30	69	109
10050740	07,40	69	109
10050750	07,50	69	109
100507541	07,541 19/64	75	117
10050760	07,60	75	117
10050770	07,70	75	117
10050775	07,75	75	117
10050780	07,80	75	117
10050790	07,90	75	117
100507938	07,938 5/16	75	117
10050800	08,00	75	117
10050810	08,10	75	117
10050820	08,20	75	117
10050825	08,25	75	117
10050830	08,30	75	117
100508334	08,334 21/64	75	117
10050840	08,40	75	117
10050850	08,50	75	117
10050860	08,60	81	125
10050870	08,70	81	125
100508731	08,731 11/32	81	125
10050875	08,75	81	125
10050880	08,80	81	125
10050890	08,90	81	125
10050900	09,00	81	125
10050910	09,10	81	125
100509128	09,128 23/64	81	125
10050920	09,20	81	125
10050925	09,25	81	125
10050930	09,30	81	125
10050940	09,40	81	125
10050950	09,50	81	125
100509525	09,525 3/8	87	133
10050960	09,60	87	133
10050970	09,70	87	133
10050975	09,75	87	133
10050980	09,80	87	133
10050990	09,90	87	133
100509922	09,922 25/64	87	133
10051000	10,00	87	133
10051010	10,10	87	133
10051020	10,20	87	133
10051025	10,25	87	133
10051030	10,30	87	133
100510319	10,319 13/32	87	133
10051040	10,40	87	133
10051050	10,50	87	133
10051060	10,60	87	133
10051070	10,70	94	142

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
100510716	10,716 27/64	94	142
10051075	10,75	94	142
10051080	10,80	94	142
10051090	10,90	94	142
10051100	11,00	94	142
10051110	11,10	94	142
100511113	11,113 7/16	94	142
10051120	11,20	94	142
10051125	11,25	94	142
10051130	11,30	94	142
10051140	11,40	94	142
10051150	11,50	94	142
100511509	11,509 29/64	94	142
10051160	11,60	94	142
10051170	11,70	94	142
10051175	11,75	94	142
10051180	11,80	94	142
10051190	11,90	101	151
100511906	11,906 15/32	101	151
10051200	12,00	101	151
10051210	12,10	101	151
10051220	12,20	101	151
10051225	12,25	101	151
10051230	12,30	101	151
100512303	12,303 31/64	101	151
10051240	12,40	101	151
10051250	12,50	101	151
10051260	12,60	101	151
100512700	12,700 1/2	101	151
10051270	12,70	101	151
10051275	12,75	101	151
10051280	12,80	101	151
10051290	12,90	101	151
10051300	13,00	101	151
100513097	13,097 33/64	101	151
10051310	13,10	101	151
10051320	13,20	101	151
10051325	13,25	108	160
10051330	13,30	108	160
10051340	13,40	108	160
100513494	13,494 17/32	108	160
10051350	13,50	108	160
10051360	13,60	108	160
10051370	13,70	108	160
10051375	13,75	108	160
10051380	13,80	108	160
100513891	13,891 35/64	108	160
10051390	13,90	108	160
10051400	14,00	108	160
10051425	14,25	114	169
100514288	14,288 9/16	114	169
10051450	14,50	114	169
100514684	14,684 37/64	114	169
10051475	14,75	114	169
10051500	15,00	114	169
100515081	15,081 19/32	120	178
10051525	15,25	120	178
100515478	15,478 39/64	120	178
10051550	15,50	120	178
10051575	15,75	120	178
100515875	15,875 5/8	120	178
10051600	16,00	120	178

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Quadra-X, Drill 101-0

HSS-Co



High Performance, Self-centering, Short for stability
Work Material: Steel alloys and stainless steel materials

EDP#	D h8 [mm]	[inch]	L2 [mm]	L1 [mm]
101002489	02,489	No.40	18	47
10100250	02,50		18	47
101002527	02,527	No.39	18	47
101002578	02,578	No.38	18	47
10100260	02,60		18	47
101002642	02,642	No.37	18	47
10100270	02,70		21	51
101002705	02,705	No.36	21	51
101002778	02,778	7/64	21	51
101002794	02,794	No.35	21	51
10100280	02,80		21	51
101002819	02,819	No.34	21	51
101002870	02,870	No.33	21	51
10100290	02,90		21	51
101002946	02,946	No.32	21	51
10100300	03,00		21	51
101003048	03,048	No.31	24	55
10100310	03,10		24	55
101003175	03,175	1/8	24	55
10100320	03,20		24	55
101003264	03,264	No.30	24	55
10100330	03,30		24	55
10100340	03,40		26	59
101003454	03,454	No.29	26	59
10100350	03,50		26	59
101003569	03,569	No.28	26	59
101003572	03,572	9/64	26	59
10100360	03,60		26	59
101003658	03,658	No.27	26	59
10100370	03,70		26	59
101003734	03,734	No.26	26	59
101003797	03,797	No.25	29	62
10100380	03,80		29	62
101003861	03,861	No.24	29	62
10100390	03,90		29	62
101003912	03,912	No.23	29	62
101003969	03,969	5/32	29	62
101003988	03,988	No.22	29	62
10100400	04,00		29	62
101004039	04,039	No.21	29	62
101004089	04,089	No.20	29	62
10100410	04,10		29	62
10100420	04,20		29	62
101004216	04,216	No.19	29	62
10100430	04,30		31	66
101004305	04,305	No.18	31	66
101004366	04,366	11/64	31	66
101004394	04,394	No.17	31	66
10100440	04,40		31	66
101004496	04,496	No.16	31	66
10100450	04,50		31	66

EDP#	D h8 [mm]	[inch]	L2 [mm]	L1 [mm]
101004572	04,572	No.15	31	66
10100460	04,60		31	66
101004623	04,623	No.14	31	66
101004699	04,699	No.13	31	66
10100470	04,70		31	66
101004763	04,763	3/16	34	71
10100480	04,80		34	71
101004801	04,801	No.12	34	71
101004851	04,851	No.11	34	71
10100490	04,90		34	71
101004915	04,915	No.10	34	71
101004978	04,978	No.9	34	71
10100500	05,00		34	71
101005055	05,055	No.8	34	71
10100510	05,10		34	71
101005105	05,105	No.7	34	71
101005159	05,159	13/64	34	71
101005182	05,182	No.6	34	71
10100520	05,20		34	71
101005220	05,220	No.5	34	71
10100530	05,30		34	71
101005309	05,309	No.4	34	71
10100540	05,40		37	77
101005410	05,410	No.3	37	77
10100550	05,50		37	77
10100555	05,55		37	77
101005556	05,556	7/32	37	77
10100560	05,60		37	77
101005613	05,613	No.2	37	77
10100570	05,70		37	77
101005791	05,791	No.1	37	77
10100580	05,80		37	77
10100590	05,90		37	77
101005944	05,944	SIZE A	37	77
101005953	05,953	15/64	37	77
10100600	06,00		37	77
101006045	06,045	SIZE B	41	82
10100610	06,10		41	82
101006147	06,147	SIZE C	41	82
10100620	06,20		41	82
101006248	06,248	SIZE D	41	82
10100630	06,30		41	82
101006350	06,350	1/4	41	82
101006350	06,350	SIZE E	41	82
10100640	06,40		41	82
10100650	06,50		41	82
101006528	06,528	SIZE F	41	82
10100660	06,60		41	82
101006629	06,629	SIZE G	41	82
10100670	06,70		41	82
101006747	06,747	17/64	46	88

Quadra-X, Drill 101-0

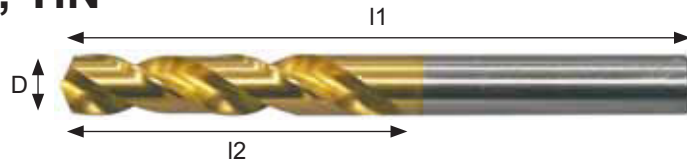
EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
101006756	06,756	SIZE H	46 88
10100680	06,80		46 88
10100690	06,90		46 88
101006909	06,909	SIZE I	46 88
10100700	07,00		46 88
101007036	07,036	SIZE J	46 88
10100710	07,10		46 88
101007137	07,137	SIZE K	46 88
101007144	07,144	9/32	46 88
10100720	07,20		46 88
10100730	07,30		46 88
101007366	07,366	SIZE L	46 88
10100740	07,40		46 88
101007493	07,493	SIZE M	46 88
10100750	07,50		46 88
101007541	07,541	19/64	46 88
10100760	07,60		46 88
101007671	07,671	SIZE N	46 88
10100770	07,70		46 88
10100780	07,80		50 94
10100790	07,90		50 94
101007938	07,938	5/16	50 94
10100800	08,00		50 94
101008026	08,026	SIZE O	50 94
10100810	08,10		50 94
10100820	08,20		50 94
101008204	08,204	SIZE P	50 94
10100830	08,30		50 94
101008334	08,334	21/64	50 94
10100840	08,40		50 94
101008433	08,433	SIZE Q	50 94
10100850	08,50		50 94
10100860	08,60		50 94
101008611	08,611	SIZE R	50 94
10100870	08,70		50 94
101008731	08,731	11/32	50 94
10100880	08,80		55 102
101008839	08,839	SIZE S	55 102
10100890	08,90		55 102
10100900	09,00		55 102
101009093	09,093	SIZE T	55 102
10100910	09,10		55 102
101009128	09,128	23/64	55 102
10100920	09,20		55 102
10100930	09,30		55 102
101009347	09,347	SIZE U	55 102
10100940	09,40		55 102
10100950	09,50		55 102
101009525	09,525	3/8	55 102
101009576	09,576	SIZE V	55 102
10100960	09,60		55 102
10100970	09,70		55 102
10100980	09,80		59 108
101009804	09,804	SIZE W	59 108
10100990	09,90		59 108
101009922	09,922	25/64	59 108
10101000	10,00		59 108
101010084	10,084	SIZE X	59 108
10101020	10,20		59 108
101010262	10,262	SIZE Y	59 108

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
10101030	10,30		59 108
101010319	10,319	13/32	59 108
10101040	10,40		59 108
101010490	10,490	SIZE Z	59 108
10101050	10,50		59 108
101010716	10,716	27/64	65 116
10101080	10,80		65 116
10101100	11,00		65 116
101011113	11,113	7/16	65 116
10101120	11,20		65 116
10101150	11,50		65 116
101011509	11,509	29/64	65 116
10101180	11,80		65 116
101011906	11,906	15/32	71 125
10101200	12,00		71 125
10101220	12,20		71 125
101012303	12,303	31/64	71 125
10101250	12,50		71 125
101012700	12,700	1/2	71 125
10101280	12,80		71 125
10101300	13,00		71 125
101013097	13,097	33/64	77 130
101013494	13,494	17/32	84 139
10101350	13,50		84 139
101013891	13,891	35/64	84 139
10101400	14,00		84 139
101014288	14,288	9/16	84 139
10101450	14,50		88 145
101014684	14,684	37/64	88 145
10101500	15,00		88 145
101015081	15,081	19/32	88 145
10101530	15,30		93 150
101015478	15,478	39/64	93 150
10101550	15,50		93 150
101015875	15,875	5/8	93 150
10101600	16,00		93 150
10101650	16,50		93 150
10101700	17,00		93 150
10101750	17,50		93 150
10101770	17,70		93 150
10101800	18,00		93 150
10101850	18,50		93 150
10101900	19,00		93 150
10101950	19,50		93 150
10101970	19,70		93 150
10102000	20,00		93 150

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Quadra-X, Drill 101-3, TiN

HSS-Co



High Performance, Self-centering, Short for stability
Work Material: Steel alloys and stainless steel materials

EDP#	D h8 [mm]	[inch]	L2 [mm]	L1 [mm]
101302489	02,489	No.40	18	47
10130250	02,50		18	47
101302527	02,527	No.39	18	47
101302578	02,578	No.38	18	47
10130260	02,60		18	47
101302642	02,642	No.37	18	47
10130270	02,70		21	51
101302705	02,705	No.36	21	51
101302778	02,778	7/64	21	51
101302794	02,794	No.35	21	51
10130280	02,80		21	51
101302819	02,819	No.34	21	51
101302870	02,870	No.33	21	51
10130290	02,90		21	51
101302946	02,946	No.32	21	51
10130300	03,00		21	51
101303048	03,048	No.31	24	55
10130310	03,10		24	55
101303175	03,175	1/8	24	55
10130320	03,20		24	55
101303264	03,264	No.30	24	55
10130330	03,30		24	55
10130340	03,40		26	59
101303454	03,454	No.29	26	59
10130350	03,50		26	59
101303569	03,569	No.28	26	59
101303572	03,572	9/64	26	59
10130360	03,60		26	59
101303658	03,658	No.27	26	59
10130370	03,70		26	59
101303734	03,734	No.26	26	59
101303797	03,797	No.25	29	62
10130380	03,80		29	62
101303861	03,861	No.24	29	62
10130390	03,90		29	62
101303912	03,912	No.23	29	62
101303969	03,969	5/32	29	62
101303988	03,988	No.22	29	62
10130400	04,00		29	62
101304039	04,039	No.21	29	62
101304089	04,089	No.20	29	62
10130410	04,10		29	62
10130420	04,20		29	62
101304216	04,216	No.19	29	62
10130430	04,30		31	66
101304305	04,305	No.18	31	66
101304366	04,366	11/64	31	66
101304394	04,394	No.17	31	66
10130440	04,40		31	66
101304496	04,496	No.16	31	66

EDP#	D h8 [mm]	[inch]	L2 [mm]	L1 [mm]
10130450	04,50		31	66
101304572	04,572	No.15	31	66
10130460	04,60		31	66
101304623	04,623	No.14	31	66
101304699	04,699	No.13	31	66
10130470	04,70		31	66
101304763	04,763	3/16	34	71
10130480	04,80		34	71
101304801	04,801	No.12	34	71
101304851	04,851	No.11	34	71
10130490	04,90		34	71
101304915	04,915	No.10	34	71
101304978	04,978	No.9	34	71
10130500	05,00		34	71
101305055	05,055	No.8	34	71
10130510	05,10		34	71
101305105	05,105	No.7	34	71
101305159	05,159	13/64	34	71
101305182	05,182	No.6	34	71
10130520	05,20		34	71
101305220	05,220	No.5	34	71
10130530	05,30		34	71
101305309	05,309	No.4	34	71
10130540	05,40		37	77
101305410	05,410	No.3	37	77
10130550	05,50		37	77
101305556	05,556	7/32	37	77
10130560	05,60		37	77
101305613	05,613	No.2	37	77
10130570	05,70		37	77
101305791	05,791	No.1	37	77
10130580	05,80		37	77
10130590	05,90		37	77
101305953	05,953	15/64	37	77
10130600	06,00		37	77
10130610	06,10		41	82
10130620	06,20		41	82
10130630	06,30		41	82
101306350	06,350	1/4	41	82
10130640	06,40		41	82
10130650	06,50		41	82
10130660	06,60		41	82
10130670	06,70		41	82
101306747	06,747	17/64	46	88
10130680	06,80		46	88
10130690	06,90		46	88
10130700	07,00		46	88
10130710	07,10		46	88
101307144	07,144	9/32	46	88
10130720	07,20		46	88

Quadra-X, Drill 101-3, TiN

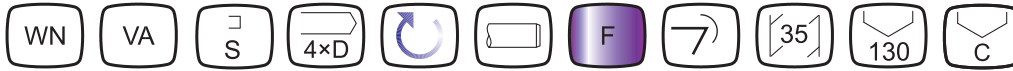
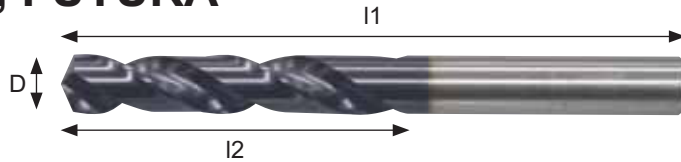
EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
10130730	07,30	46	88
10130740	07,40	46	88
10130750	07,50	46	88
101307541	07,541	46	88
10130760	07,60	46	88
10130770	07,70	46	88
10130780	07,80	50	94
10130790	07,90	50	94
101307938	07,938	50	94
10130800	08,00	50	94
10130810	08,10	50	94
10130820	08,20	50	94
10130830	08,30	50	94
101308334	08,334	50	94
10130840	08,40	50	94
10130850	08,50	50	94
10130860	08,60	50	94
10130870	08,70	50	94
101308731	08,731	50	94
10130880	08,80	55	102
10130890	08,90	55	102
10130900	09,00	55	102
10130910	09,10	55	102
101309128	09,128	55	102
10130920	09,20	55	102
10130930	09,30	55	102
10130940	09,40	55	102
10130950	09,50	55	102
101309525	09,525	55	102
10130960	09,60	55	102
10130970	09,70	55	102
10130980	09,80	59	108
10130990	09,90	59	108
101309922	09,922	59	108
10131000	10,00	59	108
10131020	10,20	59	108
101310319	10,319	59	108
10131050	10,50	59	108
101310716	10,716	65	116
10131080	10,80	65	116

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
10131100	11,00	65	116
101311113	11,113	65	116
10131120	11,20	65	116
10131150	11,50	65	116
101311509	11,509	65	116
10131180	11,80	65	116
101311906	11,906	71	125
10131200	12,00	71	125
10131220	12,20	71	125
101312303	12,303	71	125
10131250	12,50	71	125
101312700	12,700	71	125
10131280	12,80	71	125
10131300	13,00	71	125
101313097	13,097	77	130
101313494	13,494	84	139
10131350	13,50	84	139
101313891	13,891	84	139
10131400	14,00	84	139
101314288	14,288	84	139
10131450	14,50	88	145
101314684	14,684	88	145
10131500	15,00	88	145
101315081	15,081	88	145
101315478	15,478	93	150
10131550	15,50	93	150
101315875	15,875	93	150
10131600	16,00	93	150
10131650	16,50	93	150
10131700	17,00	93	150
10131750	17,50	93	150
10131770	17,70	93	150
10131800	18,00	93	150
10131850	18,50	93	150
10131900	19,00	93	150
10131950	19,50	93	150
10131970	19,70	93	150
10132000	20,00	93	150

D
R
I
L
SHSS
-Co

Quadra-X, Drill 101-4, FUTURA

HSS-Co



High Performance, Self-centering, Short for stability
Work Material: Steel alloys and stainless steel materials

EDP#	D h8 [mm] [inch]		L2 [mm] [mm]	L1 [mm] [mm]
10140250	02,50		18	47
10140260	02,60		18	47
10140270	02,70		21	51
101402778	02,778	7/64	21	51
10140280	02,80		21	51
10140290	02,90		21	51
10140300	03,00		21	51
10140310	03,10		24	55
101403175	03,175	1/8	24	55
10140320	03,20		24	55
10140330	03,30		24	55
10140340	03,40		26	59
10140350	03,50		26	59
101403572	03,572	9/64	26	59
10140360	03,60		26	59
10140370	03,70		26	59
10140380	03,80		29	62
10140390	03,90		29	62
101403969	03,969	5/32	29	62
10140400	04,00		29	62
10140410	04,10		29	62
10140420	04,20		29	62
10140430	04,30		31	66
101404366	04,366	11/64	31	66
10140440	04,40		31	66
10140450	04,50		31	66
10140460	04,60		31	66
10140470	04,70		31	66
101404763	04,763	3/16	34	71
10140480	04,80		34	71
10140490	04,90		34	71
10140500	05,00		34	71
10140510	05,10		34	71
101405159	05,159	13/64	34	71
10140520	05,20		34	71
10140530	05,30		34	71
10140540	05,40		37	77
10140550	05,50		37	77
10140555	05,55		37	77
101405556	05,556	7/32	37	77
10140560	05,60		37	77
10140570	05,70		37	77
10140580	05,80		37	77
10140590	05,90		37	77
101405953	05,953	15/64	37	77
10140600	06,00		37	77
10140610	06,10		41	82
10140620	06,20		41	82
10140630	06,30		41	82

EDP#	D h8 [mm] [inch]		L2 [mm] [mm]	L1 [mm] [mm]
101406350	06,350	1/4	41	82
10140640	06,40		41	82
10140650	06,50		41	82
10140660	06,60		41	82
10140670	06,70		41	82
101406747	06,747	17/64	46	88
10140680	06,80		46	88
10140690	06,90		46	88
10140700	07,00		46	88
10140710	07,10		46	88
101407144	07,144	9/32	46	88
10140720	07,20		46	88
10140730	07,30		46	88
10140740	07,40		46	88
10140750	07,50		46	88
101407541	07,541	19/64	46	88
10140760	07,60		46	88
10140770	07,70		46	88
10140780	07,80		50	94
10140790	07,90		50	94
101407938	07,938	5/16	50	94
10140800	08,00		50	94
10140810	08,10		50	94
10140820	08,20		50	94
10140830	08,30		50	94
101408334	08,334	21/64	50	94
10140840	08,40		50	94
10140850	08,50		50	94
10140860	08,60		50	94
10140870	08,70		50	94
101408731	08,731	11/32	50	94
10140880	08,80		55	102
10140890	08,90		55	102
10140900	09,00		55	102
10140910	09,10		55	102
101409128	09,128	23/64	55	102
10140920	09,20		55	102
10140930	09,30		55	102
10140940	09,40		55	102
10140950	09,50		55	102
101409525	09,525	3/8	55	102
10140960	09,60		55	102
10140970	09,70		55	102
10140980	09,80		59	108
10140990	09,90		59	108
101409922	09,922	25/64	59	108
10141000	10,00		59	108
10141020	10,20		59	108
10141030	10,30		59	108

Quadra-X, Drill 101-4, FUTURA

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm] [mm]
101410319	10,319 13/32	59	108
10141040	10,40	59	108
10141050	10,50	59	108
101410716	10,716 27/64	65	116
10141080	10,80	65	116
10141100	11,00	65	116
101411113	11,113 7/16	65	116
10141120	11,20	65	116
10141150	11,50	65	116
101411509	11,509 29/64	65	116
10141180	11,80	65	116
101411906	11,906 15/32	71	125
10141200	12,00	71	125
10141220	12,20	71	125
101412303	12,303 31/64	71	125
10141250	12,50	71	125
101412700	12,700 1/2	71	125
10141280	12,80	71	125
10141300	13,00	71	125
101413097	13,097 33/64	77	130
101413494	13,494 17/32	84	139
10141350	13,50	84	139
101413891	13,891 35/64	84	139

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm] [mm]
10141400	14,00	84	139
101414288	14,288 9/16	84	139
10141450	14,50	88	145
101414684	14,684 37/64	88	145
10141500	15,00	88	145
101415081	15,081 19/32	88	145
10141530	15,30	93	150
101415478	15,478 39/64	93	150
10141550	15,50	93	150
101415875	15,875 5/8	93	150
10141600	16,00	93	150
10141650	16,50	93	150
10141700	17,00	93	150
10141750	17,50	93	150
10141770	17,70	93	150
10141800	18,00	93	150
10141850	18,50	93	150
10141900	19,00	93	150
10141950	19,50	93	150
10141970	19,70	93	150
10142000	20,00	93	150

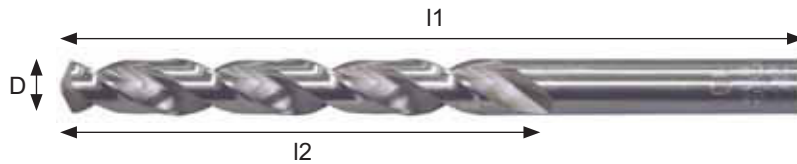
DRILLS

HSS
-Co

Drill 102-0

HSS-Co

>2,5 mm



<2,5 mm >2,4 mm

Work Material: Aluminum, magnesium and copper

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
10200100	01,00	12	34
10200110	01,10	14	36
10200120	01,20	16	38
10200130	01,30	16	38
10200140	01,40	18	40
10200150	01,50	18	40
10200160	01,60	20	43
10200170	01,70	20	43
10200180	01,80	22	46
10200190	01,90	22	46
10200200	02,00	24	49
10200210	02,10	24	49
10200220	02,20	27	53
10200230	02,30	27	53
10200240	02,40	30	57
10200250	02,50	30	57
10200260	02,60	30	57

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
10200270	02,70	33	61
10200280	02,80	33	61
10200290	02,90	33	61
10200300	03,00	33	61
10200310	03,10	36	65
10200320	03,20	36	65
10200330	03,30	36	65
10200340	03,40	39	70
10200350	03,50	39	70
10200360	03,60	39	70
10200370	03,70	39	70
10200380	03,80	43	75
10200390	03,90	43	75
10200400	04,00	43	75
10200410	04,10	43	75
10200420	04,20	43	75
10200430	04,30	47	80

Drill 102-0

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
10200440	04,40	47	80
10200450	04,50	47	80
10200460	04,60	47	80
10200470	04,70	47	80
10200480	04,80	52	86
10200490	04,90	52	86
10200500	05,00	52	86
10200510	05,10	52	86
10200520	05,20	52	86
10200530	05,30	52	86
10200540	05,40	57	93
10200550	05,50	57	93
10200560	05,60	57	93
10200570	05,70	57	93
10200580	05,80	57	93
10200590	05,90	57	93
10200600	06,00	57	93
10200610	06,10	63	101
10200620	06,20	63	101
10200630	06,30	63	101
10200640	06,40	63	101
10200650	06,50	63	101
10200660	06,60	63	101
10200670	06,70	63	101
10200680	06,80	69	109
10200690	06,90	69	109
10200700	07,00	69	109
10200710	07,10	69	109
10200720	07,20	69	109
10200730	07,30	69	109
10200740	07,40	69	109

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
10200750	07,50	69	109
10200760	07,60	75	117
10200770	07,70	75	117
10200780	07,80	75	117
10200790	07,90	75	117
10200800	08,00	75	117
10200810	08,10	75	117
10200820	08,20	75	117
10200830	08,30	75	117
10200840	08,40	75	117
10200850	08,50	75	117
10200860	08,60	81	125
10200870	08,70	81	125
10200880	08,80	81	125
10200890	08,90	81	125
10200900	09,00	81	125
10200910	09,10	81	125
10200920	09,20	81	125
10200930	09,30	81	125
10200940	09,40	81	125
10200950	09,50	81	125
10200960	09,60	87	133
10200970	09,70	87	133
10200980	09,80	87	133
10200990	09,90	87	133
10201000	10,00	87	133
10201020	10,20	87	133
10201050	10,50	87	133
10201100	11,00	94	142
10201200	12,00	101	151
10201300	13,00	101	151

Drill 104-0

HSS



Work Material: Short Chipping material such as brass, bronze, hard rubber and some plastics.

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
10400100	01,00	12	34
10400120	01,20	16	38
10400130	01,30	16	38
10400140	01,40	18	40
10400150	01,50	18	40
10400170	01,70	20	43
10400180	01,80	22	46
10400190	01,90	22	46
10400200	02,00	24	49

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
10400220	02,20	27	53
10400230	02,30	27	53
10400240	02,40	30	57
10400250	02,50	30	57
10400270	02,70	33	61
10400280	02,80	33	61
10400290	02,90	33	61
10400300	03,00	33	61
10400320	03,20	36	65

Drill 104-0

EDP#	D h8 [mm]	l2 [mm]	l1 [mm]
10400330	03,30	36	65
10400340	03,40	36	65
10400350	03,50	39	70
10400360	03,60	39	70
10400370	03,70	39	70
10400380	03,80	43	75
10400390	03,90	43	75
10400400	04,00	43	75
10400420	04,20	43	75
10400440	04,40	47	80
10400450	04,50	47	80
10400460	04,60	47	80

EDP#	D h8 [mm]	l2 [mm]	l1 [mm]
10400470	04,70	47	80
10400480	04,80	52	86
10400490	04,90	52	86
10400500	05,00	52	86
10400550	05,50	57	93
10400600	06,00	57	93
10400700	07,00	69	109
10400750	07,50	69	109
10400800	08,00	75	117
104008500	08,50	75	117
10400900	09,00	81	125
104009500	09,50	81	125
104001000	10,00	81	125

DRILLS

HSS
-Co

Cool-X, Coolant thru 105-4, FUTURA

HSS-Co



High Performance, Self-centring.

Work Material: Steel alloys and stainless steel materials

EDP#	D h8 [mm]	l2 [mm]	l1 [mm]
10540500	05,00	52	86
10540510	05,10	52	86
10540550	05,50	57	93
10540555	05,55	57	93
10540600	06,00	57	93
10540650	06,50	63	101
10540680	06,80	69	109
10540690	06,90	69	109
10540700	07,00	69	109
10540740	07,40	69	109
10540750	07,50	69	109
10540800	08,00	75	117
10540850	08,50	75	117
10540860	08,60	81	125
10540880	08,80	81	125
10540900	09,00	81	125
10540930	09,30	81	125
10540950	09,50	81	125
10541000	10,00	87	133
10541020	10,20	87	133
10541030	10,30	87	133

EDP#	D h8 [mm]	l2 [mm]	l1 [mm]
10541050	10,50	87	133
10541100	11,00	94	142
10541120	11,20	94	142
10541150	11,50	94	142
10541180	11,80	94	142
10541200	12,00	101	151
10541210	12,10	101	151
10541250	12,50	101	151
10541300	13,00	101	151
10541350	13,50	108	160
10541400	14,00	108	160
10541410	14,10	114	169
10541450	14,50	114	169
10541500	15,00	114	169
10541530	15,30	120	178
10541550	15,50	120	178
10541570	15,70	120	178
10541600	16,00	120	178

Parabolic Deep Hole Drill 107-0

HSS-Co



Work Material: Soft long-chipping materials, such as aluminum, magnesium, and copper

EDP#	D h8 [mm]	[inch]	L2 [mm]	L1 [mm]
10700100	01,00		12	34
10700110	01,10		14	36
10700120	01,20		16	38
10700130	01,30		16	38
10700140	01,40		18	40
10700150	01,50		18	40
10700160	01,60		20	43
10700170	01,70		20	43
10700180	01,80		22	46
10700190	01,90		22	46
10700200	02,00		24	49
10700210	02,10		24	49
10700220	02,20		27	53
10700230	02,30		27	53
10700240	02,40		30	57
10700250	02,50		30	57
10700260	02,60		30	57
10700270	02,70		33	61
107002778	02,778	7/64	33	61
10700280	02,80		33	61
10700290	02,90		33	61
10700300	03,00		33	61
10700310	03,10		36	65
107003175	03,175	1/8	36	65
10700320	03,20		36	65
10700330	03,30		36	65
10700340	03,40		39	70
10700350	03,50		39	70
107003572	03,572	9/64	39	70
10700360	03,60		39	70
10700370	03,70		39	70
10700380	03,80		43	75
10700390	03,90		43	75
107003969	03,969	5/32	43	75
10700400	04,00		43	75
10700410	04,10		43	75
10700420	04,20		43	75
10700430	04,30		47	80
107004366	04,366	11/64	47	80
10700440	04,40		47	80
10700450	04,50		47	80
10700460	04,60		47	80
10700470	04,70		47	80
107004763	04,763	3/16	52	86
10700480	04,80		52	86
10700490	04,90		52	86
10700500	05,00		52	86
10700510	05,10		52	86
107005159	05,159	13/64	52	86
10700520	05,20		52	86
10700530	05,30		52	86
10700540	05,40		57	93
10700550	05,50		57	93
107005556	05,556	7/32	57	93
10700560	05,60		57	93

EDP#	D h8 [mm]	[inch]	L2 [mm]	L1 [mm]
10700570	05,70		57	93
10700580	05,80		57	93
10700590	05,90		57	93
107005953	05,953	15/64	57	93
10700600	06,00		57	93
10700610	06,10		63	101
10700620	06,20		63	101
10700630	06,30		63	101
107006350	06,350	1/4	63	101
10700640	06,40		63	101
10700650	06,50		63	101
10700660	06,60		63	101
10700670	06,70		63	101
107006747	06,747	17/64	69	109
10700680	06,80		69	109
10700690	06,90		69	109
10700700	07,00		69	109
10700710	07,10		69	109
107007144	07,144	9/32	69	109
10700720	07,20		69	109
10700730	07,30		69	109
10700740	07,40		69	109
10700750	07,50		69	109
107007541	07,541	19/64	75	117
10700760	07,60		75	117
10700770	07,70		75	117
10700780	07,80		75	117
10700790	07,90		75	117
107007938	07,938	5/16	75	117
10700800	08,00		75	117
10700810	08,10		75	117
10700820	08,20		75	117
10700830	08,30		75	117
107008334	08,334	21/64	75	117
10700840	08,40		75	117
10700850	08,50		75	117
10700860	08,60		81	125
10700870	08,70		81	125
107008731	08,731	11/32	81	125
10700880	08,80		81	125
10700890	08,90		81	125
10700900	09,00		81	125
10700910	09,10		81	125
107009128	09,128	23/64	81	125
10700920	09,20		81	125
10700930	09,30		81	125
10700940	09,40		81	125
10700950	09,50		81	125
107009525	09,525	3/8	87	133
10700960	09,60		87	133
10700970	09,70		87	133
10700980	09,80		87	133
10700990	09,90		87	133
107009922	09,922	25/64	87	133
10701000	10,00		87	133

Parabolic Deep Hole Drill 107-0

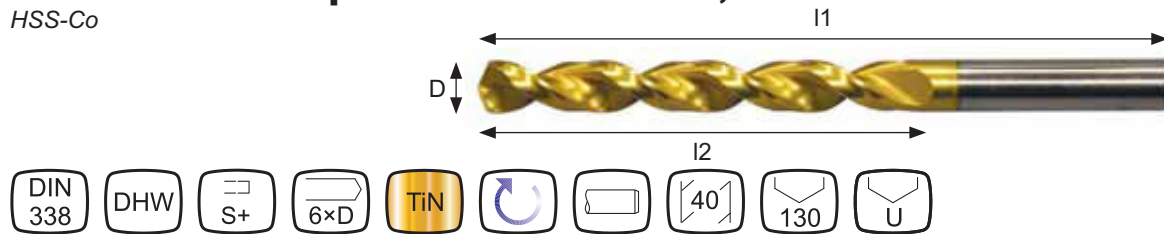
EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
10701020	10,20	87	133
107010319	10,319 13/32	87	113
10701050	10,50	87	133
107010716	10,716 27/64	94	142
10701080	10,80	94	142
10701100	11,00	94	142
107011113	11,113 7/16	94	142
10701120	11,20	94	142
10701150	11,50	94	142
107011509	11,509 29/64	94	142
10701180	11,80	94	142
107011906	11,906 15/32	101	151

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
10701200	12,00	101	151
10701220	12,20	101	151
107012303	12,303 31/64	101	151
10701250	12,50	101	151
107012700	12,700 1/2	101	151
10701280	12,80	101	151
10701300	13,00	101	151

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Parabolic Deep Hole Drill 107-3, TiN

HSS-Co



Work Material: Soft, long-chipping materials such as stainless steel, light metals, and copper

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
10730200	02,00	24	49
10730210	02,10	24	49
10730220	02,20	27	53
10730230	02,30	27	53
10730240	02,40	30	57
10730250	02,50	30	57
10730260	02,60	30	57
10730270	02,70	33	61
10730278	02,78 7/64	33	61
10730280	02,80	33	61
10730290	02,90	33	61
10730300	03,00	33	61
10730310	03,10	36	65
10730318	03,18 1/8	36	65
10730320	03,20	36	65
10730330	03,30	36	65
10730340	03,40	39	70
10730350	03,50	39	70
10730357	03,57 9/64	39	70
10730360	03,60	39	70
10730370	03,70	39	70
10730380	03,80	43	75
10730390	03,90	43	75
10730397	03,97 5/32	43	75
10730400	04,00	43	75
10730410	04,10	43	75
10730420	04,20	43	75
10730430	04,30	47	80
10730437	04,37 11/64	47	80
10730440	04,40	47	80
10730450	04,50	47	80
10730460	04,60	47	80
10730470	04,70	47	80
10730476	04,76 3/16	52	86
10730480	04,80	52	86
10730490	04,90	52	86

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
10730500	05,00	52	86
10730510	05,10	52	86
10730516	05,16 13/64	52	86
10730520	05,20	52	86
10730530	05,30	52	86
10730540	05,40	57	93
10730550	05,50	57	93
10730556	05,56 7/32	57	93
10730560	05,60	57	93
10730570	05,70	57	93
10730580	05,80	57	93
10730590	05,90	57	93
10730595	05,95 15/64	57	93
10730600	06,00	57	93
10730610	06,10	63	101
10730620	06,20	63	101
10730630	06,30	63	101
10730635	06,35 1/4	63	101
10730640	06,40	63	101
10730650	06,50	63	101
10730660	06,60	63	101
10730670	06,70	63	101
10730675	06,75 17/64	69	109
10730680	06,80	69	109
10730690	06,90	69	109
10730700	07,00	69	109
10730710	07,10	69	109
10730714	07,14 9/32	69	109
10730720	07,20	69	109
10730730	07,30	69	109
10730740	07,40	69	109
10730750	07,50	69	109
10730754	07,54 19/64	75	117
10730760	07,60	75	117
10730770	07,70	75	117
10730780	07,80	75	117

Parabolic Deep Hole Drill 107-3, TiN

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
10730790	07,90	75	117
10730794	07,94	75	117
10730800	08,00	75	117
10730810	08,10	75	117
10730820	08,20	75	117
10730830	08,30	75	117
10730833	08,33	75	117
10730840	08,40	75	117
10730850	08,50	75	117
10730860	08,60	81	125
10730870	08,70	81	125
10730873	08,73	81	125
10730880	08,80	81	125
10730890	08,90	81	125
10730900	09,00	81	125
10730910	09,10	81	125
10730913	09,13	81	125
10730920	09,20	81	125
10730930	09,30	81	125
10730940	09,40	81	125
10730950	09,50	81	125
10730953	09,53	87	133
10730960	09,60	87	133
10730970	09,70	87	133

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
10730980	09,80	87	133
10730990	09,90	87	133
10730992	09,92	87	133
10731000	10,00	87	133
10731020	10,20	87	133
10731032	10,32	87	113
10731050	10,50	87	133
10731072	10,72	94	142
10731080	10,80	94	142
10731100	11,00	94	142
10731111	11,11	94	142
10731120	11,20	94	142
10731150	11,50	94	142
10731151	11,51	94	142
10731180	11,80	94	142
10731191	11,91	101	151
10731200	12,00	101	151
10731220	12,20	101	151
10731230	12,30	101	151
10731250	12,50	101	151
10731270	12,70	101	151
10731280	12,80	101	151
10731300	13,00	101	151

Parabolic Deep Hole Drill 107-4, FUTURA

HSS-Co



Work Material: Soft, long-chipping materials such as stainless steel, light metals, and copper

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
10740200	02,00	24	49
10740210	02,10	24	49
10740220	02,20	27	53
10740230	02,30	27	53
10740240	02,40	30	57
10740250	02,50	30	57
10740260	02,60	30	57
10740270	02,70	33	61
10740280	02,80	33	61
10740290	02,90	33	61
10740300	03,00	33	61
10740310	03,10	36	65
10740320	03,20	36	65
10740330	03,30	36	65
10740340	03,40	39	70
10740350	03,50	39	70
10740360	03,60	39	70
10740370	03,70	39	70
10740380	03,80	43	75
10740390	03,90	43	75
10740400	04,00	43	75
10740410	04,10	43	75

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
10740420	04,20	43	75
10740430	04,30	47	80
10740440	04,40	47	80
10740450	04,50	47	80
10740460	04,60	47	80
10740470	04,70	47	80
10740480	04,80	52	86
10740490	04,90	52	86
10740500	05,00	52	86
10740510	05,10	52	86
10740520	05,20	52	86
10740530	05,30	52	86
10740540	05,40	57	93
10740550	05,50	57	93
10740560	05,60	57	93
10740570	05,70	57	93
10740580	05,80	57	93
10740590	05,90	57	93
10740600	06,00	57	93
10740610	06,10	63	101
10740620	06,20	63	101
10740630	06,30	63	101

Parabolic Deep Hole Drill 107-4, FUTURA

EDP#	D h8 [mm]	l2 [mm]	l1 [mm]
10740640	06,40	63	101
10740650	06,50	63	101
10740660	06,60	63	101
10740670	06,70	63	101
10740680	06,80	69	109
10740690	06,90	69	109
10740700	07,00	69	109
10740710	07,10	69	109
10740720	07,20	69	109
10740730	07,30	69	109
10740740	07,40	69	109
10740750	07,50	69	109
10740760	07,60	75	117
10740770	07,70	75	117
10740780	07,80	75	117
10740790	07,90	75	117
10740800	08,00	75	117
10740810	08,10	75	117
10740820	08,20	75	117
10740830	08,30	75	117
10740840	08,40	75	117
10740850	08,50	75	117
10740860	08,60	81	125
10740870	08,70	81	125
10740880	08,80	81	125

EDP#	D h8 [mm]	l2 [mm]	l1 [mm]
10740890	08,90	81	125
10740900	09,00	81	125
10740910	09,10	81	125
10740920	09,20	81	125
10740930	09,30	81	125
10740940	09,40	81	125
10740950	09,50	81	125
10740960	09,60	87	133
10740970	09,70	87	133
10740980	09,80	87	133
10740990	09,90	87	133
10741000	10,00	87	133
10741020	10,20	87	133
10741050	10,50	87	133
10741080	10,80	94	142
10741100	11,00	94	142
10741120	11,20	94	142
10741150	11,50	94	142
10741180	11,80	94	142
10741200	12,00	101	151
10741220	12,20	101	151
10741250	12,50	101	151
10741280	12,80	101	151
10741300	13,00	101	151

DRILLS

HSS
-Co

Drill 108-0

HSS-Co

>2,5 mm



Work Material: Hard to Machine, long-chipping materials such as stainless steel and exotic materials

EDP#	D h8 [mm]	l2 [mm]	l1 [mm]
10800100	01,00	12	34
10800110	01,10	14	36
10800120	01,20	16	38
10800130	01,30	16	38
10800140	01,40	18	40
10800150	01,50	18	40
10800160	01,60	20	43
10800170	01,70	20	43
10800180	01,80	22	46
10800190	01,90	22	46
10800200	02,00	24	49
10800210	02,10	24	49
10800220	02,20	27	53
10800230	02,30	27	53
10800240	02,40	30	57
10800250	02,50	30	57
10800260	02,60	30	57
10800270	02,70	33	61
10800280	02,80	33	61
10800290	02,90	33	61
10800300	03,00	33	61

EDP#	D h8 [mm]	l2 [mm]	l1 [mm]
10800310	03,10	36	65
10800320	03,20	36	65
10800330	03,30	36	65
10800340	03,40	36	65
10800350	03,50	39	70
10800360	03,60	39	70
10800370	03,70	39	70
10800380	03,80	43	75
10800390	03,90	43	75
10800400	04,00	43	75
10800410	04,10	43	75
10800420	04,20	43	75
10800430	04,30	47	80
10800440	04,40	47	80
10800450	04,50	47	80
10800460	04,60	47	80
10800470	04,70	47	80
10800480	04,80	52	86
10800490	04,90	52	86
10800500	05,00	52	86
10800510	05,10	52	86

Drill 108-0

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
10800520	05,20	52	86
10800530	05,30	52	86
10800540	05,40	57	93
10800550	05,50	57	93
10800560	05,60	57	93
10800570	05,70	57	93
10800580	05,80	57	93
10800590	05,90	57	93
10800600	06,00	57	93
10800610	06,10	63	101
10800620	06,20	63	101
10800630	06,30	63	101
10800640	06,40	63	101
10800650	06,50	63	101
10800660	06,60	63	101
10800670	06,70	63	101
10800680	06,80	69	109
10800690	06,90	69	109
10800700	07,00	69	109
10800710	07,10	69	109
10800720	07,20	69	109
10800730	07,30	69	109
10800740	07,40	69	109
10800750	07,50	69	109
10800760	07,60	75	117
10800770	07,70	75	117
10800780	07,80	75	117

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
10800790	07,90	75	117
10800800	08,00	75	117
10800810	08,10	75	117
10800820	08,20	75	117
10800830	08,30	75	117
10800840	08,40	75	117
10800850	08,50	75	117
10800860	08,60	81	125
10800870	08,70	81	125
10800880	08,80	81	125
10800890	08,90	81	125
10800900	09,00	81	125
10800910	09,10	81	125
10800920	09,20	81	125
10800930	09,30	81	125
10800940	09,40	81	125
10800950	09,50	81	125
10800960	09,60	87	133
10800970	09,70	87	133
10800980	09,80	87	133
10800990	09,90	87	133
10801000	10,00	87	133
10801020	10,20	87	133
10801050	10,50	87	133
10801100	11,00	94	142
10801150	11,50	94	142
10801200	12,00	101	151
10801250	12,50	101	151
10801300	13,00	101	151

Wide-Land Parabolic Drill 109-0

HSS-Co



High Performance, self-centering, very high stability
Work Material: Steel alloys and stainless steel materials

EDP#	D h8 [mm]	[inch]	I2 [mm]	I1 [mm]
109002489	02,489	No.40	30	57
10900250	02,50		30	57
109002527	02,527	No.39	30	57
109002578	02,578	No.38	30	57
10900260	02,60		30	57
109002642	02,642	No.37	30	57
10900270	02,70		33	61
109002705	02,705	No.36	33	61
10900275	02,75		33	61
109002778	02,778	7/64	33	61
109002794	02,794	No.35	33	61
10900280	02,80		33	61
109002819	02,819	No.34	33	61
109002870	02,870	No.33	33	61
10900290	02,90		33	61
109002946	02,946	No.32	33	61
10900300	03,00		33	61

EDP#	D h8 [mm]	[inch]	I2 [mm]	I1 [mm]
109003048	03,048	No.31	36	65
10900310	03,10		36	65
109003175	03,175	1/8	36	65
10900320	03,20		36	65
10900325	03,25		36	65
109003264	03,264	No.30	36	65
10900330	03,30		36	65
10900340	03,40		39	70
109003454	03,454	No.29	39	70
10900350	03,50		39	70
109003569	03,569	No.28	39	70
109003572	03,572	9/64	39	70
10900360	03,60		39	70
10900365	03,65		39	70
109003658	03,658	No.27	39	70
10900370	03,70		39	70

Wide-Land Parabolic Drill 109-0

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm] [mm]
109003734	03,734 No.26	39	70
109003797	03,797 No.25	43	75
10900380	03,80	43	75
109003861	03,861 No.24	43	75
10900390	03,90	43	75
109003912	03,912 No.23	43	75
109003969	03,969 5/32	43	75
109003988	03,988 No.22	43	75
10900400	04,00	43	75
109004039	04,039 No.21	43	75
109004089	04,089 No.20	43	75
10900410	04,10	43	75
10900420	04,20	43	75
109004216	04,216 No.19	43	75
10900430	04,30	47	80
109004305	04,305 No.18	47	80
109004366	04,366 11/64	47	80
109004394	04,394 No.17	47	80
10900440	04,40	47	80
109004496	04,496 No.16	47	80
10900450	04,50	47	80
109004572	04,572 No.15	47	80
10900460	04,60	47	80
109004623	04,623 No.14	47	80
109004699	04,699 No.13	47	80
10900470	04,70	47	80
109004763	04,763 3/16	52	86
10900480	04,80	52	86
109004801	04,801 No.12	52	86
109004851	04,851 No.11	52	86
10900490	04,90	52	86
109004915	04,915 No.10	52	86
109004978	04,978 No.9	52	86
10900500	05,00	52	86
109005055	05,055 No.8	52	86
10900510	05,10	52	86
109005105	05,105 No.7	52	86
109005159	05,159 13/64	52	86
109005182	05,182 No.6	52	86
10900520	05,20	52	86
109005220	05,220 No.5	52	86
10900530	05,30	52	86
109005309	05,309 No.4	52	86
10900540	05,40	57	93
109005410	05,410 No.3	57	93
10900550	05,50	57	93
10900555	05,55	57	93
109005556	05,556 7/32	57	93
10900560	05,60	57	93
109005613	05,613 No.2	57	93
10900570	05,70	57	93
109005791	05,791 No.1	57	93
10900580	05,80	57	93
10900590	05,90	57	93
109005944	05,944 Size A	57	93
109005953	05,953 15/64	57	93
10900600	06,00	57	93
109006045	06,045 Size B	63	101
10900610	06,10	63	101
109006147	06,147 Size C	63	101
10900620	06,20	63	101
109006248	06,248 Size D	63	101
10900630	06,30	63	101
109006350	06,350 1/4	63	101

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm] [mm]
109006350	06,350 Size E	63	101
10900640	06,40	63	101
10900650	06,50	63	101
109006528	06,528 Size F	63	101
10900660	06,60	63	101
109006629	06,629 Size G	63	101
10900670	06,70	63	101
109006747	06,747 17/64	69	109
109006756	06,756 Size H	69	109
10900680	06,80	69	109
10900690	06,90	69	109
109006909	06,909 Size I	69	109
10900700	07,00	69	109
109007036	07,036 Size J	69	109
10900710	07,10	69	109
109007137	07,137 Size K	69	109
109007144	07,144 9/32	69	109
10900720	07,20	69	109
10900730	07,30	69	109
109007366	07,366 Size L	69	109
10900740	07,40	69	109
109007493	07,493 Size M	69	109
10900750	07,50	69	109
109007541	07,541 19/64	75	117
10900760	07,60	75	117
109007671	07,671 Size N	75	117
10900770	07,70	75	117
10900780	07,80	75	117
10900790	07,90	75	117
109007938	07,938 5/16	75	117
10900800	08,00	75	117
109008026	08,026 Size O	75	117
10900810	08,10	75	117
10900820	08,20	75	117
109008204	08,204 Size P	75	117
10900830	08,30	75	117
109008334	08,334 21/64	75	117
10900840	08,40	75	117
109008433	08,433 Size Q	75	117
10900850	08,50	75	117
10900860	08,60	81	125
109008611	08,611 Size R	81	125
10900870	08,70	81	125
109008731	08,731 11/32	81	125
10900880	08,80	81	125
109008839	08,839 Size S	81	125
10900890	08,90	81	125
10900900	09,00	81	125
109009093	09,093 Size T	81	125
10900910	09,10	81	125
109009128	09,128 23/64	81	125
10900920	09,20	81	125
10900930	09,30	81	125
109009347	09,347 Size U	81	125
10900940	09,40	81	125
10900950	09,50	81	125
109009525	09,525 3/8	87	133
109009576	09,576 Size V	87	133
10900960	09,60	87	133
10900970	09,70	87	133
10900980	09,80	87	133
109009804	09,804 Size W	87	133
10900990	09,90	87	133

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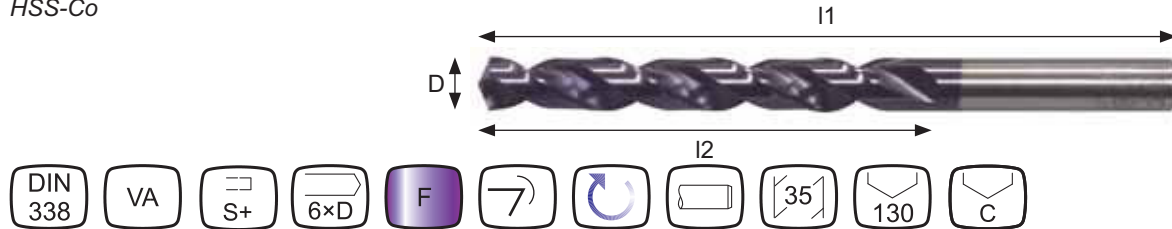
Wide-Land Parabolic Drill 109-0

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm] [mm]
109009922	09,922 25/64	87	133
10901000	10,00	87	133
109010084	10,084 Size X	87	133
10901020	10,20	87	133
109010262	10,262 Size Y	87	133
10901030	10,30	87	133
109010319	10,319 13/32	87	133
10901040	10,40	87	133
109010490	10,490 Size Z	87	133
10901050	10,50	87	133
109010716	10,716 27/64	94	142
10901080	10,80	94	142
10901100	11,00	94	142
109011113	11,113 7/16	94	142
10901120	11,20	94	142
10901150	11,50	94	142
109011509	11,509 29/64	94	142
10901180	11,80	94	142
109011906	11,906 15/32	101	151
10901200	12,00	101	151
10901220	12,20	101	151
109012303	12,303 31/64	101	151
10901250	12,50	101	151
109012700	12,700 1/2	101	151
10901280	12,80	101	151

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm] [mm]
10901300	13,00	101	151
109013097	13,097 33/64	101	151
10901310	13,10	101	151
10901330	13,30	108	160
109013494	13,494 17/32	108	160
10901350	13,50	108	160
10901370	13,70	108	160
10901380	13,80	108	160
109013891	13,891 35/64	108	160
10901400	14,00	108	160
10901410	14,10	114	169
10901420	14,20	114	169
109014288	14,288 9/16	114	169
10901450	14,50	114	169
109014684	14,684 37/64	114	169
10901480	14,80	114	169
10901500	15,00	114	169
109015081	15,081 19/32	120	178
10901510	15,10	120	178
10901530	15,30	120	178
109015478	15,478 39/64	120	178
10901550	15,50	120	178
10901570	15,70	120	178
109015875	15,875 5/8	120	178
10901600	16,00	120	178

Wide-Land Parabolic Drill 109-4, FUTURA

HSS-Co



High Performance, self-centering, very high stability
Work Material: Steel alloys and stainless steel materials

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm] [mm]
109402489	02,489 No.40	30	57
10940250	02,50	30	57
109402527	02,527 No.39	30	57
109402578	02,578 No.38	30	57
10940260	02,60	30	57
109402642	02,642 No.37	30	57
10940270	02,70	33	61
109402705	02,705 No.36	33	61
10940275	02,75	33	61
109402778	02,778 7/64	33	61
109402794	02,794 No.35	33	61
10940280	02,80	33	61
109402819	02,819 No.34	33	61
109402870	02,870 No.33	33	61
10940290	02,90	33	61
109402946	02,946 No.32	33	61
10940300	03,00	33	61
109403048	03,048 No.31	36	65
10940310	03,10	36	65

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm] [mm]
109403175	03,175 1/8	36	65
10940320	03,20	36	65
10940325	03,25	36	65
109403264	03,264 No.30	36	65
10940330	03,30	36	65
10940340	03,40	39	70
109403454	03,454 No.29	39	70
10940350	03,50	39	70
109403569	03,569 No.28	39	70
109403572	03,572 9/64	39	70
10940360	03,60	39	70
10940365	03,65	39	70
109403658	03,658 No.27	39	70
10940370	03,70	39	70
109403734	03,734 No.26	39	70
109403797	03,797 No.25	43	75
10940380	03,80	43	75
109403861	03,861 No.24	43	75
10940390	03,90	43	75

Wide-Land Parabolic Drill 109-4, FUTURA

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
109403912	03,912 No.23	43	75
109403969	03,969 5/32	43	75
109403988	03,988 No.22	43	75
10940400	04,00	43	75
109404039	04,039 No.21	43	75
109404089	04,089 No.20	43	75
10940410	04,10	43	75
10940420	04,20	43	75
109404216	04,216 No.19	43	75
10940430	04,30	47	80
109404305	04,305 No.18	47	80
109404366	04,366 11/64	47	80
109404394	04,394 No.17	47	80
10940440	04,40	47	80
109404496	04,496 No.16	47	80
10940450	04,50	47	80
109404572	04,572 No.15	47	80
10940460	04,60	47	80
109404623	04,623 No.14	47	80
109404699	04,699 No.13	47	80
10940470	04,70	47	80
109404763	04,763 3/16	52	86
10940480	04,80	52	86
109404801	04,801 No.12	52	86
109404851	04,851 No.11	52	86
10940490	04,90	52	86
109404915	04,915 No.10	52	86
109404978	04,978 No.9	52	86
10940500	05,00	52	86
109405055	05,055 No.8	52	86
10940510	05,10	52	86
109405105	05,105 No.7	52	86
109405159	05,159 13/64	52	86
109405182	05,182 No.6	52	86
10940520	05,20	52	86
109405220	05,220 No.5	52	86
10940530	05,30	52	86
109405309	05,309 No.4	52	86
10940540	05,40	57	93
109405410	05,410 No.3	57	93
10940550	05,50	57	93
10940555	05,55	57	93
109405556	05,556 7/32	57	93
10940560	05,60	57	93
109405613	05,613 No.2	57	93
10940570	05,70	57	93
109405791	05,791 No.1	57	93
10940580	05,80	57	93
10940590	05,90	57	93
109405953	05,953 15/64	57	93
10940600	06,00	57	93
10940610	06,10	63	101
10940620	06,20	63	101
10940630	06,30	63	101
109406350	06,350 1/4	63	101
10940640	06,40	63	101
10940650	06,50	63	101
10940660	06,60	63	101
10940670	06,70	63	101
109406747	06,747 17/64	69	109

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
10940680	06,80	69	109
10940690	06,90	69	109
10940700	07,00	69	109
10940710	07,10	69	109
109407144	07,144 9/32	69	109
10940720	07,20	69	109
10940730	07,30	69	109
10940740	07,40	69	109
10940750	07,50	69	109
109407541	07,541 19/64	75	117
10940760	07,60	75	117
10940770	07,70	75	117
10940780	07,80	75	117
10940790	07,90	75	117
109407938	07,938 5/16	75	117
10940800	08,00	75	117
10940810	08,10	75	117
10940820	08,20	75	117
10940830	08,30	75	117
109408334	08,334 21/64	75	117
10940840	08,40	75	117
10940850	08,50	75	117
10940860	08,60	81	125
10940870	08,70	81	125
109408731	08,731 11/32	81	125
10940880	08,80	81	125
10940890	08,90	81	125
10940900	09,00	81	125
10940910	09,10	81	125
109409128	09,128 23/64	81	125
10940920	09,20	81	125
10940930	09,30	81	125
10940940	09,40	81	125
10940950	09,50	81	125
109409525	09,525 3/8	87	133
10940960	09,60	87	133
10940970	09,70	87	133
10940980	09,80	87	133
10940990	09,90	87	133
109409922	09,922 25/64	87	133
10941000	10,00	87	133
10941020	10,20	87	133
10941030	10,30	87	133
109410319	10,319 13/32	87	133
10941040	10,40	87	133
10941050	10,50	87	133
109410716	10,716 27/64	94	142
10941080	10,80	94	142
10941100	11,00	94	142
109411113	11,113 7/16	94	142
10941120	11,20	94	142
10941150	11,50	94	142
109411509	11,509 29/64	94	142
10941180	11,80	94	142
109411906	11,906 15/32	101	151
10941200	12,00	101	151
10941220	12,20	101	151
109412303	12,303 31/64	101	151
10941250	12,50	101	151
109412700	12,700 1/2	101	151

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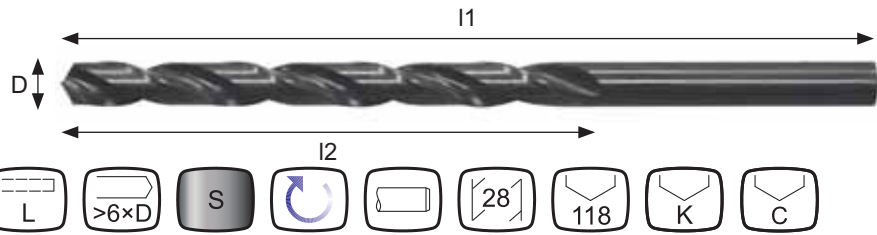
Wide-Land Parabolic Drill 109-4, FUTURA

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm] [mm]
10941280	12,80	101	151
10941300	13,00	101	151
109413097	13,097	101	151
10941310	13,10	101	151
10941330	13,30	108	160
109413494	13,494	108	160
10941350	13,50	108	160
10941370	13,70	108	160
10941380	13,80	108	160
109413891	13,891	108	160
10941400	14,00	108	160
10941410	14,10	114	169
10941420	14,20	114	169
109414288	14,288	114	169
10941450	14,50	114	169

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm] [mm]
109414684	14,684	37/64	114 169
10941480	14,80	114	169
10941500	15,00	114	169
109415081	15,081	19/32	120 178
10941510	15,10	120	178
10941530	15,30	120	178
109415478	15,478	39/64	120 178
10941550	15,50	120	178
10941570	15,70	120	178
109415875	15,875	5/8	120 178
10941600	16,00	120	178

Drill 110-0

HSS



Work material: Steel and cast iron

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm] [mm]
11000100	01,00	33	56
11000110	01,10	37	60
11000120	01,20	41	65
11000130	01,30	41	65
11000140	01,40	45	70
11000150	01,50	45	70
110001588	01,588	1/16	50 76
11000160	01,60	50	76
11000170	01,70	50	76
11000175	01,75	53	80
11000180	01,80	53	80
11000190	01,90	53	80
110001984	01,984	5/64	56 85
11000200	02,00	56	85
11000210	02,10	56	85
11000220	02,20	59	90
11000230	02,30	59	90
110002381	02,381	3/32	62 95
11000240	02,40	62	95
11000250	02,50	62	95
11000260	02,60	62	95
11000270	02,70	66	100
110002778	02,778	7/64	66 100
11000280	02,80	66	100
11000290	02,90	66	100
11000300	03,00	66	100
11000310	03,10	69	106
110003175	03,175	1/8	69 106
11000320	03,20	69	106

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm] [mm]
11000330	03,30	69	106
11000340	03,40	73	112
11000350	03,50	73	112
110003572	03,572	9/64	73 112
11000360	03,60	73	112
11000370	03,70	73	112
11000375	03,75	73	112
11000380	03,80	78	119
11000390	03,90	78	119
110003969	03,969	5/32	78 119
11000400	04,00	78	119
11000410	04,10	78	119
11000420	04,20	78	119
11000425	04,25	78	119
11000430	04,30	82	126
110004366	04,366	11/64	82 126
11000440	04,40	82	126
11000450	04,50	82	126
11000460	04,60	82	126
11000470	04,70	82	126
11000475	04,75	82	126
110004763	04,763	3/16	87 132
11000480	04,80	87	132
11000490	04,90	87	132
11000500	05,00	87	132
11000510	05,10	87	132
110005159	05,159	13/64	87 132
11000520	05,20	87	132
11000525	05,25	87	132

Drill 110-0

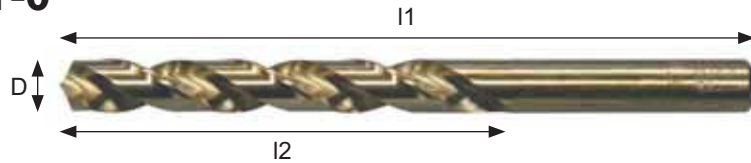
EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
11000530	05,30	87	132
11000540	05,40	91	139
11000550	05,50	91	139
110005556	05,556	91	139
11000560	05,60	91	139
11000570	05,70	91	139
11000575	05,75	91	139
11000580	05,80	91	139
11000590	05,90	91	139
110005953	05,953	91	139
11000600	06,00	91	139
11000610	06,10	97	148
11000620	06,20	97	148
11000625	06,25	97	148
11000630	06,30	97	148
110006350	06,350	97	148
11000640	06,40	97	148
11000650	06,50	97	148
11000660	06,60	97	148
11000670	06,70	97	148
110006747	06,747	102	156
11000675	06,75	102	156
11000680	06,80	102	156
11000690	06,90	102	156
11000700	07,00	102	156
11000710	07,10	102	156
110007144	07,144	102	156
11000720	07,20	102	156
11000725	07,25	102	156
11000730	07,30	102	156
11000740	07,40	102	156
11000750	07,50	102	156
110007541	07,541	109	165
11000760	07,60	109	165
11000770	07,70	109	165
11000775	07,75	109	165
11000780	07,80	109	165
11000790	07,90	109	165
110007938	07,938	109	165
11000800	08,00	109	165
11000810	08,10	109	165
11000820	08,20	109	165
11000825	08,25	109	165
11000830	08,30	109	165
110008334	08,334	109	165
11000840	08,40	109	165
11000850	08,50	109	165
11000860	08,60	115	175
11000870	08,70	115	175
110008731	08,731	115	175

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
11000875	08,75	115	175
11000880	08,80	115	175
11000890	08,90	115	175
11000900	09,00	115	175
11000910	09,10	115	175
110009128	09,128	115	175
11000920	09,20	115	175
11000925	09,25	115	175
11000930	09,30	115	175
11000940	09,40	115	175
11000950	09,50	115	175
110009525	09,525	121	184
11000960	09,60	121	184
11000970	09,70	121	184
11000975	09,75	121	184
11000980	09,80	121	184
11000990	09,90	121	184
110009922	09,922	121	184
11001000	10,00	121	184
11001025	10,25	121	184
110010319	10,319	121	184
11001050	10,50	121	184
110010716	10,716	128	195
11001100	11,00	128	195
110011113	11,113	128	195
11001150	11,50	128	195
110011509	11,509	128	195
11001175	11,75	128	195
110011906	11,906	134	205
11001200	12,00	134	205
11001225	12,25	134	205
110012303	12,303	134	205
11001250	12,50	134	205
110012700	12,700	134	205
11001300	13,00	134	205
110013097	13,097	134	205
110013494	13,494	140	214
11001350	13,50	140	214
11001375	13,75	140	214
110013891	13,891	140	214
11001400	14,00	140	214
110014288	14,288	144	220
110014684	14,684	144	220
11001500	15,00	144	220
110015081	15,081	144	220
110015478	15,478	149	227
11001550	15,50	149	227
110015875	15,875	149	227
11001600	16,00	149	227

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Qvint-X, Drill 111-0

HSS-Co



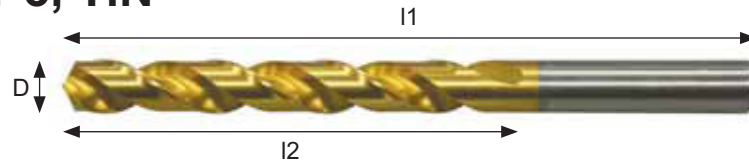
High Performance, self-centering, very high stability
Work material: Steel alloys and stainless steel materials

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
11100250	02,50	30	57
11100260	02,60	30	57
11100270	02,70	33	61
11100275	02,75	33	61
11100280	02,80	33	61
11100290	02,90	33	61
11100300	03,00	33	61
11100310	03,10	36	65
11100320	03,20	36	65
11100325	03,25	36	65
11100330	03,30	36	65
11100340	03,40	39	70
11100350	03,50	39	70
11100360	03,60	39	70
11100365	03,65	39	70
11100370	03,70	39	70
11100380	03,80	43	75
11100390	03,90	43	75
11100400	04,00	43	75
11100410	04,10	43	75
11100420	04,20	43	75
11100430	04,30	47	80
11100440	04,40	47	80
11100450	04,50	47	80
11100460	04,60	47	80
11100470	04,70	47	80
11100480	04,80	52	86
11100490	04,90	52	86
11100500	05,00	52	86
11100510	05,10	52	86
11100520	05,20	52	86
11100530	05,30	52	86
11100540	05,40	57	93
11100550	05,50	57	93
11100560	05,60	57	93
11100570	05,70	57	93
11100580	05,80	57	93
11100590	05,90	57	93
11100600	06,00	57	93
11100610	06,10	63	101
11100620	06,20	63	101
11100630	06,30	63	101
11100640	06,40	63	101
11100650	06,50	63	101
11100660	06,60	63	101
11100670	06,70	63	101
11100680	06,80	69	109
11100690	06,90	69	109
11100700	07,00	69	109
11100710	07,10	69	109

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
11100720	07,20	69	109
11100730	07,30	69	109
11100740	07,40	69	109
11100750	07,50	69	109
11100760	07,60	75	117
11100770	07,70	75	117
11100780	07,80	75	117
11100790	07,90	75	117
11100800	08,00	75	117
11100810	08,10	75	117
11100820	08,20	75	117
11100830	08,30	75	117
11100840	08,40	75	117
11100850	08,50	75	117
11100860	08,60	81	125
11100870	08,70	81	125
11100880	08,80	81	125
11100890	08,90	81	125
11100900	09,00	81	125
11100910	09,10	81	125
11100920	09,20	81	125
11100930	09,30	81	125
11100940	09,40	81	125
11100950	09,50	81	125
11100960	09,60	87	133
11100970	09,70	87	133
11100980	09,80	87	133
11100990	09,90	87	133
11101000	10,00	87	133
11101020	10,20	87	133
11101030	10,30	87	133
11101040	10,40	87	133
11101050	10,50	87	133
11101080	10,80	94	142
11101100	11,00	94	142
11101120	11,20	94	142
11101150	11,50	94	142
11101180	11,80	94	142
11101200	12,00	101	151
11101220	12,20	101	151
11101250	12,50	101	151
11101280	12,80	101	151
11101300	13,00	101	151
11101350	13,50	108	160
11101400	14,00	108	160
11101450	14,50	114	169
11101500	15,00	114	169
11101550	15,50	120	178
11101600	16,00	120	178

Qvint-X, Drill 111-3, TiN

HSS-Co



High Performance, self-centering, very high stability
Work material: steel alloys and stainless steel materials

EDP#	D h8 [mm]	l2 [mm]	l1 [mm]
11130250	02,50	30	57
11130260	02,60	30	57
11130270	02,70	33	61
11130275	02,75	33	61
11130280	02,80	33	61
11130290	02,90	33	61
11130300	03,00	33	61
11130310	03,10	36	65
11130320	03,20	36	65
11130325	03,25	36	65
11130330	03,30	36	65
11130340	03,40	39	70
11130350	03,50	39	70
11130360	03,60	39	70
11130365	03,65	39	70
11130370	03,70	39	70
11130380	03,80	43	75
11130390	03,90	43	75
11130400	04,00	43	75
11130410	04,10	43	75
11130420	04,20	43	75
11130430	04,30	47	80
11130440	04,40	47	80
11130450	04,50	47	80
11130460	04,60	47	80
11130470	04,70	47	80
11130480	04,80	52	86
11130490	04,90	52	86
11130500	05,00	52	86
11130510	05,10	52	86
11130520	05,20	52	86
11130530	05,30	52	86
11130540	05,40	57	93
11130550	05,50	57	93
11130560	05,60	57	93
11130570	05,70	57	93
11130580	05,80	57	93
11130590	05,90	57	93
11130600	06,00	57	93
11130610	06,10	63	101
11130620	06,20	63	101
11130630	06,30	63	101
11130640	06,40	63	101
11130650	06,50	63	101
11130660	06,60	63	101
11130670	06,70	63	101
11130680	06,80	69	109
11130690	06,90	69	109
11130700	07,00	69	109
11130710	07,10	69	109

EDP#	D h8 [mm]	l2 [mm]	l1 [mm]
11130720	07,20	69	109
11130730	07,30	69	109
11130740	07,40	69	109
11130750	07,50	69	109
11130760	07,60	75	117
11130770	07,70	75	117
11130780	07,80	75	117
11130790	07,90	75	117
11130800	08,00	75	117
11130810	08,10	75	117
11130820	08,20	75	117
11130830	08,30	75	117
11130840	08,40	75	117
11130850	08,50	75	117
11130860	08,60	81	125
11130870	08,70	81	125
11130880	08,80	81	125
11130890	08,90	81	125
11130900	09,00	81	125
11130910	09,10	81	125
11130920	09,20	81	125
11130930	09,30	81	125
11130940	09,40	81	125
11130950	09,50	81	125
11130960	09,60	87	133
11130970	09,70	87	133
11130980	09,80	87	133
11130990	09,90	87	133
11131000	10,00	87	133
11131020	10,20	87	133
11131030	10,30	87	133
11131040	10,40	87	133
11131050	10,50	87	133
11131080	10,80	94	142
11131100	11,00	94	142
11131120	11,20	94	142
11131150	11,50	94	142
11131180	11,80	94	142
11131200	12,00	101	151
11131220	12,20	101	151
11131250	12,50	101	151
11131280	12,80	101	151
11131300	13,00	101	151
11131350	13,50	108	160
11131400	14,00	108	160
11131450	14,50	114	169
11131500	15,00	114	169
11131550	15,50	120	178
11131600	16,00	120	178

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Qvint-X, Drill 111-4, FUTURA

HSS-Co



High Performance, self-centering, very high stability
Work Material: Steel alloys and stainless steel materials

EDP#	D h8 [mm]	L2 [mm]	L1 [mm]
11140250	02,50	30	57
11140260	02,60	30	57
11140270	02,70	33	61
11140275	02,75	33	61
11140280	02,80	33	61
11140290	02,90	33	61
11140300	03,00	33	61
11140310	03,10	36	65
11140320	03,20	36	65
11140325	03,25	36	65
11140330	03,30	36	65
11140340	03,40	39	70
11140350	03,50	39	70
11140360	03,60	39	70
11140365	03,65	39	70
11140370	03,70	39	70
11140380	03,80	43	75
11140390	03,90	43	75
11140400	04,00	43	75
11140410	04,10	43	75
11140420	04,20	43	75
11140430	04,30	47	80
11140440	04,40	47	80
11140450	04,50	47	80
11140460	04,60	47	80
11140470	04,70	47	80
11140480	04,80	52	86
11140490	04,90	52	86
11140500	05,00	52	86
11140510	05,10	52	86
11140520	05,20	52	86
11140530	05,30	52	86
11140540	05,40	57	93
11140550	05,50	57	93
11140560	05,60	57	93
11140570	05,70	57	93
11140580	05,80	57	93
11140590	05,90	57	93
11140600	06,00	57	93
11140610	06,10	63	101
11140620	06,20	63	101
11140630	06,30	63	101
11140640	06,40	63	101
11140650	06,50	63	101
11140660	06,60	63	101
11140670	06,70	63	101
11140680	06,80	69	109
11140690	06,90	69	109

EDP#	D h8 [mm]	L2 [mm]	L1 [mm]
11140700	07,00	69	109
11140710	07,10	69	109
11140720	07,20	69	109
11140730	07,30	69	109
11140740	07,40	69	109
11140750	07,50	69	109
11140760	07,60	75	117
11140770	07,70	75	117
11140780	07,80	75	117
11140790	07,90	75	117
11140800	08,00	75	117
11140810	08,10	75	117
11140820	08,20	75	117
11140830	08,30	75	117
11140840	08,40	75	117
11140850	08,50	75	117
11140860	08,60	81	125
11140870	08,70	81	125
11140880	08,80	81	125
11140890	08,90	81	125
11140900	09,00	81	125
11140910	09,10	81	125
11140920	09,20	81	125
11140930	09,30	81	125
11140940	09,40	81	125
11140950	09,50	81	125
11140980	09,80	87	133
11141000	10,00	87	133
11141020	10,20	87	133
11141030	10,30	87	133
11141040	10,40	87	133
11141050	10,50	87	133
11141080	10,80	94	142
11141100	11,00	94	142
11141120	11,20	94	142
11141150	11,50	94	142
11141180	11,80	94	142
11141200	12,00	101	151
11141220	12,20	101	151
11141250	12,50	101	151
11141280	12,80	101	151
11141300	13,00	101	151
11141350	13,50	108	160
11141400	14,00	108	160
11141450	14,50	114	169
11141500	15,00	114	169
11141550	15,50	120	178
11141600	16,00	120	178

Parabolic taper length Drill, long, 117-0

HSS-Co



Work Material: steel and long-chipping materials such as light metals, copper and stainless steel

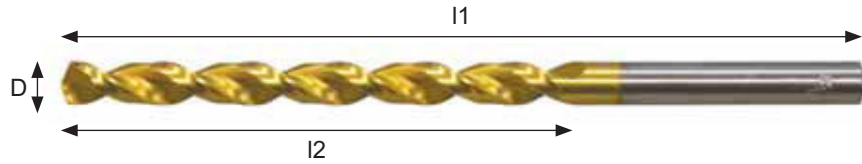
EDP#	D h8 [mm]	l2 [mm]	l1 [mm]
11700200	02,00	56	85
11700210	02,10	56	85
11700220	02,20	59	90
11700230	02,30	59	90
11700240	02,40	62	95
11700250	02,50	62	95
11700260	02,60	62	95
11700270	02,70	66	100
11700280	02,80	66	100
11700290	02,90	66	100
11700300	03,00	66	100
11700310	03,10	69	106
11700320	03,20	69	106
11700330	03,30	69	106
11700340	03,40	73	112
11700350	03,50	73	112
11700360	03,60	73	112
11700370	03,70	73	112
11700380	03,80	78	119
11700390	03,90	78	119
11700400	04,00	78	119
11700410	04,10	78	119
11700420	04,20	78	119
11700430	04,30	82	126
11700440	04,40	82	126
11700450	04,50	82	126
11700460	04,60	82	126
11700470	04,70	82	126
11700480	04,80	87	132
11700490	04,90	87	132
11700500	05,00	87	132
11700510	05,10	87	132
11700520	05,20	87	132
11700530	05,30	87	132
11700540	05,40	91	139
11700550	05,50	91	139
11700560	05,60	91	139
11700570	05,70	91	139
11700580	05,80	91	139
11700590	05,90	91	139
11700600	06,00	91	139
11700610	06,10	97	148
11700620	06,20	97	148
11700630	06,30	97	148
11700640	06,40	97	148
11700650	06,50	97	148
11700660	06,60	97	148
11700670	06,70	97	148

EDP#	D h8 [mm]	l2 [mm]	l1 [mm]
11700680	06,80	102	156
11700690	06,90	102	156
11700700	07,00	102	156
11700710	07,10	102	156
11700720	07,20	102	156
11700730	07,30	102	156
11700740	07,40	102	156
11700750	07,50	102	156
11700760	07,60	109	165
11700770	07,70	109	165
11700780	07,80	109	165
11700790	07,90	109	165
11700800	08,00	109	165
11700810	08,10	109	165
11700820	08,20	109	165
11700830	08,30	109	165
11700840	08,40	109	165
11700850	08,50	109	165
11700860	08,60	115	175
11700870	08,70	115	175
11700880	08,80	115	175
11700890	08,90	115	175
11700900	09,00	115	175
11700910	09,10	115	175
11700920	09,20	115	175
11700930	09,30	115	175
11700940	09,40	115	175
11700950	09,50	115	175
11700960	09,60	121	184
11700970	09,70	121	184
11700980	09,80	121	184
11700990	09,90	121	184
11701000	10,00	121	184
11701050	10,50	121	184
11701080	10,80	128	195
11701100	11,00	128	195
11701120	11,20	128	195
11701150	11,50	128	195
11701180	11,80	128	195
11701200	12,00	134	205
11701220	12,20	134	205
11701250	12,50	134	205
11701280	12,80	134	205
11701300	13,00	134	205

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Parabolic taper length Drill, long, 117-3, TiN

HSS-Co



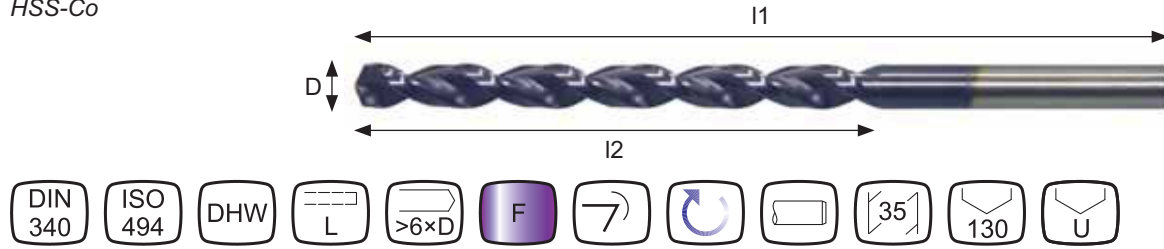
Work Material: steel and long-chipping materials such as light metals, copper and stainless steel

EDP#	D h8 [mm]	L2 [mm]	L1 [mm]
11730200	02,00	56	85
11730210	02,10	56	85
11730220	02,20	59	90
11730230	02,30	59	90
11730240	02,40	62	95
11730250	02,50	62	95
11730260	02,60	62	95
11730270	02,70	66	100
11730280	02,80	66	100
11730290	02,90	66	100
11730300	03,00	66	100
11730310	03,10	69	106
11730320	03,20	69	106
11730330	03,30	69	106
11730340	03,40	73	112
11730350	03,50	73	112
11730360	03,60	73	112
11730370	03,70	73	112
11730380	03,80	78	119
11730390	03,90	78	119
11730400	04,00	78	119
11730410	04,10	78	119
11730420	04,20	78	119
11730430	04,30	82	126
11730440	04,40	82	126
11730450	04,50	82	126
11730460	04,60	82	126
11730470	04,70	82	126
11730480	04,80	87	132
11730490	04,90	87	132
11730500	05,00	87	132
11730510	05,10	87	132
11730520	05,20	87	132
11730530	05,30	87	132
11730540	05,40	91	139
11730550	05,50	91	139
11730560	05,60	91	139
11730570	05,70	91	139
11730580	05,80	91	139
11730590	05,90	91	139
11730600	06,00	91	139
11730610	06,10	97	148
11730620	06,20	97	148
11730630	06,30	97	148
11730640	06,40	97	148
11730650	06,50	97	148
11730660	06,60	97	148
11730670	06,70	97	148

EDP#	D h8 [mm]	L2 [mm]	L1 [mm]
11730680	06,80	102	156
11730690	06,90	102	156
11730700	07,00	102	156
11730710	07,10	102	156
11730720	07,20	102	156
11730730	07,30	102	156
11730740	07,40	102	156
11730750	07,50	102	156
11730760	07,60	109	165
11730770	07,70	109	165
11730780	07,80	109	165
11730790	07,90	109	165
11730800	08,00	109	165
11730810	08,10	109	165
11730820	08,20	109	165
11730830	08,30	109	165
11730840	08,40	109	165
11730850	08,50	109	165
11730860	08,60	115	175
11730870	08,70	115	175
11730880	08,80	115	175
11730890	08,90	115	175
11730900	09,00	115	175
11730910	09,10	115	175
11730920	09,20	115	175
11730930	09,30	115	175
11730940	09,40	115	175
11730950	09,50	115	175
11730960	09,60	121	184
11730970	09,70	121	184
11730980	09,80	121	184
11730990	09,90	121	184
11731000	10,00	121	184
11731050	10,50	121	184
11731080	10,80	128	195
11731100	11,00	128	195
11731120	11,20	128	195
11731150	11,50	128	195
11731180	11,80	128	195
11731200	12,00	134	205
11731220	12,20	134	205
11731250	12,50	134	205
11731280	12,80	134	205
11731300	13,00	134	205

Parabolic taper length Drill, long, 117-4, FUTURA

HSS-Co



Work Material: steel and long-chipping materials such as light metals, copper and stainless steel

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
11740200	02,00	56	85
11740210	02,10	56	85
11740220	02,20	59	90
11740230	02,30	59	90
11740240	02,40	62	95
11740250	02,50	62	95
11740260	02,60	62	95
11740270	02,70	66	100
11740280	02,80	66	100
11740290	02,90	66	100
11740300	03,00	66	100
11740310	03,10	69	106
11740320	03,20	69	106
11740330	03,30	69	106
11740340	03,40	73	112
11740350	03,50	73	112
11740360	03,60	73	112
11740370	03,70	73	112
11740380	03,80	78	119
11740390	03,90	78	119
11740400	04,00	78	119
11740410	04,10	78	119
11740420	04,20	78	119
11740430	04,30	82	126
11740440	04,40	82	126
11740450	04,50	82	126
11740460	04,60	82	126
11740470	04,70	82	126
11740480	04,80	87	132
11740490	04,90	87	132
11740500	05,00	87	132
11740510	05,10	87	132
11740520	05,20	87	132
11740530	05,30	87	132
11740540	05,40	91	139
11740550	05,50	91	139
11740560	05,60	91	139
11740570	05,70	91	139
11740580	05,80	91	139
11740590	05,90	91	139
11740600	06,00	91	139
11740610	06,10	97	148
11740620	06,20	97	148
11740630	06,30	97	148
11740640	06,40	97	148
11740650	06,50	97	148
11740660	06,60	97	148
11740670	06,70	97	148

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
11740680	06,80	102	156
11740690	06,90	102	156
11740700	07,00	102	156
11740710	07,10	102	156
11740720	07,20	102	156
11740730	07,30	102	156
11740740	07,40	102	156
11740750	07,50	102	156
11740760	07,60	109	165
11740770	07,70	109	165
11740780	07,80	109	165
11740790	07,90	109	165
11740800	08,00	109	165
11740810	08,10	109	165
11740820	08,20	109	165
11740830	08,30	109	165
11740840	08,40	109	165
11740850	08,50	109	165
11740860	08,60	115	175
11740870	08,70	115	175
11740880	08,80	115	175
11740890	08,90	115	175
11740900	09,00	115	175
11740910	09,10	115	175
11740920	09,20	115	175
11740930	09,30	115	175
11740940	09,40	115	175
11740950	09,50	115	175
11740960	09,60	121	184
11740970	09,70	121	184
11740980	09,80	121	184
11740990	09,90	121	184
11741000	10,00	121	184
11741050	10,50	121	184
11741080	10,80	128	195
11741100	11,00	128	195
11741120	11,20	128	195
11741150	11,50	128	195
11741180	11,80	128	195
11741200	12,00	134	205
11741220	12,20	134	205
11741250	12,50	134	205
11741280	12,80	134	205
11741300	13,00	134	205

DRILLS

HSS
-Co

Parabolic taper length Drill, extra-long, 118

HSS-Co



Work material: Steel and cast iron

118-1

EDP#	D h8 [mm]	L2 [mm]	L1 [mm]
11810200	02,00	93	125
11820250	02,50	93	125
11830300	03,00	93	125

118-2

EDP#	D h8 [mm]	L2 [mm]	L1 [mm]
11820200	02,00	120	160
11820210	02,10	120	160
11820220	02,20	120	160
11820230	02,30	120	160
11820240	02,40	120	160
11820250	02,50	120	160
11820260	02,60	120	160
11820270	02,70	120	160
11820280	02,80	120	160
11820290	02,90	120	160
11820300	03,00	120	160
11820310	03,10	120	160
11820320	03,20	120	160
11820330	03,30	120	160
11820340	03,40	120	160
11820350	03,50	120	160
11820360	03,60	120	160
11820370	03,70	120	160
11820380	03,80	120	160
11820390	03,90	120	160
11820400	04,00	120	160
11820410	04,10	120	160
11820420	04,20	120	160
11820430	04,30	120	160
11820440	04,40	120	160
11820450	04,50	120	160
11820460	04,60	120	160
11820470	04,70	120	160
11820480	04,80	120	160
11820490	04,90	120	160
11820500	05,00	120	160
11820510	05,10	120	160
11820520	05,20	120	160
11820530	05,30	120	160
11820540	05,40	120	160
11820550	05,50	120	160
11820560	05,60	120	160
11820570	05,70	120	160
11820580	05,80	120	160
11820590	05,90	120	160
11820600	06,00	120	160

118-3

EDP#	D h8 [mm]	L2 [mm]	L1 [mm]
11830300	03,00	150	200
11830310	03,10	150	200
11830320	03,20	150	200
11830330	03,30	150	200
11830340	03,40	150	200
11830350	03,50	150	200
11830360	03,60	150	200
11830370	03,70	150	200
11830380	03,80	150	200
11830390	03,90	150	200
11830400	04,00	150	200
11830410	04,10	150	200
11830420	04,20	150	200
11830430	04,30	150	200
11830440	04,40	150	200
11830450	04,50	150	200
11830460	04,60	150	200
11830470	04,70	150	200
11830480	04,80	150	200
11830490	04,90	150	200
11830500	05,00	150	200
11830510	05,10	150	200
11830520	05,20	150	200
11830530	05,30	150	200
11830540	05,40	150	200
11830550	05,50	150	200
11830560	05,60	150	200
11830570	05,70	150	200
11830580	05,80	150	200
11830590	05,90	150	200
11830600	06,00	150	200
11830610	06,10	150	200
11830620	06,20	150	200
11830630	06,30	150	200
11830640	06,40	150	200
11830650	06,50	150	200
11830660	06,60	150	200
11830670	06,70	150	200
11830680	06,80	150	200
11830690	06,90	150	200
11830700	07,00	150	200
11830710	07,10	150	200
11830720	07,20	150	200
11830730	07,30	150	200
11830740	07,40	150	200
11830750	07,50	150	200
11830800	08,00	150	200
11830850	08,50	150	200
11830900	09,00	150	200
11830950	09,50	150	200
11831000	10,00	150	200

Parabolic taper length Drill, extra-long, 118

118-4

EDP#	D h8 [mm]	l2 [mm]	l1 [mm]
11840300	03,00	187	250
11840310	03,10	187	250
11840320	03,20	187	250
11840330	03,30	187	250
11840340	03,40	187	250
11840350	03,50	187	250
11840360	03,60	187	250
11840370	03,70	187	250
11840380	03,80	187	250
11840390	03,90	187	250
11840400	04,00	187	250
11840410	04,10	187	250
11840420	04,20	187	250
11840430	04,30	187	250
11840440	04,40	187	250
11840450	04,50	187	250
11840460	04,60	187	250
11840470	04,70	187	250
11840480	04,80	187	250
11840490	04,90	187	250
11840500	05,00	187	250
11840510	05,10	187	250
11840520	05,20	187	250
11840530	05,30	187	250
11840540	05,40	187	250
11840550	05,50	187	250
11840560	05,60	187	250
11840570	05,70	187	250
11840580	05,80	187	250
11840590	05,90	187	250
11840600	06,00	187	250
11840610	06,10	187	250
11840620	06,20	187	250
11840630	06,30	187	250
11840640	06,40	187	250
11840650	06,50	187	250
11840660	06,60	187	250
11840670	06,70	187	250
11840680	06,80	187	250
11840690	06,90	187	250
11840700	07,00	187	250
11840710	07,10	187	250
11840720	07,20	187	250
11840730	07,30	187	250
11840740	07,40	187	250
11840750	07,50	187	250
11840800	08,00	187	250
11840850	08,50	187	250
11840900	09,00	187	250
11840950	09,50	187	250
11841000	10,00	187	250
11841050	10,50	187	250
11841100	11,00	187	250
11841150	11,50	187	250
11841200	12,00	187	250
11841250	12,50	187	250
11841300	13,00	187	250

118-5

EDP#	D h8 [mm]	l2 [mm]	l1 [mm]
11850400	04,00	235	315
11850410	04,10	235	315
11850420	04,20	235	315
11850430	04,30	235	315
11850440	04,40	235	315
11850450	04,50	235	315
11850460	04,60	235	315
11850470	04,70	235	315
11850480	04,80	235	315
11850490	04,90	235	315
11850500	05,00	235	315
11850510	05,10	235	315
11850520	05,20	235	315
11850530	05,30	235	315
11850540	05,40	235	315
11850550	05,50	235	315
11850560	05,60	235	315
11850570	05,70	235	315
11850580	05,80	235	315
11850590	05,90	235	315
11850600	06,00	235	315
11850610	06,10	235	315
11850620	06,20	235	315
11850630	06,30	235	315
11850640	06,40	235	315
11850650	06,50	235	315
11850660	06,60	235	315
11850670	06,70	235	315
11850680	06,80	235	315
11850690	06,90	235	315
11850700	07,00	235	315
11850710	07,10	235	315
11850720	07,20	235	315
11850730	07,30	235	315
11850740	07,40	235	315
11850750	07,50	235	315
11850800	08,00	235	315
11850850	08,50	235	315
11850900	09,00	235	315
11850950	09,50	235	315
11851000	10,00	235	315
11851050	10,50	235	315
11851100	11,00	235	315
11851150	11,50	235	315
11851200	12,00	235	315
11851250	12,50	235	315
11851300	13,00	235	315

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Parabolic taper length Drill, extra-long, 118

118-6

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
11860500	05,00	300	400
11860510	05,10	300	400
11860520	05,20	300	400
11860530	05,30	300	400
11860540	05,40	300	400
11860550	05,50	300	400
11860560	05,60	300	400
11860570	05,70	300	400
11860580	05,80	300	400
11860590	05,90	300	400
11860600	06,00	300	400
11860610	06,10	300	400
11860620	06,20	300	400
11860630	06,30	300	400
11860640	06,40	300	400
11860650	06,50	300	400
11860660	06,60	300	400
11860670	06,70	300	400
11860680	06,80	300	400
11860690	06,90	300	400
11860700	07,00	300	400
11860710	07,10	300	400
11860720	07,20	300	400
11860730	07,30	300	400
11860740	07,40	300	400
11860750	07,50	300	400
11860800	08,00	300	400

118-6

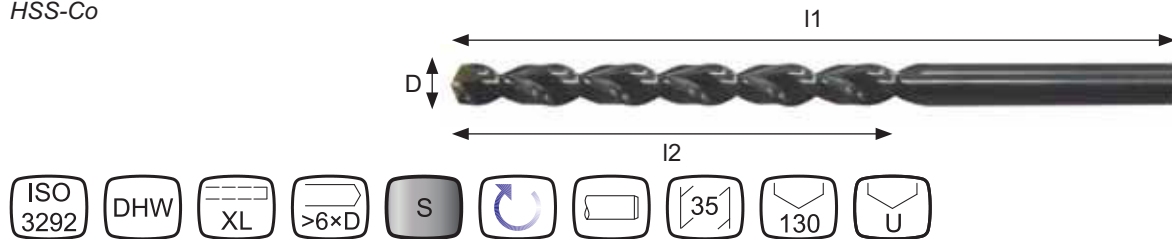
EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
11860850	08,50	300	400
11860900	09,00	300	400
11860950	09,50	300	400
11861000	10,00	300	400
11861050	10,50	300	400
11861100	11,00	300	400
11861150	11,50	300	400
11861200	12,00	300	400
11861250	12,50	300	400
11861300	13,00	300	400

118-7

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
11870500	05,00	450	500
11870600	06,00	450	500
11870700	07,00	450	500
11870800	08,00	450	500
11870900	09,00	450	500
11871000	10,00	450	500
11871100	11,00	450	500
11871200	12,00	450	500
11871300	13,00	450	500

Parabolic taper length Drill, extra-long, 119

HSS-Co



Work material: Steel and cast iron

119-1

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
11910200	02,00	93	125
11910250	02,50	93	125
11910300	03,00	93	125

119-2

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
11920200	02,00	120	160
11920250	02,50	120	160
11920300	03,00	120	160
11920350	03,50	120	160
11920400	04,00	120	160
11920450	04,50	120	160
11920500	05,00	120	160
11920550	05,50	120	160
11920600	06,00	120	160

Parabolic taper length Drill, extra-long, 119

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119-3

EDP#	D h8 [mm]	l2 [mm]	l1 [mm]
11930300	03,00	150	200
11930350	03,50	150	200
11930400	04,00	150	200
11930450	04,50	150	200
11930500	05,00	150	200
11930550	05,50	150	200
11930600	06,00	150	200
11930650	06,50	150	200
11930700	07,00	150	200
11930750	07,50	150	200
11930800	08,00	150	200
11930850	08,50	150	200
11930900	09,00	150	200
11930950	09,50	150	200
11931000	10,00	150	200

119-5

EDP#	D h8 [mm]	l2 [mm]	l1 [mm]
11950400	04,00	235	315
11950450	04,50	235	315
11950500	05,00	235	315
11950550	05,50	235	315
11950600	06,00	235	315
11950650	06,50	235	315
11950700	07,00	235	315
11950750	07,50	235	315
11950800	08,00	235	315
11950850	08,50	235	315
11950900	09,00	235	315
11950950	09,50	235	315
11951000	10,00	235	315
11951050	10,50	235	315
11951100	11,00	235	315
11951150	11,50	235	315
11951200	12,00	235	315
11951250	12,50	235	315
11951300	13,00	235	315

119-4

EDP#	D h8 [mm]	l2 [mm]	l1 [mm]
11940300	03,00	187	250
11940350	03,50	187	250
11940400	04,00	187	250
11940450	04,50	187	250
11940500	05,00	187	250
11940550	05,50	187	250
11940600	06,00	187	250
11940650	06,50	187	250
11940700	07,00	187	250
11940750	07,50	187	250
11940800	08,00	187	250
11940850	08,50	187	250
11940900	09,00	187	250
11940950	09,50	187	250
11941000	10,00	187	250
11941050	10,50	187	250
11941100	11,00	187	250
11941150	11,50	187	250
11941200	12,00	187	250
11941250	12,50	187	250
11941300	13,00	187	250

119-6

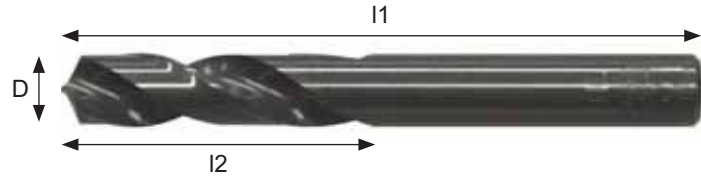
EDP#	D h8 [mm]	l2 [mm]	l1 [mm]
11960500	05,00	300	400
11960550	05,50	300	400
11960600	06,00	300	400
11960650	06,50	300	400
11960700	07,00	300	400
11960750	07,50	300	400
11960800	08,00	300	400
11960850	08,50	300	400
11960900	09,00	300	400
11960950	09,50	300	400
11961000	10,00	300	400
11961050	10,50	300	400
11961100	11,00	300	400
11961150	11,50	300	400
11961200	12,00	300	400
11961250	12,50	300	400
11961300	13,00	300	400

119-7

EDP#	D h8 [mm]	l2 [mm]	l1 [mm]
11970500	05,00	450	500
11970600	06,00	450	500
11970700	07,00	450	500
11970800	08,00	450	500
11970900	09,00	450	500
11971000	10,00	450	500
11971100	11,00	450	500
11971200	12,00	450	500
11971300	13,00	450	500

Drill 120-0

HSS-Co
>2,5 mm



Work Material: Steel and cast iron .

EDP#	D h8 [mm]	[inch]	I2 [mm]	I1 [mm]
12000100	01,00		6	26
12000110	01,10		7	28
12000120	01,20		8	30
12000130	01,30		8	30
12000140	01,40		9	32
12000150	01,50		9	32
120001588	01,588	1/16	10	34
12000160	01,60		10	34
12000170	01,70		10	34
12000180	01,80		11	36
12000190	01,90		11	36
120001984	01,984	5/64	12	38
12000200	02,00		12	38
12000210	02,10		12	38
12000220	02,20		13	40
12000230	02,30		13	40
120002381	02,381	3/32	14	43
12000240	02,40		14	43
12000250	02,50		14	43
12000260	02,60		14	43
12000270	02,70		16	46
120002778	02,778	7/64	16	46
12000280	02,80		16	46
12000290	02,90		16	46
12000300	03,00		16	46
12000310	03,10		18	49
120003175	03,175	1/8	18	49
12000320	03,20		18	49
12000325	03,25		18	49
12000330	03,30		18	49
12000340	03,40		20	52
12000350	03,50		20	52
120003572	03,572	9/64	20	52
12000360	03,60		20	52
12000370	03,70		20	52
12000380	03,80		22	55
12000390	03,90		22	55
120003969	03,969	5/32	22	55
12000400	04,00		22	55
12000410	04,10		22	55
12000420	04,20		22	55
12000430	04,30		24	58
120004366	04,366	11/64	24	58
12000440	04,40		24	58
12000450	04,50		24	58
12000460	04,60		24	58
12000470	04,70		24	58
120004763	04,763	3/16	26	62
12000480	04,80		26	62
12000490	04,90		26	62
12000500	05,00		26	62

EDP#	D h8 [mm]	[inch]	I2 [mm]	I1 [mm]
12000510	05,10		26	62
120005159	05,159	13/64	26	62
12000520	05,20		26	62
12000530	05,30		26	62
12000540	05,40		26	62
12000550	05,50		28	66
120005556	05,556	7/32	28	66
12000560	05,60		28	66
12000570	05,70		28	66
12000580	05,80		28	66
12000590	05,90		28	66
120005953	05,953	15/64	28	66
12000600	06,00		28	66
12000610	06,10		28	66
12000620	06,20		31	70
12000630	06,30		31	70
120006350	06,350	1/4	31	70
12000640	06,40		31	70
12000650	06,50		31	70
12000660	06,60		31	70
12000670	06,70		31	70
120006747	06,747	17/64	34	74
12000680	06,80		34	74
12000690	06,90		34	74
12000700	07,00		34	74
12000710	07,10		34	74
120007144	07,144	9/32	34	74
12000720	07,20		34	74
12000730	07,30		34	74
12000740	07,40		34	74
12000750	07,50		34	74
120007541	07,541	19/64	37	79
12000760	07,60		37	79
12000770	07,70		37	79
12000780	07,80		37	79
12000790	07,90		37	79
120007938	07,938	5/16	37	79
12000800	08,00		37	79
12000810	08,10		37	79
12000820	08,20		37	79
12000830	08,30		37	79
120008334	08,334	21/64	37	79
12000840	08,40		37	79
12000850	08,50		37	79
12000860	08,60		37	79
12000870	08,70		37	79
120008731	08,731	11/32	40	84
12000880	08,80		40	84
12000890	08,90		40	84
12000900	09,00		40	84
12000910	09,10		40	84

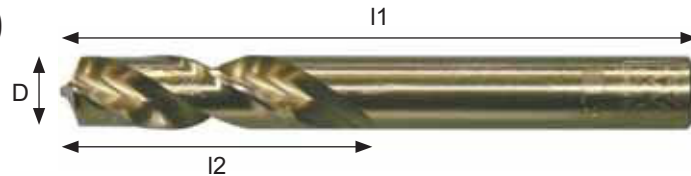
Drill 120-0

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
120009128	09,128 23/64	40	84
12000920	09,20	40	84
12000930	09,30	40	84
12000940	09,40	40	84
12000950	09,50	40	84
120009525	09,525 3/8	43	89
12000960	09,60	43	89
12000970	09,70	43	89
12000980	09,80	43	89
12000990	09,90	43	89
120009922	09,922 25/64	43	89
12001000	10,00	43	89
12001020	10,20	43	89
120010319	10,319 13/32	43	89
12001050	10,50	43	89
120010716	10,716 27/64	47	95
12001080	10,80	47	95
12001100	11,00	47	95
120011113	11,113 7/16	47	95
12001120	11,20	47	95
12001150	11,50	47	95

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
120011509	11,509 29/64	47	95
12001180	11,80	47	95
120011906	11,906 15/32	51	102
12001200	12,00	51	102
12001220	12,20	51	102
120012303	12,303 31/64	51	102
12001250	12,50	51	102
120012700	12,700 1/2	51	102
12001280	12,80	51	102
12001300	13,00	51	102
120013097	13,097 33/64	51	102
120013494	13,494 17/32	54	107
12001350	13,50	54	107
120013891	13,891 35/64	54	107
12001400	14,00	54	107
120014288	14,288 9/16	56	111
120014684	14,684 37/64	56	111
12001500	15,00	56	111
120015081	15,081 19/32	58	115
120015478	15,478 39/64	58	115
120015875	15,875 5/8	58	115
12001600	16,00	58	115

Double-X, Drill 121-0

HSS-Co



High Performance, self-centering, very high stability
Work material: Steel alloys and stainless steel materials

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
121002489	02,489 No.40	14	43
12100250	02,50	14	43
121002527	02,527 No.39	14	43
12100255	02,55	14	43
121002578	02,578 No.38	14	43
12100260	02,60	14	43
121002642	02,642 No.37	14	43
12100270	02,70	16	46
121002705	02,705 No.36	16	46
12100275	02,75	16	46
121002778	02,778 7/64	16	46
121002794	02,794 No.35	16	46
12100280	02,80	16	46
121002819	02,819 No.34	16	46
121002870	02,870 No.33	16	46
12100290	02,90	16	46
121002946	02,946 No.32	16	46
12100300	03,00	16	46
121003048	03,048 No.31	18	49
12100310	03,10	18	49
121003175	03,175 1/8	18	49
12100320	03,20	18	49
12100325	03,25	18	49
121003264	03,264 No.30	18	49

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
12100330	03,30	18	49
12100340	03,40	20	52
121003454	03,454 No.29	20	52
12100350	03,50	20	52
121003569	03,569 No.28	20	52
121003572	03,572 9/64	20	52
12100360	03,60	20	52
12100365	03,65	20	52
121003658	03,658 No.27	20	52
12100370	03,70	20	52
121003734	03,734 No.26	20	52
121003797	03,797 No.25	22	55
12100380	03,80	22	55
121003861	03,861 No.24	22	55
12100390	03,90	22	55
121003912	03,912 No.23	22	55
121003969	03,969 5/32	22	55
121003988	03,988 No.22	22	55
12100400	04,00	22	55
121004039	04,039 No.21	22	55
121004089	04,089 No.20	22	55
12100410	04,10	22	55
12100420	04,20	22	55
121004216	04,216 No.19	22	55

DRILLS

HSS
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Double-X, Drill 121-0**D
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EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm] [mm]
12100430	04,30	24	58
121004305	04,305 No.18	24	58
121004366	04,366 11/64	24	58
121004394	04,394 No.17	24	58
12100440	04,40	24	58
121004496	04,496 No.16	24	58
12100450	04,50	24	58
121004572	04,572 No.15	24	58
12100460	04,60	24	58
121004623	04,623 No.14	24	58
12100465	04,65	24	58
121004699	04,699 No.13	24	58
12100470	04,70	24	58
121004763	04,763 3/16	26	62
12100480	04,80	26	62
121004801	04,801 No.12	26	62
121004851	04,851 No.11	26	62
12100490	04,90	26	62
121004915	04,915 No.10	26	62
121004978	04,978 No.9	26	62
12100500	05,00	26	62
121005055	05,055 No.8	26	62
12100510	05,10	26	62
121005105	05,105 No.7	26	62
121005159	05,159 13/64	26	62
121005182	05,182 No.6	26	62
12100520	05,20	26	62
121005220	05,220 No.5	26	62
12100530	05,30	26	62
121005309	05,309 No.4	26	62
12100540	05,40	28	66
121005410	05,410 No.3	28	66
12100550	05,50	28	66
12100555	05,55	28	66
121005556	05,556 7/32	28	66
12100560	05,60	28	66
121005613	05,613 No.2	28	66
12100570	05,70	28	66
121005791	05,791 No.1	28	66
12100580	05,80	28	66
12100590	05,90	28	66
121005944	05,944 SIZE A	28	66
121005953	05,953 15/64	28	66
12100600	06,00	28	66
121006045	06,045 SIZE B	31	70
12100610	06,10	31	70
121006147	06,147 SIZE C	31	70
12100620	06,20	31	70
121006248	06,248 SIZE D	31	70
12100630	06,30	31	70
121006350	06,350 1/4	31	70
12100635	06,35 SIZE E	31	70
12100640	06,40	31	70
12100650	06,50	31	70
121006528	06,528 SIZE F	31	70
12100660	06,60	31	70
121006629	06,629 SIZE G	31	70
12100670	06,70	31	70
121006747	06,747 17/64	34	74
121006756	06,756 SIZE H	34	74
12100680	06,80	34	74
12100690	06,90	34	74
121006909	06,909 SIZE I	34	74

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm] [mm]
12100700	07,00	34	74
121007036	07,036 SIZE J	34	74
12100710	07,10	34	74
121007137	07,137 SIZE K	34	74
121007144	07,144 9/32	34	74
12100720	07,20	34	74
12100730	07,30	34	74
121007366	07,366 SIZE L	34	74
12100740	07,40	34	74
121007493	07,493 SIZE M	34	74
12100750	07,50	34	74
121007541	07,541 19/64	37	79
12100760	07,60	37	79
121007671	07,671 SIZE N	37	79
12100770	07,70	37	79
12100780	07,80	37	79
12100790	07,90	37	79
121007938	07,938 5/16	37	79
12100800	08,00	37	79
121008026	08,026 SIZE O	37	79
12100810	08,10	37	79
12100820	08,20	37	79
121008204	08,204 SIZE P	37	79
12100830	08,30	37	79
121008334	08,334 21/64	37	79
12100840	08,40	37	79
121008433	08,433 SIZE Q	37	79
12100850	08,50	37	79
12100860	08,60	40	84
121008611	08,611 SIZE R	40	84
12100870	08,70	40	84
121008731	08,731 11/32	40	84
12100880	08,80	40	84
121008839	08,839 SIZE S	40	84
12100890	08,90	40	84
12100900	09,00	40	84
121009093	09,093 SIZE T	40	84
12100910	09,10	40	84
121009128	09,128 23/64	40	84
12100920	09,20	40	84
12100930	09,30	40	84
121009347	09,347 SIZE U	40	84
12100940	09,40	40	84
12100950	09,50	40	84
121009525	09,525 3/8	43	89
121009576	09,576 SIZE V	43	89
12100960	09,60	43	89
12100970	09,70	43	89
12100980	09,80	43	89
121009804	09,804 SIZE W	43	89
12100990	09,90	43	89
121009922	09,922 25/64	43	89
12101000	10,00	43	89
121010084	10,084 SIZE X	43	89
12101020	10,20	43	89
121010262	10,262 SIZE Y	43	89
12101030	10,30	43	89
121010319	10,319 13/32	43	89
12101040	10,40	43	89
121010490	10,490 SIZE Z	43	89
12101050	10,50	43	89
121010716	10,716 27/64	47	95
12101080	10,80	47	95

Double-X, Drill 121-0

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
12101100	11,00	47	95
121011113	11,113 7/16	47	95
12101120	11,20	47	95
12101150	11,50	47	95
121011509	11,509 29/64	47	95
12101180	11,80	47	95
121011906	11,906 15/32	51	102
12101200	12,00	51	102
12101210	12,10	51	102
12101220	12,20	51	102
121012303	12,303 31/64	51	102
12101250	12,50	51	102
121012700	12,700 1/2	51	102
12101280	12,80	51	102
12101300	13,00	51	102
121013097	13,097 33/64	51	102
12101310	13,10	51	102
121013494	13,494 17/32	54	107
12101350	13,50	54	107
12101380	13,80	54	107
121013891	13,891 35/64	54	107
12101400	14,00	54	107
12101420	14,20	56	111
121014288	14,288 9/16	56	111

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
12101450	14,50	56	111
121014684	14,684 37/64	56	111
12101480	14,80	56	111
12101500	15,00	56	111
121015081	15,081 19/32	58	115
12101510	15,10	58	115
12101520	15,20	58	115
12101530	15,30	58	115
121015478	15,478 39/64	58	115
12101550	15,50	58	115
12101570	15,70	58	115
121015875	15,875 5/8	58	115
12101600	16,00	58	115
12101650	16,50	60	119
12101700	17,00	60	119
12101750	17,50	62	123
12101770	17,70	62	123
12101800	18,00	62	123
12101850	18,50	64	127
12101900	19,00	64	127
12101950	19,50	66	131
12101970	19,70	66	131
12102000	20,00	66	131

DRILLS

HSS
-Co

Double-X, Drill 121-3, TiN

HSS-Co



High Performance, self-centering, very high stability
Work Material: Steel alloys and stainless steel materials

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
121302489	02,489 No.40	14	43
12130250	02,50	14	43
121302527	02,527 No.39	14	43
121302578	02,578 No.38	14	43
12130260	02,60	14	43
121302642	02,642 No.37	14	43
12130270	02,70	16	46
121302705	02,705 No.36	16	46
121302778	02,778 7/64	16	46
121302794	02,794 No.35	16	46
12130280	02,80	16	46
121302819	02,819 No.34	16	46
121302870	02,870 No.33	16	46
12130290	02,90	16	46
121302946	02,946 No.32	16	46
12130300	03,00	16	46
121303048	03,048 No.31	18	49
12130310	03,10	18	49
121303175	03,175 1/8	18	49
12130320	03,20	18	49
12130325	03,25	18	49
121303264	03,264 No.30	18	49

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
12130330	03,30	18	49
12130340	03,40	20	52
121303454	03,454 No.29	20	52
12130350	03,50	20	52
121303569	03,569 No.28	20	52
121303572	03,572 9/64	20	52
12130360	03,60	20	52
12130365	03,65	20	52
121303658	03,658 No.27	20	52
12130370	03,70	20	52
121303734	03,734 No.26	20	52
121303797	03,797 No.25	22	55
12130380	03,80	22	55
121303861	03,861 No.24	22	55
12130390	03,90	22	55
121303912	03,912 No.23	22	55
121303969	03,969 5/32	22	55
121303988	03,988 No.22	22	55
12130400	04,00	22	55
121304039	04,039 No.21	22	55
121304089	04,089 No.20	22	55
12130410	04,10	22	55

Double-X, Drill 121-3, TiN**D
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EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm] [mm]
12130420	04,20	22	55
121304216	04,216 No.19	22	55
12130430	04,30	24	58
121304305	04,305 No.18	24	58
121304366	04,366 11/64	24	58
121304394	04,394 No.17	24	58
12130440	04,40	24	58
121304496	04,496 No.16	24	58
12130450	04,50	24	58
121304572	04,572 No.15	24	58
12130460	04,60	24	58
121304623	04,623 No.14	24	58
121304699	04,699 No.13	24	58
12130470	04,70	24	58
121304763	04,763 3/16	26	62
12130480	04,80	26	62
121304801	04,801 No.12	26	62
121304851	04,851 No.11	26	62
12130490	04,90	26	62
121304915	04,915 No.10	26	62
121304978	04,978 No.9	26	62
12130500	05,00	26	62
121305055	05,055 No.8	26	62
12130510	05,10	26	62
121305105	05,105 No.7	26	62
121305159	05,159 13/64	26	62
121305182	05,182 No.6	26	62
12130520	05,20	26	62
121305220	05,220 No.5	26	62
12130530	05,30	26	62
121305309	05,309 No.4	26	62
12130540	05,40	28	66
121305410	05,410 No.3	28	66
12130550	05,50	28	66
121305556	05,556 7/32	28	66
12130560	05,60	28	66
121305613	05,613 No.2	28	66
12130570	05,70	28	66
121305791	05,791 No.1	28	66
12130580	05,80	28	66
12130590	05,90	28	66
121305953	05,953 15/64	28	66
12130600	06,00	28	66
12130610	06,10	31	70
12130620	06,20	31	70
12130630	06,30	31	70
121306350	06,350 1/4	31	70
12130640	06,40	31	70
12130650	06,50	31	70
12130660	06,60	31	70
12130670	06,70	31	70
121306747	06,747 17/64	34	74
12130680	06,80	34	74
12130690	06,90	34	74
12130700	07,00	34	74
12130710	07,10	34	74
121307144	07,144 9/32	34	74
12130720	07,20	34	74
12130730	07,30	34	74
12130740	07,40	34	74
12130750	07,50	34	74
121307541	07,541 19/64	37	79
12130760	07,60	37	79
12130770	07,70	37	79

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm] [mm]
12130780	07,80	37	79
12130790	07,90	37	79
121307938	07,938 5/16	37	79
12130800	08,00	37	79
12130810	08,10	37	79
12130820	08,20	37	79
12130830	08,30	37	79
121308334	08,334 21/64	37	79
12130840	08,40	37	79
12130850	08,50	37	79
12130860	08,60	40	84
12130870	08,70	40	84
121308731	08,731 11/32	40	84
12130880	08,80	40	84
12130890	08,90	40	84
12130900	09,00	40	84
12130910	09,10	40	84
121309128	09,128 23/64	40	84
12130920	09,20	40	84
12130930	09,30	40	84
12130940	09,40	40	84
12130950	09,50	40	84
121309525	09,525 3/8	43	89
12130960	09,60	43	89
12130970	09,70	43	89
12130980	09,80	43	89
12130990	09,90	43	89
121309922	09,922 25/64	43	89
12131000	10,00	43	89
12131020	10,20	43	89
12131030	10,30	43	89
121310319	10,319 13/32	43	89
12131040	10,40	43	89
12131050	10,50	43	89
121310716	10,716 27/64	47	95
12131080	10,80	47	95
12131100	11,00	47	95
121311113	11,113 7/16	47	95
12131120	11,20	47	95
12131150	11,50	47	95
121311509	11,509 29/64	47	95
12131180	11,80	47	95
121311906	11,906 15/32	51	102
12131200	12,00	51	102
12131210	12,10	51	102
12131220	12,20	51	102
121312303	12,303 31/64	51	102
12131250	12,50	51	102
121312700	12,700 1/2	51	102
12131280	12,80	51	102
12131300	13,00	51	102
121313097	13,097 33/64	51	102
12131310	13,10	51	102
121313494	13,494 17/32	54	107
12131350	13,50	54	107
12131380	13,80	54	107
121313891	13,891 35/64	54	107
12131400	14,00	54	107
12131420	14,20	56	111
121314288	14,288 9/16	56	111
12131450	14,50	56	111
121314684	14,684 37/64	56	111
12131480	14,80	56	111
12131500	15,00	56	111
121315081	15,081 19/32	58	115

Double-X, Drill 121-3, TiN

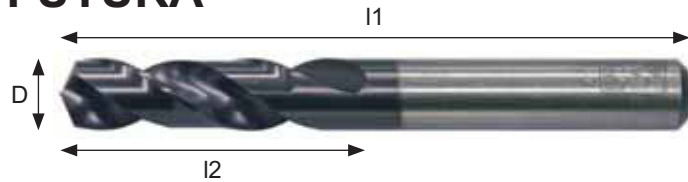
EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
12131520	15,20	58	115
12131530	15,30	58	115
121315478	15,478 39/64	58	115
12131550	15,50	58	115
12131570	15,70	58	115
121315875	15,875 5/8	58	115
12131600	16,00	58	115
12131650	16,50	60	119
12131700	17,00	60	119

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
12131750	17,50	62	123
12131770	17,70	62	123
12131800	18,00	62	123
12131850	18,50	64	127
12131900	19,00	64	127
12131950	19,50	66	131
12131970	19,70	66	131
12132000	20,00	66	131

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SHSS
-Co

Double-X, Drill 121-4, FUTURA

HSS-Co



High Performance, self-centering, very high stability
Work Material: steel alloys and stainless steel material

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
12140250	02,50	14	43
12140260	02,60	14	43
12140270	02,70	16	46
12140275	02,75	16	46
121402778	02,778 7/64	16	46
12140280	02,80	16	46
12140290	02,90	16	46
12140300	03,00	16	46
12140310	03,10	18	49
121403175	03,175 1/8	18	49
12140320	03,20	18	49
12140325	03,25	18	49
12140330	03,30	18	49
12140340	03,40	20	52
12140350	03,50	20	52
121403572	03,572 9/64	20	52
12140360	03,60	20	52
12140365	03,65	20	52
12140370	03,70	20	52
12140380	03,80	22	55
12140390	03,90	22	55
121403969	03,969 5/32	22	55
12140400	04,00	22	55
12140410	04,10	22	55
12140420	04,20	22	55
12140430	04,30	24	58
121404366	04,366 11/64	24	58
12140440	04,40	24	58
12140450	04,50	24	58
12140460	04,60	24	58
12140465	04,65	24	58
12140470	04,70	24	58
121404763	04,763 3/16	26	62
12140480	04,80	26	62
12140490	04,90	26	62
12140500	05,00	26	62

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
12140510	05,10	26	62
121405159	05,159 13/64	26	62
12140520	05,20	26	62
12140530	05,30	26	62
12140540	05,40	28	66
12140550	05,50	28	66
12140555	05,55	28	66
121405556	05,556 7/32	28	66
12140560	05,60	28	66
12140570	05,70	28	66
12140580	05,80	28	66
12140590	05,90	28	66
121405953	05,953 15/64	28	66
12140600	06,00	28	66
12140610	06,10	31	70
12140620	06,20	31	70
12140630	06,30	31	70
121406350	06,350 1/4	31	70
12140640	06,40	31	70
12140650	06,50	31	70
12140660	06,60	31	70
12140670	06,70	31	70
121406747	06,747 17/64	34	74
12140680	06,80	34	74
12140690	06,90	34	74
12140700	07,00	34	74
12140710	07,10	34	74
121407144	07,144 9/32	34	74
12140720	07,20	34	74
12140730	07,30	34	74
12140740	07,40	34	74
12140750	07,50	34	74
121407541	07,541 19/64	37	79
12140760	07,60	37	79
12140770	07,70	37	79
12140780	07,80	37	79

Double-X, Drill 121-4, FUTURA

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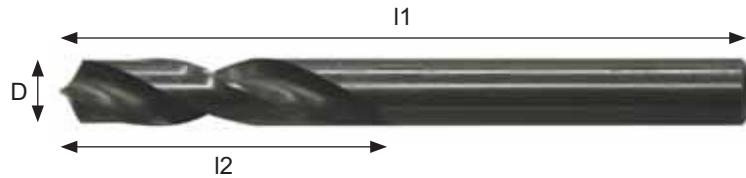
HSS
-Co**

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
12140790	07,90	37	79
121407938	07,938 5/16	37	79
12140800	08,00	37	79
12140810	08,10	37	79
12140820	08,20	37	79
12140830	08,30	37	79
121408334	08,334 21/64	37	79
12140840	08,40	37	79
12140850	08,50	37	79
12140860	08,60	40	84
12140870	08,70	40	84
121408731	08,731 11/32	40	84
12140880	08,80	40	84
12140890	08,90	40	84
12140900	09,00	40	84
12140910	09,10	40	84
121409128	09,128 23/64	40	84
12140920	09,20	40	84
12140930	09,30	40	84
12140940	09,40	40	84
12140950	09,50	40	84
121409525	09,525 3/8	43	89
12140960	09,60	43	89
12140970	09,70	43	89
12140980	09,80	43	89
12140990	09,90	43	89
121409922	09,922 25/64	43	89
12141000	10,00	43	89
12141020	10,20	43	89
12141030	10,30	43	89
121410319	10,319 13/32	43	89
12141040	10,40	43	89
12141050	10,50	43	89
121410716	10,716 27/64	47	95
12141080	10,80	47	95
12141100	11,00	47	95
121411113	11,113 7/16	47	95
12141120	11,20	47	95
12141150	11,50	47	95
121411509	11,509 29/64	47	95
12141180	11,80	47	95
121411906	11,906 15/32	51	102

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
12141200	12,00	51	102
12141210	12,10	51	102
12141220	12,20	51	102
121412303	12,303 31/64	51	102
12141250	12,50	51	102
121412700	12,700 1/2	51	102
12141280	12,80	51	102
12141300	13,00	51	102
121413097	13,097 33/64	51	102
12141310	13,10	51	102
121413494	13,494 17/32	54	107
12141350	13,50	54	107
12141380	13,80	54	107
121413891	13,891 35/64	54	107
12141400	14,00	54	107
12141420	14,20	56	111
121414288	14,288 9/16	56	111
12141450	14,50	56	111
121414684	14,684 37/64	56	111
12141480	14,80	56	111
12141500	15,00	56	111
121415081	15,081 19/32	58	115
12141510	15,10	58	115
12141520	15,20	58	115
12141530	15,30	58	115
121415478	15,478 39/64	58	115
12141550	15,50	58	115
12141570	15,70	58	115
121415875	15,875 5/8	58	115
12141600	16,00	58	115
12141650	16,50	60	119
12141700	17,00	60	119
12141750	17,50	62	123
12141770	17,70	62	123
12141800	18,00	62	123
12141850	18,50	64	127
12141900	19,00	64	127
12141950	19,50	66	131
12141970	19,70	66	131
12142000	20,00	66	131

Drill 122-0

HSS-Co



Light Cutting

Work Material: Hand drill

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
12200250	02,50	14	43
12200260	02,60	14	43
12200270	02,70	16	46
12200280	02,80	16	46
12200290	02,90	16	46
12200300	03,00	16	46

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
12200310	03,10	20	49
12200320	03,20	20	49
12200330	03,30	20	49
12200340	03,40	22	52
12200350	03,50	22	52
12200360	03,60	22	52

Drill 122-0

EDP#	D h8 [mm]	l2 [mm]	l1 [mm]
12200370	03,70	22	52
12200380	03,80	24	55
12200390	03,90	24	55
12200400	04,00	24	55
12200410	04,10	24	55
12200420	04,20	24	55
12200430	04,30	26	58
12200440	04,40	26	58
12200450	04,50	26	58
12200460	04,60	26	58
12200470	04,70	26	58
12200480	04,80	29	62
12200490	04,90	29	62
12200500	05,00	29	62
12200510	05,10	29	62
12200520	05,20	29	62
12200530	05,30	29	62
12200540	05,40	30	66
12200550	05,50	30	66
12200560	05,60	30	66
12200570	05,70	30	66
12200580	05,80	30	66
12200590	05,90	30	66
12200600	06,00	30	66
12200610	06,10	33	70
12200620	06,20	33	70
12200630	06,30	33	70
12200640	06,40	33	70
12200650	06,50	33	70
12200660	06,60	33	70

EDP#	D h8 [mm]	l2 [mm]	l1 [mm]
12200670	06,70	33	70
12200680	06,80	36	74
12200690	06,90	36	74
12200700	07,00	36	74
12200710	07,10	36	74
12200720	07,20	36	74
12200730	07,30	36	74
12200740	07,40	36	74
12200750	07,50	36	74
12200760	07,60	39	79
12200770	07,70	39	79
12200780	07,80	39	79
12200790	07,90	39	79
12200800	08,00	39	79
12200810	08,10	39	79
12200850	08,50	39	79
12200860	08,60	40	84
12200880	08,80	40	84
12200900	09,00	40	84
12200930	09,30	40	84
12200950	09,50	40	84
12201000	10,00	43	89
12201020	10,20	43	89
12201030	10,30	43	89
12201050	10,50	43	89
12201100	11,00	47	95
12201150	11,50	47	95
12201200	12,00	51	102
12201250	12,50	51	102
12201300	13,00	51	102

DRILLS

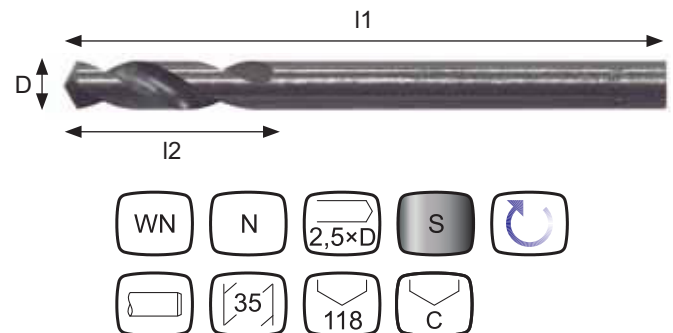
HSS
-Co

Thin sheet metal drills 123-0

HSS-Co

Work material: For blind rivet, pop rivet

EDP#	D h8 [mm]	l2 [mm]	l1 [mm]
12300325	03,25	13	49
12300330	03,30	13	49
12300410	04,10	16	55
12300490	04,90	21	62

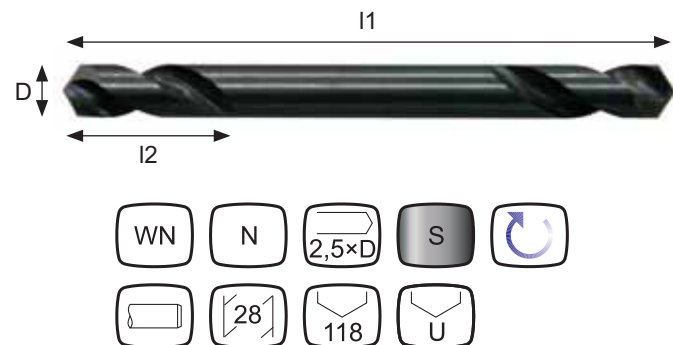


Thin sheet metal drills 124-0

HSS

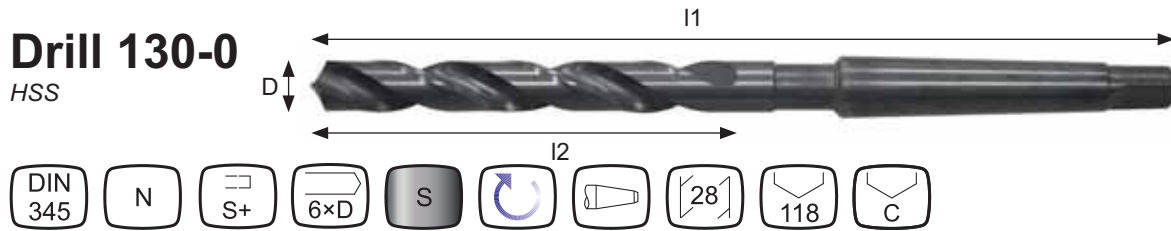
Work material: For blind rivet, pop rivet

EDP#	D h8 [mm]	l2 [mm]	l1 [mm]
12400250	02,50	10	43
12400320	03,20	10	49
12400330	03,30	10	49
12400410	04,10	13	55
12400420	04,20	13	55
12400450	04,50	13	58
12400490	04,90	13	62
12400500	05,00	13	62
12400570	05,70	19	66
12400650	06,50	19	70



Drill 130-0

HSS



Multi application drill for machines with morse taper shank
Work Material: Steel and cast iron

EDP#	D h8 [mm]	L2 [mm]	L1 [mm]	MK
13001000	10,00	87	168	1
13001020	10,20	87	168	1
13001025	10,25	87	168	1
13001050	10,50	87	168	1
13001075	10,75	94	175	1
13001080	10,80	94	175	1
13001100	11,00	94	175	1
13001120	11,20	94	175	1
13001125	11,25	94	175	1
13001150	11,50	94	175	1
13001175	11,75	94	175	1
13001180	11,80	94	175	1
13001200	12,00	101	182	1
13001220	12,20	101	182	1
13001225	12,25	101	182	1
13001250	12,50	101	182	1
13001275	12,75	101	182	1
13001280	12,80	101	182	1
13001300	13,00	101	182	1
13001320	13,20	101	182	1
13001325	13,25	108	189	1
13001350	13,50	108	189	1
13001375	13,75	108	189	1
13001380	13,80	108	189	1
13001400	14,00	108	189	1
13001425	14,25	114	212	2
13001450	14,50	114	212	2
13001475	14,75	114	212	2
13001500	15,00	114	212	2
13001525	15,25	120	218	2
13001550	15,50	120	218	2
13001575	15,75	120	218	2
13001600	16,00	120	218	2
13001625	16,25	125	223	2
13001650	16,50	125	223	2
13001675	16,75	125	223	2
13001700	17,00	125	223	2
13001725	17,25	130	228	2
13001750	17,50	130	228	2
13001775	17,75	130	228	2
13001800	18,00	130	228	2
13001825	18,25	135	233	2
13001850	18,50	135	233	2
13001875	18,75	135	233	2
13001900	19,00	135	233	2
13001925	19,25	140	238	2
13001950	19,50	140	238	2
13001975	19,75	140	238	2
13002000	20,00	140	238	2
13002025	20,25	145	243	2
13002050	20,50	145	243	2
13002075	20,75	145	243	2
13002100	21,00	145	243	2
13002125	21,25	150	248	2
13002150	21,50	150	248	2
13002175	21,75	150	248	2
13002200	22,00	150	248	2

EDP#	D h8 [mm]	L2 [mm]	L1 [mm]	MK
13002225	22,25	150	248	2
13002250	22,50	155	253	2
13002275	22,75	155	253	2
13002300	23,00	155	253	2
13002325	23,25	155	253	3
13002350	23,50	155	253	3
13002375	23,75	160	281	3
13002400	24,00	160	281	3
13002425	24,25	160	281	3
13002450	24,50	160	281	3
13002475	24,75	160	281	3
13002500	25,00	160	281	3
13002525	25,25	165	286	3
13002550	25,50	165	286	3
13002575	25,75	165	286	3
13002600	26,00	165	286	3
13002625	26,25	165	286	3
13002650	26,50	165	286	3
13002675	26,75	170	291	3
13002700	27,00	170	291	3
13002725	27,25	170	291	3
13002750	27,50	170	291	3
13002775	27,75	170	291	3
13002800	28,00	170	291	3
13002825	28,25	175	296	3
13002850	28,50	175	296	3
13002875	28,75	175	296	3
13002900	29,00	175	296	3
13002925	29,25	175	296	3
13002950	29,50	175	296	3
13002975	29,75	175	296	3
13003000	30,00	175	296	3
13003025	30,25	180	301	3
13003050	30,50	180	301	3
13003075	30,75	180	301	3
13003100	31,00	180	301	3
13003125	31,25	180	301	3
13003150	31,50	180	301	3
13003175	31,75	185	306	3
13003200	32,00	185	334	4
13003250	32,50	185	334	4
13003300	33,00	185	334	4
13003350	33,50	185	334	4
13003400	34,00	190	339	4
13003450	34,50	190	339	4
13003500	35,00	190	339	4
13003550	35,50	190	339	4
13003600	36,00	195	344	4
13003650	36,50	195	344	4
13003700	37,00	195	344	4
13003750	37,50	195	344	4
13003800	38,00	200	349	4
13003850	38,50	200	349	4
13003900	39,00	200	349	4
13003950	39,50	200	349	4
13004000	40,00	200	349	4
13004050	40,50	205	354	4

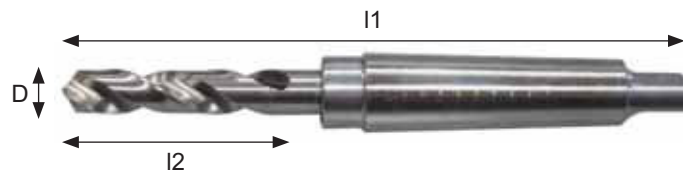
Drill 130-0

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]	MK
13004100	41,00	205	354	4
13004150	41,50	205	354	4
13004200	42,00	205	354	4
13004250	42,50	205	354	4
13004300	43,00	210	359	4
13004350	43,50	210	359	4
13004400	44,00	210	359	4
13004450	44,50	210	359	4
13004500	45,00	210	359	4
13004550	45,50	215	364	4
13004600	46,00	215	364	4
13004650	46,50	215	364	4
13004700	47,00	215	364	4
13004750	47,50	215	364	4
13004800	48,00	220	369	4

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]	MK
13004850	48,50	220	369	4
13004900	49,00	220	369	4
13004950	49,50	220	369	4
13005000	50,00	220	369	4
13005100	51,00	225	412	5
13005200	52,00	225	412	5
13005300	53,00	225	412	5
13005400	54,00	230	417	5
13005500	55,00	230	417	5
13005600	56,00	230	417	5
13005700	57,00	235	422	5
13005800	58,00	235	422	5
13005900	59,00	235	422	5
13006000	60,00	235	422	5

Drill 133-0

HSS-Co



High Performance

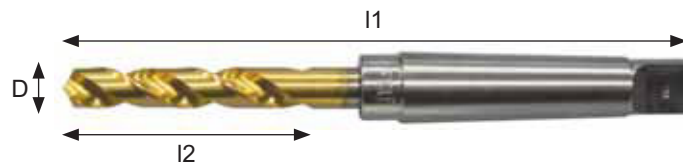
Work Material: Steel alloys and stainless steel materials

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]	MK	Pris [SEK]
13301350	13,50	84	212	3	563,00
13301400	14,00	84	212	3	501,00
13301450	14,50	88	218	3	631,00
13301500	15,00	88	218	3	563,00
13301550	15,50	93	218	3	700,00
13301600	16,00	93	218	3	599,00
13301650	16,50	93	218	3	744,00
13301700	17,00	93	218	3	645,00
13301750	17,50	93	218	3	824,00

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]	MK	Pris [SEK]
13301770	17,70	93	218	3	991,00
13301800	18,00	93	218	3	705,00
13301850	18,50	93	218	3	871,00
13301900	19,00	93	218	3	762,00
13301950	19,50	93	218	3	871,00
13301970	19,70	93	218	3	1041,00
13302000	20,00	93	218	3	781,00

Drill 133-3, TiN

HSS-Co



High Performance

Work Material: Steel alloys and stainless steel materials

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]	MK
13331350	13,50	84	212	3
13331400	14,00	84	212	3
13331450	14,50	88	218	3
13331500	15,00	88	218	3
13331550	15,50	93	218	3
13331600	16,00	93	218	3
13331650	16,50	93	218	3
13331700	17,00	93	218	3
13331750	17,50	93	218	3

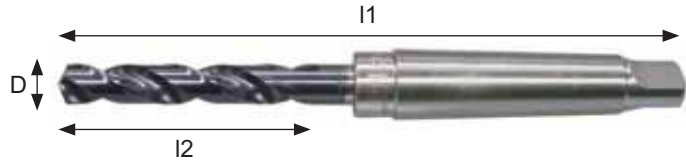
EDP#	D h8 [mm]	I2 [mm]	I1 [mm]	MK
13331800	18,00	93	218	3
13331850	18,50	93	218	3
13331900	19,00	93	218	3
13331950	19,50	93	218	3
13332000	20,00	93	218	3

DRILLS

HSS-Co

Drill 133-4, FUTURA

HSS-Co



High Performance

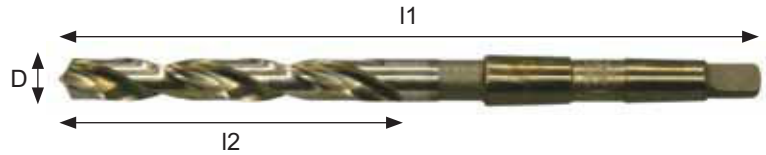
Work Material: Steel alloys and stainless steel materials

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]	MK
13341350	13,50	84	212	3
13341400	14,00	84	212	3
13341450	14,50	88	218	3
13341500	15,00	88	218	3
13341550	15,50	93	218	3
13341600	16,00	93	218	3
13341650	16,50	93	218	3
13341700	17,00	93	218	3
13341750	17,50	93	218	3

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]	MK
13341770	17,70	93	218	3
13341800	18,00	93	218	3
13341850	18,50	93	218	3
13341900	19,00	93	218	3
13341950	19,50	93	218	3
13341970	19,70	93	218	3
13342000	20,00	93	218	3

Drill 135-0

HSS-Co



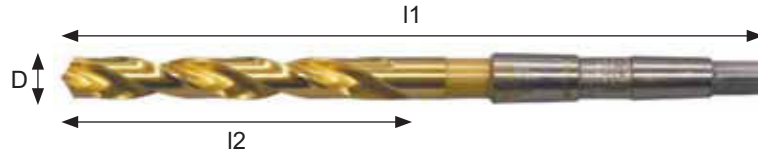
Work Material: Steel and cast iron

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]	MK
13501300	13,00	101	182	1
13501350	13,50	108	189	1
13501400	14,00	108	189	1
13501450	14,50	114	212	2
13501500	15,00	114	212	2
13501550	15,50	120	218	2
13501600	16,00	120	218	2
13501650	16,50	125	223	2
13501700	17,00	125	223	2
13501750	17,50	130	228	2
13501800	18,00	130	228	2
13501850	18,50	135	233	2
13501900	19,00	135	233	2
13501950	19,50	140	238	2
13502000	20,00	140	238	2
13502050	20,50	145	243	2
13502100	21,00	145	243	2
13502150	21,50	150	248	2

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]	MK
13502200	22,00	150	248	2
13502250	22,50	155	253	2
13502300	23,00	155	253	2
13502350	23,50	155	253	3
13502400	24,00	160	281	3
13502450	24,50	160	281	3
13502500	25,00	160	281	3
13502550	25,50	165	286	3
13502600	26,00	165	286	3
13502650	26,50	165	286	3
13502700	27,00	170	291	3
13502750	27,50	170	291	3
13502800	28,00	170	291	3
13502850	28,50	175	296	3
13502900	29,00	175	296	3
13502950	29,50	175	296	3
13503000	30,00	175	296	3

Drill 135-3, TiN

HSS-Co



Work Material: Steel and cast iron

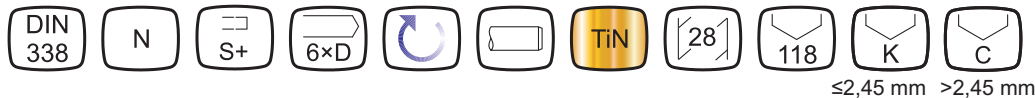
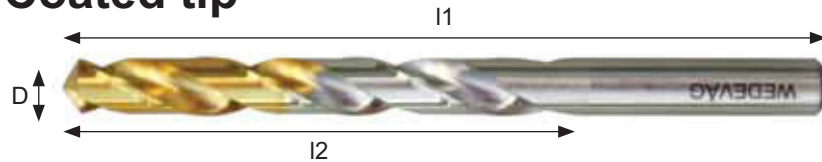
EDP#	D h8 [mm]	I2 [mm]	I1 [mm]	MK
13531300	13,00	101	182	1
13531350	13,50	108	189	1
13531400	14,00	108	189	1
13531450	14,50	114	212	2
13531500	15,00	114	212	2
13531550	15,50	120	218	2
13531600	16,00	120	218	2
13531650	16,50	125	223	2
13531700	17,00	125	223	2
13531750	17,50	130	228	2
13531800	18,00	130	228	2
13531850	18,50	135	233	2
13531900	19,00	135	233	2
13531950	19,50	140	238	2
13532000	20,00	140	238	2

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]	MK
13532050	20,50	145	243	2
13532100	21,00	145	243	2
13532150	21,50	150	248	2
13532200	22,00	150	248	2
13532250	22,50	155	253	2
13532300	23,00	155	253	2
13532400	24,00	160	281	3
13532500	25,00	160	281	3
13532600	26,00	165	286	3
13532700	27,00	170	291	3
13532800	28,00	170	291	3
13532900	29,00	175	296	3
13533000	30,00	175	296	3

Drill 140-0, TiN-Coated tip

HSS-Co

>2,5 mm



Self-centring

Coating length >3,1xD

Work Material: Steel and cast iron

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
14000100	01,00	12	34
14000110	01,10	14	36
14000120	01,20	16	38
14000130	01,30	16	38
14000140	01,40	18	40
14000150	01,50	18	40
140001588	01,588	20	43
14000160	01,60	20	43
14000170	01,70	20	43
14000180	01,80	22	46
14000190	01,90	22	46
140001984	01,984	24	49
14000200	02,00	24	49
14000210	02,10	24	49
14000220	02,20	27	53
14000230	02,30	27	53
140002381	02,381	30	57
14000240	02,40	30	57

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
14000250	02,50	30	57
14000260	02,60	30	57
14000270	02,70	33	61
140002778	02,778	33	61
14000280	02,80	33	61
14000290	02,90	33	61
14000300	03,00	33	61
14000310	03,10	36	65
140003175	03,175	36	65
14000320	03,20	36	65
14000325	03,25	36	65
14000330	03,30	36	65
14000340	03,40	39	70
14000350	03,50	39	70
140003572	03,572	39	70
14000360	03,60	39	70
14000370	03,70	39	70
14000380	03,80	43	75

Drill 140-0, TiN-Coated tip**D
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-Co**

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm] [mm]
14000390	03,90	43	75
140003969	03,969 5/32	43	75
14000400	04,00	43	75
14000410	04,10	43	75
14000420	04,20	43	75
14000430	04,30	47	80
140004366	04,366 11/64	47	80
14000440	04,40	47	80
14000450	04,50	47	80
14000460	04,60	47	80
14000470	04,70	47	80
140004763	04,763 3/16	52	86
14000480	04,80	52	86
14000490	04,90	52	86
14000500	05,00	52	86
14000510	05,10	52	86
140005159	05,159 13/64	52	86
14000520	05,20	52	86
14000530	05,30	52	86
14000540	05,40	57	93
14000550	05,50	57	93
140005556	05,556 7/32	57	93
14000560	05,60	57	93
14000570	05,70	57	93
14000580	05,80	57	93
14000590	05,90	57	93
140005953	05,953 15/64	57	93
14000600	06,00	57	93
14000610	06,10	63	101
14000620	06,20	63	101
14000630	06,30	63	101
140006350	06,350 1/4	63	101
14000640	06,40	63	101
14000650	06,50	63	101
14000660	06,60	63	101
14000670	06,70	63	101
140006747	06,747 17/64	69	109
14000680	06,80	69	109
14000690	06,90	69	109
14000700	07,00	69	109
14000710	07,10	69	109
140007144	07,144 9/32	69	109
14000720	07,20	69	109
14000730	07,30	69	109
14000740	07,40	69	109
14000750	07,50	69	109
140007541	07,541 19/64	75	117
14000760	07,60	75	117
14000770	07,70	75	117
14000780	07,80	75	117
14000790	07,90	75	117
140007938	07,938 5/16	75	117
14000800	08,00	75	117
14000810	08,10	75	117
14000820	08,20	75	117
14000830	08,30	75	117
140008334	08,334 21/64	75	117
14000840	08,40	75	117
14000850	08,50	75	117
14000860	08,60	81	125
14000870	08,70	81	125

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm] [mm]
140008731	08,731 11/32	81	125
14000880	08,80	81	125
14000890	08,90	81	125
14000900	09,00	81	125
14000910	09,10	81	125
140009128	09,128 23/64	81	125
14000920	09,20	81	125
14000930	09,30	81	125
14000940	09,40	81	125
14000950	09,50	81	125
140009525	09,525 3/8	87	133
14000960	09,60	87	133
14000970	09,70	87	133
14000980	09,80	87	133
14000990	09,90	87	133
140009922	09,922 25/64	87	133
14001000	10,00	87	133
14001010	10,10	87	133
14001020	10,20	87	133
14001030	10,30	87	133
140010319	10,319 13/32	87	133
14001040	10,40	87	133
14001050	10,50	87	133
14001060	10,60	87	133
14001070	10,70	94	142
140010716	10,716 27/64	94	142
14001080	10,80	94	142
14001090	10,90	94	142
14001100	11,00	94	142
14001110	11,10	94	142
140011113	11,113 7/16	94	142
14001120	11,20	94	142
14001130	11,30	94	142
14001140	11,40	94	142
14001150	11,50	94	142
140011509	11,509 29/64	94	142
14001160	11,60	94	142
14001170	11,70	94	142
14001180	11,80	94	142
14001190	11,90	101	151
140011906	11,906 15/32	101	151
14001200	12,00	101	151
14001210	12,10	101	151
14001220	12,20	101	151
14001230	12,30	101	151
140012303	12,303 31/64	101	151
14001240	12,40	101	151
14001250	12,50	101	151
14001260	12,60	101	151
140012700	12,700 1/2	101	151
14001270	12,70	101	151
14001280	12,80	101	151
14001290	12,90	101	151
14001300	13,00	101	151
140013097	13,097 33/64	101	151
14001310	13,10	101	151
14001320	13,20	101	151
14001325	13,25	108	160
14001330	13,30	108	160
14001340	13,40	108	160
140013494	13,494 17/32	108	160

Drill140-0, TiN-Coated tip

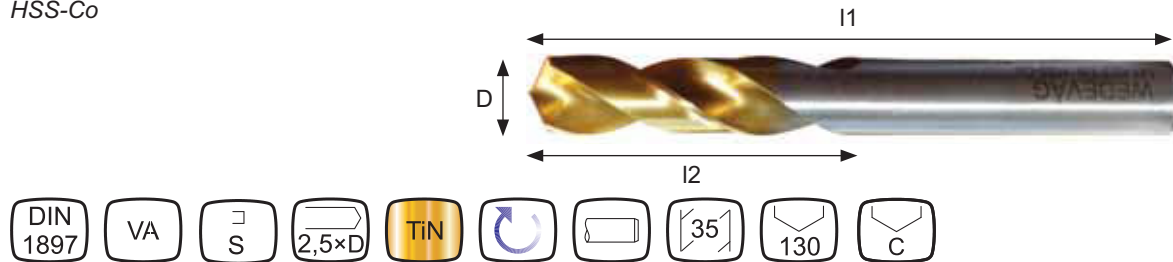
EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
14001350	13,50	108	160
14001360	13,60	108	160
14001370	13,70	108	160
14001375	13,75	108	160
14001380	13,80	108	160
140013891	13,891 35/64	108	160
14001390	13,90	108	160
14001400	14,00	108	160
14001425	14,25	114	169
140014288	14,288 9/16	114	169
14001450	14,50	114	169
140014684	14,684 37/64	114	169

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
14001475	14,75	114	169
14001500	15,00	114	169
140015081	15,081 19/32	120	178
14001525	15,25	120	178
140015478	15,478 39/64	120	178
14001550	15,50	120	178
14001575	15,75	120	178
140015875	15,875 5/8	120	178
14001600	16,00	120	178

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SHSS
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Double-X, Drill 141-0, TiN-Coated tip

HSS-Co



High Performance, self-centering, very high stability

Coating length >3,1xD

Work Material: Steel and stainless steel materials

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
14100250	02,50	14	43
14100260	02,60	14	43
14100270	02,70	16	46
141002778	02,778 7/64	16	46
14100280	02,80	16	46
14100290	02,90	16	46
14100300	03,00	16	46
14100310	03,10	18	49
141003175	03,175 1/8	18	49
14100320	03,20	18	49
14100325	03,25	18	49
14100330	03,30	18	49
14100340	03,40	20	52
14100350	03,50	20	52
141003572	03,572 9/64	20	52
14100360	03,60	20	52
14100365	03,65	20	52
14100370	03,70	20	52
14100380	03,80	22	55
14100390	03,90	22	55
141003969	03,969 5/32	22	55
14100400	04,00	22	55
14100410	04,10	22	55
14100420	04,20	22	55
14100430	04,30	24	58
141004366	04,366 11/64	24	58
14100440	04,40	24	58

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
14100450	04,50	24	58
14100460	04,60	24	58
14100470	04,70	24	58
141004763	04,763 3/16	26	62
14100480	04,80	26	62
14100490	04,90	26	62
14100500	05,00	26	62
14100510	05,10	26	62
141005159	05,159 13/64	26	62
14100520	05,20	26	62
14100530	05,30	26	62
14100540	05,40	28	66
14100550	05,50	28	66
14100555	05,55	28	66
141005556	05,556 7/32	28	66
14100560	05,60	28	66
14100570	05,70	28	66
14100580	05,80	28	66
14100590	05,90	28	66
141005953	05,953 15/64	28	66
14100600	06,00	28	66
14100610	06,10	31	70
14100620	06,20	31	70
14100630	06,30	31	70
141006350	06,350 1/4	31	70
14100640	06,40	31	70
14100650	06,50	31	70

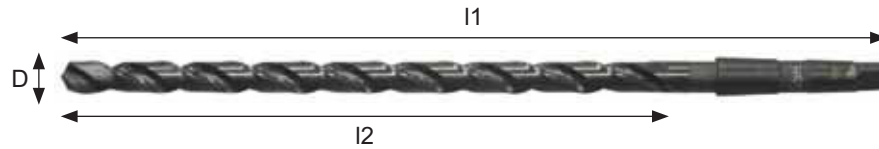
Double-X, Drill 141-0, TiN-Coated tip**D
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EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm] [mm]
14100660	06,60	31	70
14100670	06,70	31	70
141006747	06,747 17/64	34	74
14100680	06,80	34	74
14100690	06,90	34	74
14100700	07,00	34	74
14100710	07,10	34	74
141007144	07,144 9/32	34	74
14100720	07,20	34	74
14100730	07,30	34	74
14100740	07,40	34	74
14100750	07,50	34	74
141007541	07,541 19/64	37	79
14100760	07,60	37	79
14100770	07,70	37	79
14100780	07,80	37	79
14100790	07,90	37	79
141007938	07,938 5/16	37	79
14100800	08,00	37	79
14100810	08,10	37	79
14100820	08,20	37	79
14100830	08,30	37	79
141008334	08,334 21/64	37	79
14100840	08,40	37	79
14100850	08,50	37	79
14100860	08,60	40	84
14100870	08,70	40	84
141008731	08,731 11/32	40	84
14100880	08,80	40	84
14100890	08,90	40	84
14100900	09,00	40	84
14100910	09,10	40	84
141009128	09,128 23/64	40	84
14100920	09,20	40	84
14100930	09,30	40	84
14100940	09,40	40	84
14100950	09,50	40	84
141009525	09,525 3/8	43	89
14100960	09,60	43	89
14100970	09,70	43	89
14100980	09,80	43	89
14100990	09,90	43	89
141009922	09,922 25/64	43	89
14101000	10,00	43	89
14101020	10,20	43	89

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm] [mm]
14101030	10,30	43	89
141010319	10,319 13/32	43	89
14101040	10,40	43	89
14101050	10,50	43	89
141010716	10,716 27/64	47	95
14101080	10,80	47	95
14101100	11,00	47	95
141011113	11,113 7/16	47	95
14101120	11,20	47	95
14101150	11,50	47	95
141011509	11,509 29/64	47	95
14101180	11,80	47	95
141011906	11,906 15/32	51	102
14101200	12,00	51	102
14101210	12,10	51	102
14101220	12,20	51	102
141012303	12,303 31/64	51	102
14101250	12,50	51	102
141012700	12,700 1/2	51	102
14101280	12,80	51	102
14101300	13,00	51	102
141013097	13,097 33/64	51	102
14101310	13,10	51	102
141013494	13,494 17/32	54	107
14101350	13,50	54	107
14101380	13,80	54	107
141013891	13,891 35/64	54	107
14101400	14,00	54	107
14101420	14,20	56	111
141014288	14,288 9/16	56	111
14101450	14,50	56	111
141014684	14,684 37/64	56	111
14101480	14,80	56	111
14101500	15,00	56	111
141015081	15,081 19/32	58	115
14101510	15,10	58	115
14101520	15,20	58	115
14101530	15,30	58	115
141015478	15,478 39/64	58	115
14101550	15,50	58	115
14101570	15,70	58	115
141015875	15,875 5/8	58	115
14101600	16,00	58	115

Drill 145

HSS



Work Material: Deep holes in steel and castings

145-5

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]	MK
14550800	08,00	235	315	1
14550900	09,00	235	315	1
14551000	10,00	235	315	1
14551050	10,50	235	315	1
14551100	11,00	235	315	1
14551150	11,50	235	315	1
14551200	12,00	215	315	2
14551250	12,50	215	315	2
14551300	13,00	215	315	2
14551350	13,50	215	315	2
14551400	14,00	215	315	2
14551450	14,50	215	315	2

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]	MK
14551500	15,00	215	315	2
14551550	15,50	215	315	2
14551600	16,00	215	315	2
14551700	17,00	215	315	2
14551800	18,00	215	315	2
14551900	19,00	215	315	2
14552000	20,00	215	315	2
14552100	21,00	215	315	2
14552200	22,00	215	315	2
14552300	23,00	215	315	2

145-6

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]	MK
14561000	10,00	320	400	1
14561050	10,50	320	400	1
14561100	11,00	320	400	1
14561150	11,50	320	400	1
14561200	12,00	300	400	2
14561250	12,50	300	400	2
14561300	13,00	300	400	2
14561350	13,50	300	400	2
14561400	14,00	300	400	2
14561450	14,50	300	400	2
14561500	15,00	300	400	2
14561550	15,50	300	400	2
14561600	16,00	300	400	2
14561700	17,00	300	400	2
14561800	18,00	300	400	2

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]	MK
14561900	19,00	300	400	2
14562000	20,00	300	400	2
14562100	21,00	300	400	2
14562200	22,00	300	400	2
14562300	23,00	300	400	2
14562400	24,00	275	400	3
14562500	25,00	275	400	3
14562600	26,00	275	400	3
14562700	27,00	275	400	3
14562800	28,00	275	400	3
14562900	29,00	275	400	3
14563000	30,00	275	400	3

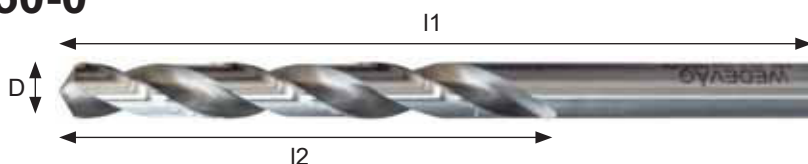
DRILLS

HSS
-Co

EasyCut, Drill 150-0

HSS-Co

>2,5 mm



≤2,45 mm >2,45 mm

Successive expansion of diameters in 0.1mm increments

High Performance, self-centering, easy cut

Work material: Steel and castings

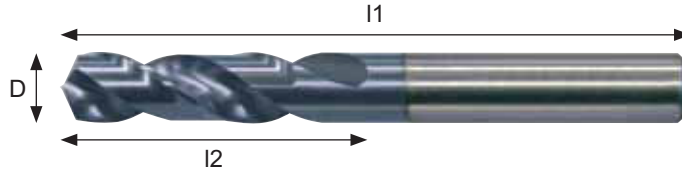
EDP#	D h8 [mm]	D [inch]	I2 [mm]	I1 [mm]
15000100	1		12	34
15000150	1,5		18	40
150001588	1,588	1/16	20	43
150001984*	1,984	5/64	24	49
15000200	2		24	49
150002381*	2,381	3/32	30	57
15000250	2,5		30	57
150002778*	2,778	7/64	33	61
15000300	3		33	61
150003175*	3,175	1/8	36	65
15000350	3,5		39	70
150003572*	3,572	9/64	39	70
15000390	3,9		43	75
150003969*	3,969	5/32	43	75
15000400	4		43	75
150004366*	4,366	11/64	47	80
15000450	4,5		47	80
150004763*	4,763	3/16	52	86
15000500	5		52	86
150005159*	5,159	13/64	52	86
15000550	5,5		57	93
150005556*	5,556	7/32	57	93
150005953*	5,953	15/64	57	93
15000600	6		57	93
150006350*	6,35	1/4	63	101
15000650	6,5		63	101
150006747*	6,747	17/64	69	109
15000700	7		69	109
150007144*	7,144	9/32	69	109
15000750	7,5		69	109
150007541*	7,541	19/64	75	117
150007938*	7,938	5/16	75	117
15000800	8		75	117
150008334*	8,334	21/64	75	117
15000850	8,5		75	117
150008731*	8,731	11/32	81	125
15000900	9		81	125
150009128*	9,128	23/64	81	125
15000950	9,5		81	125
150009525*	9,525	3/8	87	133
150009922*	9,922	25/64	87	133

EDP#	D h8 [mm]	D [inch]	I2 [mm]	I1 [mm]
15001000	10		87	133
150010319*	10,319	13/32	87	133
15001050	10,5		87	133
150010716*	10,716	27/64	94	142
15001100	11		94	142
150011113*	11,113	7/16	94	142
15001150	11,5		94	142
150011509*	11,509	29/64	94	142
15001190	11,9		101	151
150011906*	11,906	15/32	101	151
15001200	12		101	151
150012303*	12,303	31/64	101	151
15001250	12,5		101	151
150012700*	12,7	1/2	101	151
15001300	13		101	151

*Available 2nd quarter 2018

Ultima, Drill 161-0 Surface treated

HSS-Co



Surface treated

Extreme performance, self-centering

Work Material: Steel and castings

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SHSS
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EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm] [mm]
16100250	02,50	14	43
16100260	02,60	14	43
16100270	02,70	16	46
16100275	02,75	16	46
161002778	02,778	16	46
16100280	02,80	16	46
16100290	02,90	16	46
16100300	03,00	16	46
16100310	03,10	18	49
161003175	03,175	18	49
16100320	03,20	18	49
16100325	03,25	18	49
16100330	03,30	18	49
16100340	03,40	20	52
16100350	03,50	20	52
161003572	03,572	20	52
16100360	03,60	20	52
16100365	03,65	20	52
16100370	03,70	20	52
16100380	03,80	22	55
16100390	03,90	22	55
161003969	03,969	22	55
16100400	04,00	22	55
16100410	04,10	22	55
16100420	04,20	22	55
16100430	04,30	24	58
161004366	04,366	24	58
16100440	04,40	24	58
16100450	04,50	24	58
16100460	04,60	24	58
16100465	04,65	24	58
16100470	04,70	24	58
161004763	04,763	26	62
16100480	04,80	26	62
16100490	04,90	26	62
16100500	05,00	26	62
16100510	05,10	26	62
161005159	05,159	26	62
16100520	05,20	26	62
16100530	05,30	26	62
16100540	05,40	28	66
16100550	05,50	28	66
16100555	05,55	28	66
161005556	05,556	28	66
16100560	05,60	28	66
16100570	05,70	28	66
16100580	05,80	28	66
16100590	05,90	28	66

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm] [mm]
161005953	05,953	15/64	28 66
16100600	06,00	28	66
16100610	06,10	31	70
16100620	06,20	31	70
16100630	06,30	31	70
161006350	06,350	1/4	31 70
16100640	06,40	31	70
16100650	06,50	31	70
16100660	06,60	31	70
16100670	06,70	31	70
161006747	06,747	17/64	34 74
16100680	06,80	34	74
16100690	06,90	34	74
16100700	07,00	34	74
16100710	07,10	34	74
161007144	07,144	9/32	34 74
16100720	07,20	34	74
16100730	07,30	34	74
16100740	07,40	34	74
16100750	07,50	34	74
161007541	07,541	19/64	37 79
16100760	07,60	37	79
16100770	07,70	37	79
16100780	07,80	37	79
16100790	07,90	37	79
161007938	07,938	5/16	37 79
16100800	08,00	37	79
16100810	08,10	37	79
16100820	08,20	37	79
16100830	08,30	37	79
161008334	08,334	21/64	37 79
16100840	08,40	37	79
16100850	08,50	37	79
16100860	08,60	40	84
16100870	08,70	40	84
161008731	08,731	11/32	40 84
16100880	08,80	40	84
16100890	08,90	40	84
16100900	09,00	40	84
16100910	09,10	40	84
161009128	09,128	23/64	40 84
16100920	09,20	40	84
16100930	09,30	40	84
16100940	09,40	40	84
16100950	09,50	40	84
161009525	09,525	3/8	43 89
16100960	09,60	43	89
16100970	09,70	43	89

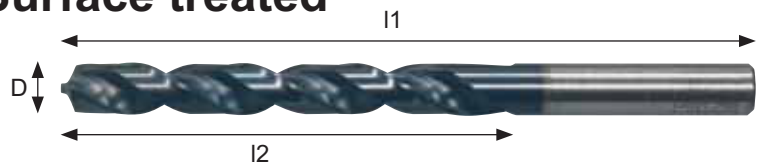
Ultima, Drill 161-0 Surface treated

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
16100980	09,80	43	89
16100990	09,90	43	89
161009922	09,922 25/64	43	89
16101000	10,00	43	89
16101020	10,20	43	89
16101030	10,30	43	89
161010319	10,319 13/32	43	89
16101040	10,40	43	89
16101050	10,50	43	89
161010716	10,716 27/64	47	95
16101080	10,80	47	95
16101100	11,00	47	95
161011113	11,113 7/16	47	95
16101120	11,20	47	95
16101150	11,50	47	95
161011509	11,509 29/64	47	95
16101180	11,80	47	95
161011906	11,906 15/32	51	102
16101200	12,00	51	102
16101210	12,10	51	102
16101220	12,20	51	102
161012303	12,303 31/64	51	102
16101250	12,50	51	102
161012700	12,700 1/2	51	102
16101280	12,80	51	102
16101300	13,00	51	102
161013097	13,097 33/64	51	102
16101310	13,10	51	102
161013494	13,494 17/32	54	107
16101350	13,50	54	107

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
16101380	13,80	54	107
161013891	13,891 35/64	54	107
16101400	14,00	54	107
16101420	14,20	56	111
161014288	14,288 9/16	56	111
16101450	14,50	56	111
161014684	14,684 37/64	56	111
16101480	14,80	56	111
16101500	15,00	56	111
161015081	15,081 19/32	58	115
16101510	15,10	58	115
16101520	15,20	58	115
16101530	15,30	58	115
161015478	15,478 39/64	58	115
16101550	15,50	58	115
16101570	15,70	58	115
161015875	15,875 5/8	58	115
16101600	16,00	58	115
16101650	16,50	60	119
16101700	17,00	60	119
16101750	17,50	62	123
16101770	17,70	62	123
16101800	18,00	62	123
16101850	18,50	64	127
16101900	19,00	64	127
16101950	19,50	66	131
16101970	19,70	66	131
16102000	20,00	66	131

Ultima, Drill 165-0, Surface treated

HSS-Co



Surface treated.

Extreme performance, self-centering

Work Material: Steel and castings

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
16500250	02,50	30	57
16500260	02,60	30	57
16500270	02,70	33	61
16500275	02,75	33	61
165002778	02,778 7/64	33	61
16500280	02,80	33	61
16500290	02,90	33	61
16500300	03,00	33	61
16500310	03,10	36	65
165003175	03,175 1/8	36	65
16500320	03,20	36	65
16500325	03,25	36	65
16500330	03,30	36	65

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
16500340	03,40	39	70
16500350	03,50	39	70
165003572	03,572 9/64	39	70
16500360	03,60	39	70
16500365	03,65	39	70
16500370	03,70	39	70
16500380	03,80	43	75
16500390	03,90	43	75
165003969	03,969 5/32	43	75
16500400	04,00	43	75
16500410	04,10	43	75
16500420	04,20	43	75
16500430	04,30	47	80

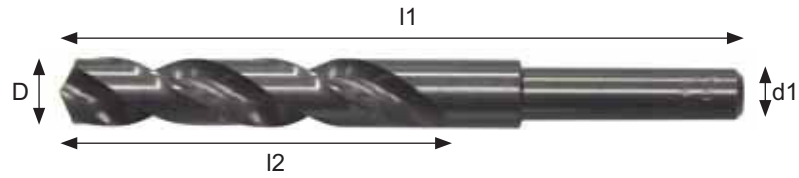
Ultima, Drill 165-0, Surface treatedD
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SHSS
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EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
165004366	04,366 11/64	47	80
16500440	04,40	47	80
16500450	04,50	47	80
16500460	04,60	47	80
16500470	04,70	47	80
165004763	04,763 3/16	52	86
16500480	04,80	52	86
16500490	04,90	52	86
16500500	05,00	52	86
16500510	05,10	52	86
165005159	05,159 13/64	52	86
16500520	05,20	52	86
16500530	05,30	52	86
16500540	05,40	57	93
16500550	05,50	57	93
165005556	05,556 7/32	57	93
16500560	05,60	57	93
16500570	05,70	57	93
16500580	05,80	57	93
16500590	05,90	57	93
165005953	05,953 15/64	57	93
16500600	06,00	57	93
16500610	06,10	63	101
16500620	06,20	63	101
16500630	06,30	63	101
165006350	06,350 1/4	63	101
16500640	06,40	63	101
16500650	06,50	63	101
16500660	06,60	63	101
16500670	06,70	63	101
165006747	06,747 17/64	69	109
16500680	06,80	69	109
16500690	06,90	69	109
16500700	07,00	69	109
16500710	07,10	69	109
165007144	07,144 9/32	69	109
16500720	07,20	69	109
16500730	07,30	69	109
16500740	07,40	69	109
16500750	07,50	69	109
165007541	07,541 19/64	75	117
16500760	07,60	75	117
16500770	07,70	75	117
16500780	07,80	75	117
16500790	07,90	75	117
165007938	07,938 5/16	75	117
16500800	08,00	75	117
16500810	08,10	75	117
16500820	08,20	75	117
16500830	08,30	75	117
165008334	08,334 21/64	75	117
16500840	08,40	75	117
16500850	08,50	75	117
16500860	08,60	81	125
16500870	08,70	81	125
165008731	08,731 11/32	81	125
16500880	08,80	81	125
16500890	08,90	81	125
16500900	09,00	81	125
16500910	09,10	81	125

EDP#	D h8 [mm] [inch]	I2 [mm] [mm]	I1 [mm]
165009128	09,128 23/64	81	125
16500920	09,20	81	125
16500930	09,30	81	125
16500940	09,40	81	125
16500950	09,50	81	125
165009525	09,525 3/8	87	133
16500960	09,60	87	133
16500970	09,70	87	133
16500980	09,80	87	133
16500990	09,90	87	133
165009922	09,922 25/64	87	133
16501000	10,00	87	133
16501020	10,20	87	133
16501030	10,30	87	133
165010319	10,319 13/32	87	133
16501040	10,40	87	133
16501050	10,50	87	133
165010716	10,716 27/64	94	142
16501080	10,80	94	142
16501100	11,00	94	142
165011113	11,113 7/16	94	142
16501120	11,20	94	142
16501150	11,50	94	142
165011509	11,509 29/64	94	142
16501180	11,80	94	142
165011906	11,906 15/32	101	151
16501200	12,00	101	151
16501220	12,20	101	151
165012303	12,303 31/64	101	151
16501250	12,50	101	151
165012700	12,700 1/2	101	151
16501280	12,80	101	151
16501300	13,00	101	151
165013097	13,097 33/64	101	151
16501310	13,10	101	151
16501330	13,30	108	160
165013494	13,494 17/32	108	160
16501350	13,50	108	160
16501370	13,70	108	160
16501380	13,80	108	160
165013891	13,891 35/64	108	160
16501400	14,00	108	160
16501410	14,10	114	169
16501420	14,20	114	169
165014288	14,288 9/16	114	169
16501450	14,50	114	169
165014684	14,684 37/64	114	169
16501480	14,80	114	169
16501500	15,00	114	169
165015081	15,081 19/32	120	178
16501510	15,10	120	178
16501530	15,30	120	178
165015478	15,478 39/64	120	178
16501550	15,50	120	178
16501570	15,70	120	178
165015875	15,875 5/8	120	178
16501600	16,00	120	178

Drill 170-0

HSS-Co



Work Material: Steel and cast iron

d1 = 9,53 mm

EDP#	D h8 [mm]	[inch]	I2 [mm]	I1 [mm]
17095309922	09,922	25/64*	87	133
17095310319	10,319	13/32*	87	133
1709531050	10,50		87	133
17095310716	10,716	27/64*	94	142
1709531100	11,00		94	142
17095311113	11,113	7/16*	94	142
1709531150	11,50		94	142
17095311509	11,509	29/64*	94	142
17095311906	11,906	15/32*	101	150
1709531200	12,00		101	151
17095312303	12,303	31/64*	101	150
1709531250	12,50		101	151
17095312700	12,700	1/2*	78	150
1709531300	13,00		101	151
1709531350	13,50		108	160
1709531400	14,00		108	160
1709531450	14,50		114	169
1709531500	15,00		114	169
1709531550	15,50		120	178
1709531600	16,00		120	150

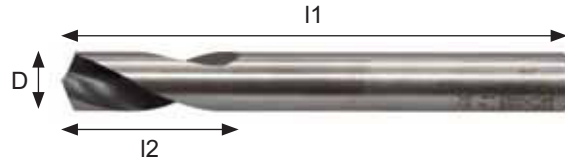
* Limited quantities available at time.

d1 = 12,7 mm

EDP#	D h8 [mm]	[inch]	I2 [mm]	I1 [mm]
17012713097	13,097	33/64*	78	150
17012713494	13,494	17/32*	78	150
17012713891	13,891	35/64*	78	150
17012714288	14,288	9/16*	78	150
17012714684	14,684	37/64**	78	150
17012715081	15,081	19/32	78	150
17012715478	15,478	39/64*	78	150
17012715875	15,875	5/8*	78	150
17012716272	16,272	41/64*	78	150
1701271650	16,50		125	184
17012716669	16,669	21/32*	78	150
1701271700	17,00		125	184
17012717066	17,066	43/64*	78	150
17012717463	17,463	11/16*	78	150
1701271750	17,50		130	191
17012717859	17,859	45/64*	78	150
1701271800	18,00		130	191
17012718256	18,256	23/32*	78	150
1701271850	18,50		135	198
17012718653	18,653	47/64*	78	150
1701271900	19,00		135	198
17012719050	19,050	3/4*	85	150
1701271950	19,50		140	205
1701272000	20,00		140	205
1701272100	21,00		145	205
1701272200	22,00		150	210
1701272300	23,00		155	215
1701272400	24,00		160	220
1701272500	25,00		160	220

NC-Spotting Drill 174-0

HSS-Co

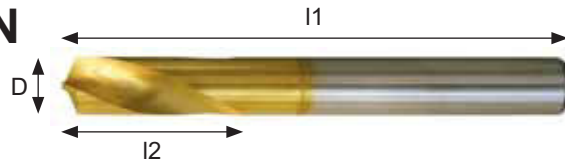


EDP#	D h8 [mm]	[inch]	I2 [mm]	I1 [mm]
17400300	03,00		15	46
174003175	03,175	1/8	15	49
174003969	03,969	5/32	15	55
17400400	04,00		15	55
174004763	04,763	3/16	15	62
17400500	05,00		15	62
17400600	06,00		20	66
174006350	06,350	1/4	20	70
174007938	07,938	5/16	25	79

EDP#	D h8 [mm]	[inch]	I2 [mm]	I1 [mm]
17400800	08,00		25	79
174009525	09,525	3/8	30	89
17401000	10,00		30	89
17401100	11,00		35	95
17401200	12,00		40	102
174012700	12,700	1/2	40	102
17401600	16,00		40	115
17402000	20,00		50	131
17402500	25,00		50	151

NC-Spotting Drill 174-3, TiN

HSS-Co

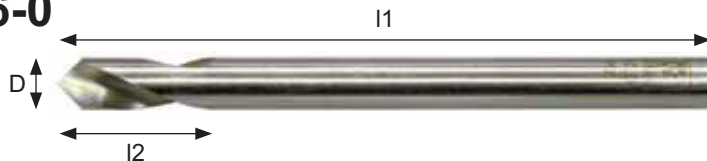


EDP#	D h8 [mm]	[inch]	I2 [mm]	I1 [mm]
17430300	03,00		15	46
174303175	03,175	1/8	15	49
174303969	03,969	5/32	15	55
17430400	04,00		15	55
174304763	04,763	3/16	15	62
17430500	05,00		15	62

EDP#	D h8 [mm]	[inch]	I2 [mm]	I1 [mm]
17430600	06,00		20	66
174306350	06,350	1/4	20	70
174307938	07,938	5/16	25	79
17430800	08,00		25	79
174309525	09,525	3/8	30	89
17431000	10,00		30	89
17431200	12,00		40	102
174312700	12,700	1/2	40	102

NC-Spotting Drill 176-0

HSS-Co

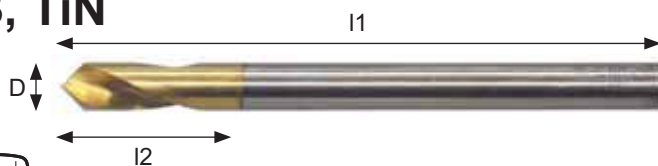


EDP#	D h8 [mm]	[inch]	I2 [mm]	I1 [mm]
17600600	06,00		20	101
176006350	06,350	1/4	20	101
176007938	07,938	5/16	25	101
17600800	08,00		25	101
176009525	09,525	3/8	30	127
17601000	10,00		30	127

EDP#	D h8 [mm]	[inch]	I2 [mm]	I1 [mm]
17601200	12,00		40	152
176012700	12,700	1/2	40	152
176015875	15,875	5/8	40	178
17601600	16,00		40	178
176019050	19,050	3/4	50	203
176025400	25,400	1	60	203

NC-Spotting Drill 176-3, TiN

HSS-Co

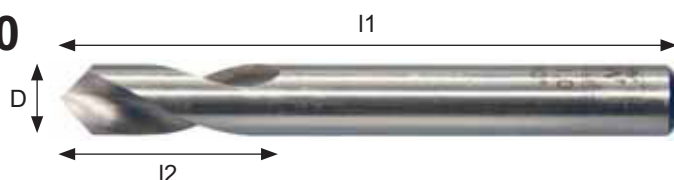


EDP#	D h8 [mm]	[inch]	I2 [mm]	I1 [mm]
17630600	06,00		20	101
176306350	06,350	1/4	20	101
176307938	07,938	5/16	25	101
17630800	08,00		25	101
176309525	09,525	3/8	30	127
17631000	10,00		30	127

EDP#	D h8 [mm]	[inch]	I2 [mm]	I1 [mm]
17631200	12,00		40	152
176312700	12,700	1/2	40	152
176315875	15,875	5/8	40	178
17631600	16,00		40	178

NC-Spotting Drill 177-0

HSS-Co

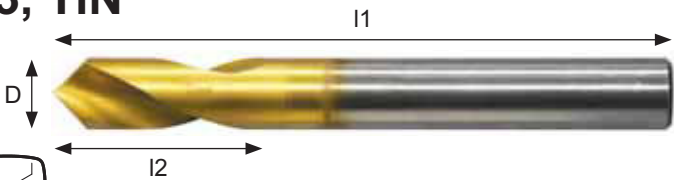


EDP#	D h8 [mm]	[inch]	I2 [mm]	I1 [mm]
17700300	03,00		15	46
177003175	03,175	1/8	15	49
177003969	03,969	5/32	15	55
17700400	04,00		15	55
177004763	04,763	3/16	15	62
17700500	05,00		15	62
17700600	06,00		20	66
177006350	06,350	1/4	20	70
17700700	07,00		25	79
177007938	07,938	5/16	25	79
17700800	08,00		25	79
177009525	09,525	3/8	30	89

EDP#	D h8 [mm]	[inch]	I2 [mm]	I1 [mm]
17701000	10,00		30	89
17701100	11,00		35	95
17701200	12,00		40	102
177012700	12,700	1/2	40	102
177015875	15,875	5/8	40	115
17701600	16,00		40	115
177019050	19,050	3/4	50	131
17702000	20,00		50	131
17702500	25,00		60	151
177025400	25,400	1	60	156

NC-Spotting Drill 177-3, TiN

HSS-Co

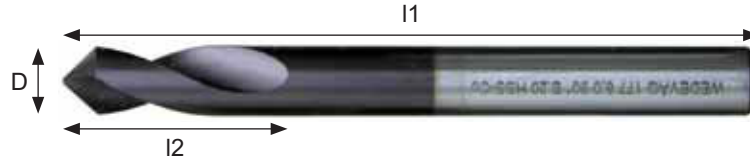


EDP#	D h8 [mm]	[inch]	I2 [mm]	I1 [mm]
17730300	03,00		15	46
177303175	03,175	1/8	15	49
177303969	03,969	5/32	15	55
17730400	04,00		15	55
177304763	04,763	3/16	15	62
17730500	05,00		15	62
17730600	06,00		20	66
177306350	06,350	1/4	20	70
17730700	07,00		25	79

EDP#	D h8 [mm]	[inch]	I2 [mm]	I1 [mm]
177307938	07,938	5/16	25	79
17730800	08,00		25	79
177309525	09,525	3/8	30	89
17731000	10,00		30	89
17731100	11,00		35	95
17731200	12,00		40	102
177312700	12,700	1/2	40	102
177315875	15,875	5/8	40	115
17731600	16,00		40	115

NC-Spotting Drill 177-4, FUTURA

HSS-Co

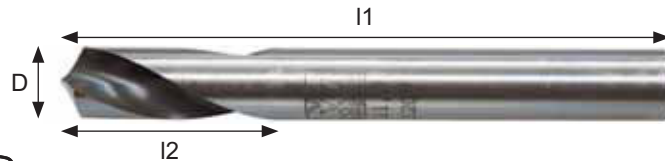


EDP#	D h8 [mm]	[inch]	L2 [mm]	L1 [mm]
17740300	03,00		15	46
177403175	03,175	1/8	15	49
177403969	03,969	5/32	15	55
17740400	04,00		15	55
177404763	04,763	3/16	15	62
17740500	05,00		15	62
17740600	06,00		20	66
177406350	06,350	1/4	20	70
177407938	07,938	5/16	25	79

EDP#	D h8 [mm]	[inch]	L2 [mm]	L1 [mm]
17740800	08,00		25	79
177409525	09,525	3/8	30	89
17741000	10,00		30	89
17741200	12,00		40	102
177412700	12,700	1/2	40	102
177415875	15,875	5/8	40	115
17741600	16,00		40	115

NC-Spotting Drill 178-0

HSS-Co

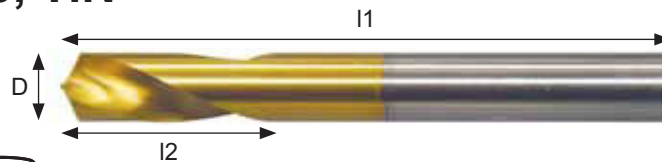


EDP#	D h8 [mm]	[inch]	L2 [mm]	L1 [mm]
17800300	03,00		15	46
178003175	03,175	1/8	15	49
178003969	03,969	5/32	15	55
17800400	04,00		15	55
178004763	04,763	3/16	15	62
17800500	05,00		15	62
17800600	06,00		20	66
178006350	06,350	1/4	20	70
178007938	07,938	5/16	25	79
17800800	08,00		25	79
178009525	09,525	3/8	30	89

EDP#	D h8 [mm]	[inch]	L2 [mm]	L1 [mm]
17801000	10,00		30	89
17801100	11,00		35	95
17801200	12,00		40	102
178012700	12,700	1/2	40	102
178015875	15,875	5/8	40	115
17801600	16,00		40	115
178019050	19,050	3/4	50	131
17802000	20,00		50	131
17802500	25,00		60	151
178025400	25,400	1	60	156

NC-Spotting Drill 178-3, TiN

HSS-Co



EDP#	D h8 [mm]	[inch]	L2 [mm]	L1 [mm]
17830300	03,00		15	46
178303175	03,175	1/8	15	49
178303969	03,969	5/32	15	55
17830400	04,00		15	55
178304763	04,763	3/16	15	62
17830500	05,00		15	62
17830600	06,00		20	66
178306350	06,350	1/4	20	70

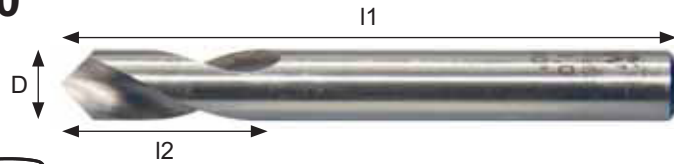
EDP#	D h8 [mm]	[inch]	L2 [mm]	L1 [mm]
178307938	07,938	5/16	25	79
17830800	08,00		25	79
178309525	09,525	3/8	30	89
17831000	10,00		30	89
17831200	12,00		40	102
178312700	12,700	1/2	40	102
178315875	15,875	5/8	40	115
17831600	16,00		40	115

DRILLS

HSS
-Co

NC-Spotting Drill 179-0

HSS-Co

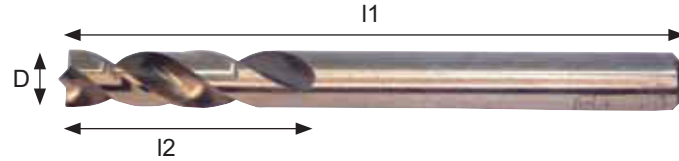


EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
17900300	03,00	15	46
17900400	04,00	15	55
17900500	05,00	15	62
17900600	06,00	20	66
17900800	08,00	25	79
17901000	10,00	30	89

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
17901100	11,00	35	95
17901200	12,00	40	102
17901600	16,00	40	115
17902000	20,00	50	131
17902500	25,00	60	151

Spot weld Drill 180

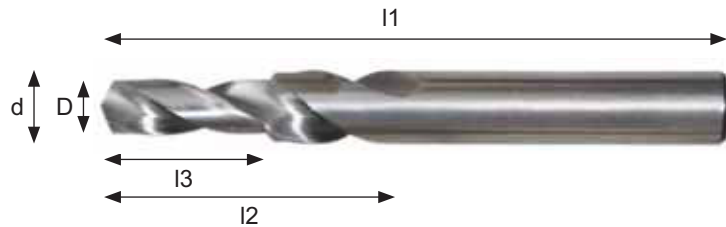
HSS-Co



EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
18000600	06,00	25	63
18000800	08,00	34	76

Step Drill 191-0

HSS-Co



Work Material: Steel alloys and stainless steel materials.

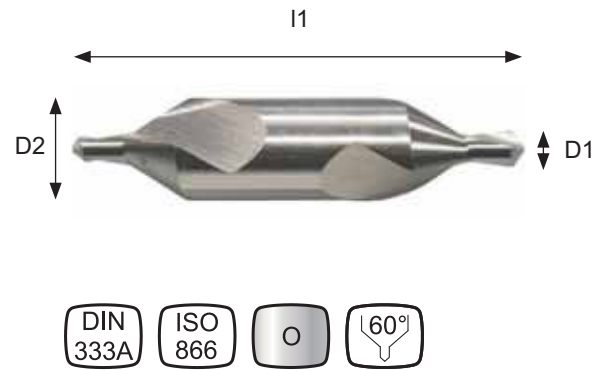
EDP#	D [mm]	Thread size	I2 [mm]	I1 [mm]	I3 [mm]	d [mm]
19100250	02,50	M3	20	52	9	3
19100330	03,30	M4	24	58	11	5
19100420	04,20	M5	28	66	14	6
19100500	05,00	M6	31	70	17	7
19100680	06,80	M8	40	84	21	9
19100850	08,50	M10	47	95	26	11
19101020	10,20	M12	54	107	30	14
19101200	12,00	M14	58	115	35	16
19101400	14,00	M16	62	123	39	18

* Coating available upon request.

Center Drill 200-0

HSS

EDP#	D1 k12 [mm]	D2 h8 [mm]	l1 [mm]
20000080	00,80	3,15	25
20000100	01,00	3,15	31
20000125	01,25	3,15	31
20000160	01,60	4,0	35
20000200	02,00	5,0	40
20000250	02,50	6,3	45
20000315	03,15	8,0	50
20000400	04,00	10,0	55
20000500	05,00	12,5	63
20000630	06,30	16,0	71
20000800	08,00	20,0	80
20001000	10,00	25,0	100



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Center Drill 200-3, TiN

HSS

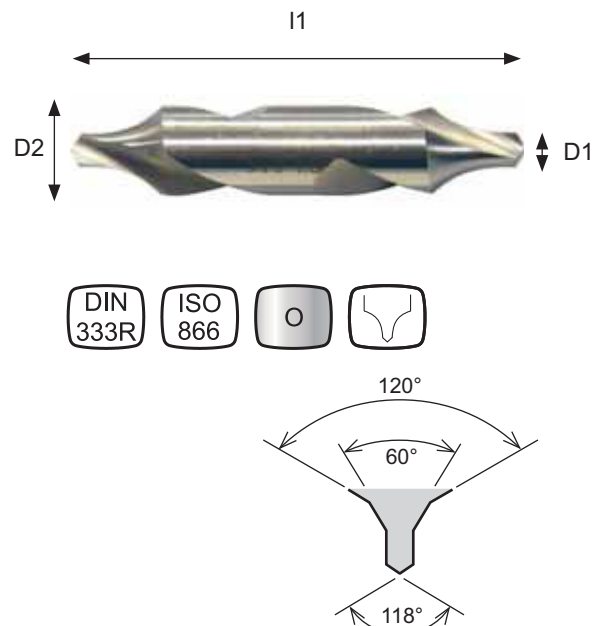
EDP#	D1 k12 [mm]	D2 h8 [mm]	l1 [mm]
20030160	01,60	4,0	35
20030200	02,00	5,0	40
20030250	02,50	6,3	45
20030315	03,15	8,0	50
20030400	04,00	10,0	55
20030500	05,00	12,5	63
20030630	06,30	16,0	71



Center Drill 202-0

HSS

EDP#	D1 k12 [mm]	D2 h8 [mm]	l1 [mm]	R [mm]
20200080	00,80	3,15	25	3
20200100	01,00	3,15	31	3
20200125	01,25	3,15	31	3
20200160	01,60	4,0	35	4
20200200	02,00	5,0	45	6
20200250	02,50	6,0	45	6
20200315	03,15	8,0	50	8
20200400	04,00	10,0	55	10
20200500	05,00	12,5	63	13
20200630	06,30	16,0	71	16



Center Drill 204-0

EDP#	D1 k12 [mm]	D2 h8 [mm]	l1 [mm]
20400100	01,00	4,0	35
20400160	01,60	6,0	45
20400200	02,00	8,0	50
20400250	02,50	10,0	55
20400315	03,15	11,2	63
20400400	04,00	14,0	71
20400500	05,00	18,0	80
20400630	06,30	20,0	80



Countersink set 250 TiN

DIN 335, Form C, Cylindrical shank.

HSS

EDP#	Dia. range [mm]	Pcs
72503006	6,3-20,5	6
72500006	6,3-20,5	6

These sets of countersinks have been requested by our customers. We can now offer two complete sets that cover many needs.

In both cases, the sets consists of six countersinks each in dimensions 6.3, 8.3, 10.4, 12.4, 16.5 and 20.5 mm respectively.

They are available in two versions. Either as HSS or as a HSS with durable TiN coating (large image).

The counter sinks have Form C and complies to DIN 335.

Recommended cutting speed is 40 rpm.



Countersink set 250

DIN 335, Form C, Cylindrical shank.

HSS

Diameter	Length
6,3 mm	34 mm
8,3 mm	40 mm
10,4 mm	49 mm
12,4 mm	57 mm
16,5 mm	61 mm
20,5 mm	70 mm

EDP# 72500006



Countersink 250-0

HSS



EDP#	d1 [mm]	d3 [mm]	d2 [mm]	l1 [mm]	l2 [mm]
25000430	04,30	1,3	4	40	4
25000500	05,00	1,5	4	40	4
25000530	05,30	1,5	4	40	4
25000580	05,80	1,5	5	45	5
25000600	06,00	1,5	5	45	5
25000630	06,30	1,5	5	45	5
25000700	07,00	1,8	6	50	5
25000730	07,30	1,8	6	50	6
25000800	08,00	2,0	6	50	6
25000830	08,30	2,0	6	50	6
25000940	09,40	2,2	6	50	7
25001000	10,00	2,5	6	50	7

EDP#	d1 [mm]	d3 [mm]	d2 [mm]	l1 [mm]	l2 [mm]
25001040	10,40	2,5	6	50	7
25001150	11,50	2,8	8	56	8
25001240	12,40	2,8	8	56	8
25001340	13,40	2,9	8	56	9
25001500	15,00	3,2	10	60	9
25001650	16,50	3,2	10	60	10
25001900	19,00	3,5	10	63	11
25002050	20,50	3,5	10	63	13
25002300	23,00	3,8	10	67	13
25002500	25,00	3,8	10	67	15
25002600	26,00	3,8	10	67	15
25002800	28,00	4,0	12	71	16
25003000	30,00	4,2	12	71	18
25003100	31,00	4,2	12	71	18

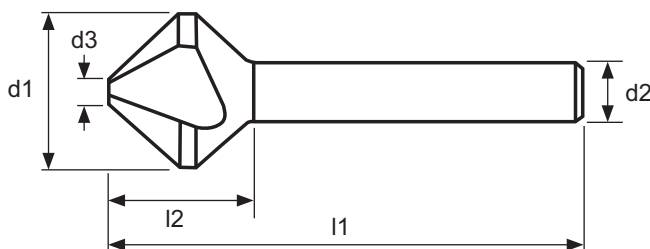
Countersink 250-3, TiN

HSS



EDP#	d1 [mm]	d3 [mm]	d2 [mm]	l1 [mm]	l2 [mm]
25030430	04,30	1,3	4	40	4
25030500	05,00	1,5	4	40	4
25030530	05,30	1,5	4	40	4
25030580	05,80	1,5	5	45	5
25030600	06,00	1,5	5	45	5
25030630	06,30	1,5	5	45	5
25030700	07,00	1,8	6	50	5
25030730	07,30	1,8	6	50	6
25030800	08,00	2,0	6	50	6
25030830	08,30	2,0	6	50	6
25030940	09,40	2,2	6	50	7
25031000	10,00	2,5	6	50	7

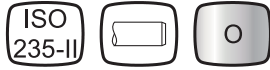
EDP#	d1 [mm]	d3 [mm]	d2 [mm]	l1 [mm]	l2 [mm]
25031040	10,40	2,5	6	50	7
25031150	11,50	2,8	8	56	8
25031240	12,40	2,8	8	56	8
25031340	13,40	2,9	8	56	9
25031500	15,00	3,2	10	60	9
25031650	16,50	3,2	10	60	10
25031900	19,00	3,5	10	63	11
25032050	20,50	3,5	10	63	13
25032300	23,00	3,8	10	67	13
25032500	25,00	3,8	10	67	15
25032600	26,00	3,8	10	67	15
25032800	28,00	4,0	12	71	16
25033000	30,00	4,2	12	71	18
25033100	31,00	4,2	12	71	18



Core Drill 240-0

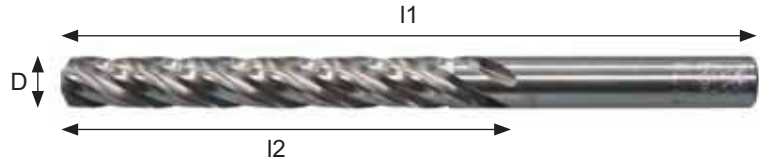
3-Flute

HSS



Intermediate dimensions are delivered on request.

EDP#	D [mm] [inch]	I2 [mm]	I1 [mm]	Minimum predrill
24000480	04,80	52	86	4
24000500	05,00	52	86	4
24000580	05,80	57	93	5
24000600	06,00	57	93	5
240006350	06,350 1/4	63	101	5
24000680	06,80	69	109	5
24000700	07,00	69	109	6
240007144	07,144 9/32	69	109	6
24000780	07,80	75	117	6
240007938	07,938 5/16	75	117	6
24000800	08,00	75	117	6
240008731	08,731 11/32	81	125	7



EDP#	D [mm] [inch]	I2 [mm]	I1 [mm]	Minimum predrill
24000880	08,80	81	125	7
24000900	09,00	81	125	7
240009525	09,525 3/8	87	133	8
24000980	09,80	87	133	8
24001000	10,00	87	133	8
240010319	10,319 13/32	87	133	8
24001075	10,75	94	142	9
24001100	11,00	94	142	9
240011113	11,113 7/16	94	142	8
24001175	11,75	101	151	9
240011906	11,906 15/32	101	151	10
24001200	12,00	101	151	10
240012700	12,700 1/2	101	151	10

Core Drill 246-0

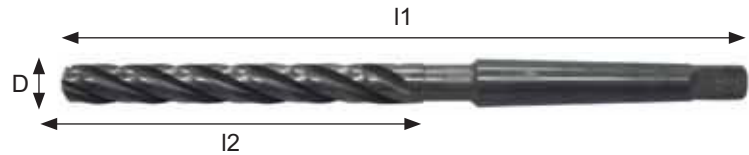
3-Flute

HSS



Intermediate dimensions are delivered on request.

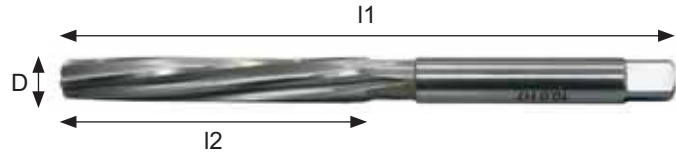
EDP#	D [mm]	I2 [mm]	I1 [mm]	Minimum predrill	MK
24600980	09,80	87	168	7,8	1
24601000	10,00	87	168	8,0	1
24601075	10,75	94	175	8,6	1
24601100	11,00	94	175	8,8	1
24601175	11,75	101	182	9,4	1
24601200	12,00	101	182	9,6	1
24601275	12,75	101	182	9,8	1
24601300	13,00	101	182	9,9	1
24601375	13,75	108	189	10,2	1
24601400	14,00	108	189	10,5	1
24601475	14,75	114	212	11,1	2
24601500	15,00	114	212	11,3	2
24601575	15,75	120	218	11,8	2
24601600	16,00	120	218	12,0	2
24601675	16,75	125	223	12,6	2
24601700	17,00	125	223	12,8	2
24601775	17,75	130	228	13,3	2
24601800	18,00	130	228	13,5	2
24601870	18,70	135	233	14,0	2
24601900	19,00	135	233	14,3	2
24601970	19,70	140	238	14,8	2
24602000	20,00	140	238	15,0	2
24602070	20,70	145	243	15,5	2
24602100	21,00	145	243	15,8	2
24602170	21,70	150	248	16,3	2
24602200	22,00	150	248	16,5	2
24602270	22,70	155	253	17,0	2



EDP#	D [mm]	I2 [mm]	I1 [mm]	Minimum predrill	MK
24602300	23,00	155	253	17,3	2
24602370	23,70	160	281	17,8	3
24602400	24,00	160	281	18,0	3
24602470	24,70	160	281	18,5	3
24602500	25,00	160	281	18,8	3
24602570	25,70	165	286	19,3	3
24602600	26,00	165	286	19,5	3
24602770	27,70	170	291	20,8	3
24602800	28,00	170	291	21,0	3
24602970	29,70	175	296	22,3	3
24603000	30,00	175	296	22,5	3
24603160	31,60	185	334	23,7	4
24603200	32,00	185	334	24,0	4
24603360	33,60	190	339	25,2	4
24603400	34,00	190	339	25,5	4
24603460	34,60	190	339	26,0	4
24603500	35,00	190	339	26,3	4
24603600	36,00	195	344	30,5	4
24603800	38,00	200	349	33,5	4
24604000	40,00	200	349	33,5	4
24604200	42,00	205	354	36,5	4
24604500	45,00	210	359	41,5	4
24604600	46,00	215	364	41,5	4
24604800	48,00	200	369	44,5	4
24605000	50,00	200	369	44,5	4

Hand Reamer 301-0

Cylindrical shank with square end
Long taper lead
7° left helix. For tolerance H7
HSS



Intermediate dimensions and other tolerance models on request.

EDP#	D [mm]	I2 [mm]	I1 [mm]	Flutes
30100100	01,00	12	37	3
30100150	01,50	20	41	3
30100200	02,00	25	50	3
30100250	02,50	29	58	5
30100300	03,00	31	62	5
30100350	03,50	35	71	5
30100400	04,00	38	76	5
30100450	04,50	41	81	6
30100500	05,00	44	87	6
30100550	05,50	47	93	6
30100600	06,00	47	93	6
30100700	07,00	54	107	6
30100800	08,00	58	115	6
30100900	09,00	62	124	6
30101000	10,00	66	133	6
30101100	11,00	71	142	6
30101200	12,00	76	152	6
30101300	13,00	76	152	8
30101400	14,00	81	163	8
30101500	15,00	81	163	8
30101600	16,00	87	175	8
30101700	17,00	87	175	8
30101800	18,00	93	188	8
30101900	19,00	93	188	8
30102000	20,00	100	201	8
30102100	21,00	100	201	8
30102200	22,00	107	215	8
30102300	23,00	107	215	8
30102400	24,00	115	231	10
30102500	25,00	115	231	10
30102600	26,00	115	231	10
30102800	28,00	124	247	10
30103000	30,00	124	247	10

Machine reamer 311

Spiral cut about 7° left

For Tolerance H7

HSS-Co



311-0

Intermediate dimensions and other tolerance models on request.

EDP#	D [mm]	D2 [mm]	I2 [mm]	I1 [mm]	Flutes
31100100	01,00	1,0	5	37	3
31100150	01,50	1,5	8	40	3
31100160	01,60	1,6	9	43	3
31100200	02,00	2,0	11	49	3
31100250	02,50	2,5	14	57	5
31100300	03,00	3,0	15	61	5
31100350	03,50	3,5	18	70	5
31100400	04,00	4,0	19	75	6
31100450	04,50	4,5	21	80	6
31100500	05,00	5,0	23	86	6
31100550	05,50	5,5	26	93	6
31100600	06,00	5,6	26	93	6
31100700	07,00	7,0	31	109	6
31100800	08,00	8,0	33	117	6
31100900	09,00	9,0	36	125	6
31101000	10,00	10,0	38	133	6
31101100	11,00	10,0	41	142	6
31101200	12,00	10,0	44	151	6
31101400	14,00	12,5	47	160	8
31101600	16,00	12,5	52	170	8
31101500	15,00	12,5	50	162	8
31101700	17,00	14,0	54	175	8
31101800	18,00	14,0	56	182	8
31101900	19,00	16,0	58	189	8
31102000	20,00	16,0	60	195	8

Hundredths Reamer 311-7

EDP#	D [mm]	D- tolerance	l2 [mm]	l1 [mm]	D2 [mm]
3117-D*	0,90-1,06	0- +0,003	5,5	34	1
3117-D*	1,07-1,18	0- +0,003	6,5	36	1
3117-D*	1,19-1,32	0- +0,003	8	38	2
3117-D*	1,33-1,39	0- +0,003	8	40	2
3117-D*	1,40-1,50	0- +0,003	8	40	2
3117-D*	1,51-1,70	0- +0,003	9	43	2
3117-D*	1,71-1,90	0- +0,003	10	46	2
3117-D*	1,91-1,99	0- +0,003	11	49	2
3117-D*	2,00-2,09	0- +0,003	11	49	2
3117-D*	2,10-2,12	0- +0,003	11	49	2
3117-D*	2,13-2,36	0- +0,003	12	53	3
3117-D*	2,37-2,49	0- +0,003	14	57	3
3117-D*	2,50-2,59	0- +0,003	14	57	3
3117-D*	2,60-2,65	0- +0,003	14	57	3
3117-D*	2,66-2,79	0- +0,003	15	61	3
3117-D*	2,80-2,99	0- +0,003	15	61	3
3117-D*	3,00	0- +0,003	15	61	3
3117-D*	3,01-3,09	0- +0,003	16	65	4
3117-D*	3,10-3,35	0- +0,003	16	65	4
3117-D*	3,36-3,49	0- +0,003	18	70	4
3117-D*	3,50-3,59	0- +0,003	18	70	4
3117-D*	3,60-3,75	0- +0,003	18	70	4
3117-D*	3,76-3,81	0- +0,003	19	75	4
3117-D*	3,82-3,97	0- +0,003	19	75	4
3117-D*	3,98-4,20	0- +0,003	19	75	4
3117-D*	4,21-4,25	0- +0,003	19	75	4
3117-D*	4,26-4,75	0- +0,003	21	80	5
3117-D*	4,76-5,20	0- +0,003	23	86	5
3117-D*	5,21-5,30	0- +0,003	23	86	5
3117-D*	5,31-6,00	0- +0,003	26	93	6
3117-D*	6,01-6,70	0- +0,003	28	101	6
3117-D*	6,71-7,50	0- +0,003	31	109	8
3117-D*	7,51-7,97	0- +0,003	33	117	8
3117-D*	7,98-8,03	0- +0,003	33	117	8
3117-D*	8,04-8,20	0- +0,003	33	117	8
3117-D*	8,21-8,50	0- +0,003	33	117	8
3117-D*	8,51-9,50	0- +0,003	36	125	10
3117-D*	9,51-10,20	0- +0,003	38	133	10
3117-D*	10,21-10,60	0- +0,003	38	133	10
3117-D*	10,61-11,20	0- +0,003	41	142	10
3117-D*	11,21-11,80	0- +0,003	41	142	10
3117-D*	11,81-12,00	0- +0,003	44	151	10
3117-D*	12,01-12,25	0- +0,003	44	151	10
3117-D*	12,26-13,20	0- +0,003	44	151	10

* EDP# 3117-D, Example: 00,70mm EDP# 3117-0070

Machine reamer 321-0

Spiral cut 7° left

For tolerance H7

HSS-Co



Intermediate dimensions and other tolerance models on request.

EDP#	D [mm]	l2 [mm]	l1 [mm]	Flutes	MK
32100500	05,00	23	133	6	1
32100600	06,00	26	138	6	1
32100700	07,00	31	150	6	1
32100800	08,00	33	156	6	1
32100900	09,00	36	162	6	1
32101000	10,00	38	168	6	1
32101100	11,00	41	175	6	1
32101200	12,00	44	182	6	1
32101300	13,00	44	182	6	1
32101400	14,00	47	189	6	1
32101500	15,00	50	204	8	2
32101600	16,00	52	210	8	2
32101700	17,00	54	214	8	2
32101800	18,00	56	219	8	2
32101900	19,00	58	223	8	2
32102000	20,00	60	228	8	2
32102100	21,00	62	232	8	2
32102200	22,00	64	237	8	2
32102300	23,00	66	241	8	2
32102400	24,00	68	268	8	3
32102500	25,00	68	268	10	3
32102600	26,00	70	273	10	3
32102800	28,00	71	277	10	3
32103000	30,00	73	281	10	3
32103200	32,00	77	317	10	4
32103400	34,00	78	321	10	4
32103500	35,00	78	321	10	4
32103600	36,00	79	325	12	4
32103800	38,00	81	329	12	4
32104000	40,00	81	329	12	4

Shell reamer 351-0

Spiral cut 7° Left
Tolerance H7
HSS



EDP#	D [mm]	Cutting length [mm]	Total length [mm]	Arbor diam.	Flutes	Arbor # 4200
35102500	25,00	32	45	13	10	3001
35102600	26,00	32	45	13	10	3001
35102800	28,00	32	45	13	10	3001
35103000	30,00	32	45	13	10	3001
35103200	32,00	36	50	16	10	3002
35103400	34,00	36	50	16	12	3002
35103500	35,00	36	50	16	12	3002
35103600	36,00	40	56	19	12	4003
35103800	38,00	40	56	19	12	4003
35104000	40,00	40	56	19	12	4003
35104200	42,00	40	56	19	12	4003
35104400	44,00	45	63	22	12	4004
35104500	45,00	45	63	22	14	4004
35104600	46,00	45	63	22	14	4004
35104800	48,00	45	63	22	14	4004
35105000	50,00	45	63	22	14	4004

DRILLS
HSS

Arbor 420-0, for reamer 351

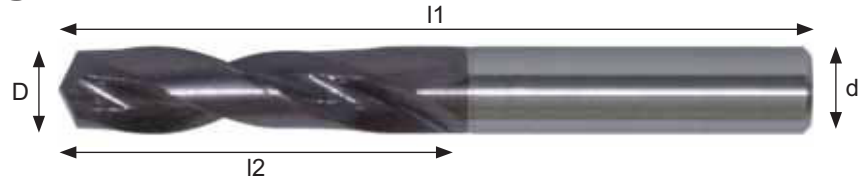
With carrier and deduction nut
Cone type B (1:30)



EDP#	Arbor diam.	L [mm]	MK MT
42003001	13	250	3
42003002	16	261	3
42004003	19	298	4
42004004	22	312	4

Drill 512-4, FUTURA

Solid micro grain Carbide

Work Material: steel, castings, stainless and acid resistant, **HARDOX®**

EDP#	D m7 [mm]	d h6 [mm]	l2 [mm]	l1 [mm]
51240300	03,00	6,0	20	62
51240310	03,10	6,0	20	62
51240320	03,20	6,0	20	62
51240330	03,30	6,0	20	62
51240340	03,40	6,0	20	62
51240350	03,50	6,0	20	62
51240360	03,60	6,0	20	62
51240370	03,70	6,0	20	62
51240380	03,80	6,0	24	66
51240390	03,90	6,0	24	66
51240400	04,00	6,0	24	66
51240410	04,10	6,0	24	66
51240420	04,20	6,0	24	66
51240430	04,30	6,0	24	66
51240440	04,40	6,0	24	66
51240450	04,50	6,0	24	66
51240460	04,60	6,0	24	66
51240470	04,70	6,0	24	66
51240480	04,80	6,0	28	66
51240490	04,90	6,0	28	66
51240500	05,00	6,0	28	66
51240510	05,10	6,0	28	66
51240520	05,20	6,0	28	66
51240530	05,30	6,0	28	66
51240540	05,40	6,0	28	66
51240550	05,50	6,0	28	66
51240560	05,60	6,0	28	66
51240570	05,70	6,0	28	66
51240580	05,80	6,0	28	66
51240590	05,90	6,0	28	66
51240600	06,00	6,0	28	66
51240610	06,10	8,0	34	79
51240620	06,20	8,0	34	79
51240630	06,30	8,0	34	79
51240640	06,40	8,0	34	79
51240650	06,50	8,0	34	79
51240660	06,60	8,0	34	79
51240670	06,70	8,0	34	79
51240680	06,80	8,0	34	79
51240690	06,90	8,0	34	79
51240700	07,00	8,0	34	79
51240710	07,10	8,0	41	79
51240720	07,20	8,0	41	79
51240730	07,30	8,0	41	79
51240740	07,40	8,0	41	79
51240750	07,50	8,0	41	79
51240760	07,60	8,0	41	79
51240770	07,70	8,0	41	79
51240780	07,80	8,0	41	79
51240790	07,90	8,0	41	79
51240800	08,00	8,0	41	79

EDP#	D m7 [mm]	d h6 [mm]	l2 [mm]	l1 [mm]
51240810	08,10	10,0	47	89
51240820	08,20	10,0	47	89
51240830	08,30	10,0	47	89
51240840	08,40	10,0	47	89
51240850	08,50	10,0	47	89
51240860	08,60	10,0	47	89
51240870	08,70	10,0	47	89
51240880	08,80	10,0	47	89
51240890	08,90	10,0	47	89
51240900	09,00	10,0	47	89
51240910	09,10	10,0	47	89
51240920	09,20	10,0	47	89
51240930	09,30	10,0	47	89
51240940	09,40	10,0	47	89
51240950	09,50	10,0	47	89
51240960	09,60	10,0	47	89
51240970	09,70	10,0	47	89
51240980	09,80	10,0	47	89
51240990	09,90	10,0	47	89
51241000	10,00	10,0	47	89
51241010	10,10	12,0	55	102
51241020	10,20	12,0	55	102
51241030	10,30	12,0	55	102
51241040	10,40	12,0	55	102
51241050	10,50	12,0	55	102
51241060	10,60	12,0	55	102
51241070	10,70	12,0	55	102
51241080	10,80	12,0	55	102
51241090	10,90	12,0	55	102
51241100	11,00	12,0	55	102
51241110	11,10	12,0	55	102
51241120	11,20	12,0	55	102
51241130	11,30	12,0	55	102
51241140	11,40	12,0	55	102
51241150	11,50	12,0	55	102
51241160	11,60	12,0	55	102
51241170	11,70	12,0	55	102
51241180	11,80	12,0	55	102
51241190	11,90	12,0	55	102
51241200	12,00	12,0	55	102
51241230	12,30	14,0	60	107
51241250	12,50	14,0	60	107
51241280	12,80	14,0	60	107
51241300	13,00	14,0	60	107
51241350	13,50	14,0	60	107
51241380	13,80	14,0	60	107
51241400	14,00	14,0	60	107
51241450	14,50	16,0	65	115
51241480	14,80	16,0	65	115
51241500	15,00	16,0	65	115
51241550	15,50	16,0	65	115

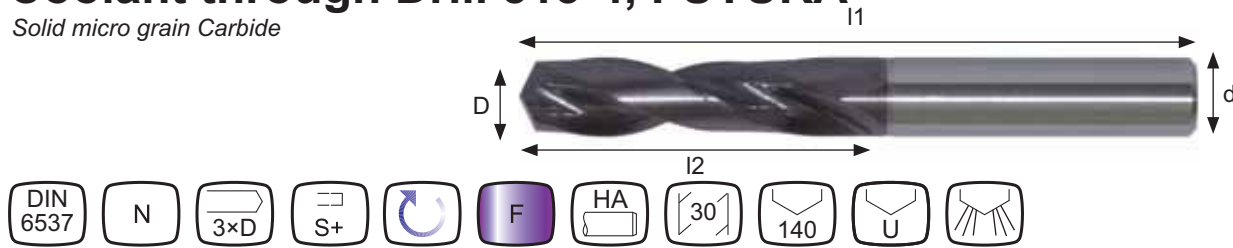
Drill 512-4, FUTURA

EDP#	D m7 [mm]	d h6 [mm]	l2 [mm]	l1 [mm]
51241580	15,80	16,0	65	115
51241600	16,00	16,0	65	115
51241650	16,50	18,0	73	123
51241680	16,80	18,0	73	123
51241700	17,00	18,0	73	123
51241750	17,50	18,0	73	123

EDP#	D m7 [mm]	d h6 [mm]	l2 [mm]	l1 [mm]
51241780	17,80	18,0	73	123
51241800	18,00	18,0	73	123
51241850	18,50	20,0	79	131
51241900	19,00	20,0	79	131
51241950	19,50	20,0	79	131
51241980	19,80	20,0	79	131
51242000	20,00	20,0	79	131

Coolant through Drill 513-4, FUTURA

Solid micro grain Carbide

Work Material: steel, castings, stainless and acid resistant, **HARDOX®**

EDP#	D m7 [mm]	d h6 [mm]	l2 [mm]	l1 [mm]
51340300	03,00	6,0	20	62
51340310	03,10	6,0	20	62
51340320	03,20	6,0	20	62
51340330	03,30	6,0	20	62
51340340	03,40	6,0	20	62
51340350	03,50	6,0	20	62
51340360	03,60	6,0	20	62
51340370	03,70	6,0	20	62
51340380	03,80	6,0	24	66
51340390	03,90	6,0	24	66
51340400	04,00	6,0	24	66
51340410	04,10	6,0	24	66
51340420	04,20	6,0	24	66
51340430	04,30	6,0	24	66
51340440	04,40	6,0	24	66
51340450	04,50	6,0	24	66
51340460	04,60	6,0	24	66
51340470	04,70	6,0	24	66
51340480	04,80	6,0	28	66
51340490	04,90	6,0	28	66
51340500	05,00	6,0	28	66
51340510	05,10	6,0	28	66
51340520	05,20	6,0	28	66
51340530	05,30	6,0	28	66
51340540	05,40	6,0	28	66
51340550	05,50	6,0	28	66
51340560	05,60	6,0	28	66
51340570	05,70	6,0	28	66
51340580	05,80	6,0	28	66
51340590	05,90	6,0	28	66
51340600	06,00	6,0	28	66
51340610	06,10	8,0	34	79
51340620	06,20	8,0	34	79
51340630	06,30	8,0	34	79
51340640	06,40	8,0	34	79
51340650	06,50	8,0	34	79

EDP#	D m7 [mm]	d h6 [mm]	l2 [mm]	l1 [mm]
51340660	06,60	8,0	34	79
51340670	06,70	8,0	34	79
51340680	06,80	8,0	34	79
51340690	06,90	8,0	34	79
51340700	07,00	8,0	34	79
51340710	07,10	8,0	41	79
51340720	07,20	8,0	41	79
51340730	07,30	8,0	41	79
51340740	07,40	8,0	41	79
51340750	07,50	8,0	41	79
51340760	07,60	8,0	41	79
51340770	07,70	8,0	41	79
51340780	07,80	8,0	41	79
51340790	07,90	8,0	41	79
51340800	08,00	8,0	41	79
51340810	08,10	10,0	47	89
51340820	08,20	10,0	47	89
51340830	08,30	10,0	47	89
51340840	08,40	10,0	47	89
51340850	08,50	10,0	47	89
51340860	08,60	10,0	47	89
51340870	08,70	10,0	47	89
51340880	08,80	10,0	47	89
51340890	08,90	10,0	47	89
51340900	09,00	10,0	47	89
51340910	09,10	10,0	47	89
51340920	09,20	10,0	47	89
51340930	09,30	10,0	47	89
51340940	09,40	10,0	47	89
51340950	09,50	10,0	47	89
51340960	09,60	10,0	47	89
51340970	09,70	10,0	47	89
51340980	09,80	10,0	47	89
51340990	09,90	10,0	47	89
51341000	10,00	10,0	47	89
51341010	10,10	12,0	55	102

EDP#	D m7 [mm]	d h6 [mm]	l2 [mm]	l1 [mm]
51341020	10,20	12,0	55	102
51341030	10,30	12,0	55	102
51341040	10,40	12,0	55	102
51341050	10,50	12,0	55	102
51341060	10,60	12,0	55	102
51341070	10,70	12,0	55	102
51341080	10,80	12,0	55	102
51341090	10,90	12,0	55	102
51341100	11,00	12,0	55	102
51341110	11,10	12,0	55	102
51341120	11,20	12,0	55	102
51341130	11,30	12,0	55	102
51341140	11,40	12,0	55	102
51341150	11,50	12,0	55	102
51341160	11,60	12,0	55	102
51341170	11,70	12,0	55	102
51341180	11,80	12,0	55	102
51341190	11,90	12,0	55	102
51341200	12,00	12,0	55	102
51341230	12,30	14,0	60	107
51341250	12,50	14,0	60	107

EDP#	D m7 [mm]	d h6 [mm]	l2 [mm]	l1 [mm]
51341280	12,80	14,0	60	107
51341300	13,00	14,0	60	107
51341350	13,50	14,0	60	107
51341380	13,80	14,0	60	107
51341400	14,00	14,0	60	107
51341450	14,50	16,0	65	115
51341480	14,80	16,0	65	115
51341500	15,00	16,0	65	115
51341550	15,50	16,0	65	115
51341580	15,80	16,0	65	115
51341600	16,00	16,0	65	115
51341650	16,50	18,0	73	123
51341680	16,80	18,0	73	123
51341700	17,00	18,0	73	123
51341750	17,50	18,0	73	123
51341780	17,80	18,0	73	123
51341800	18,00	18,0	73	123
51341850	18,50	20,0	79	131
51341900	19,00	20,0	79	131
51341950	19,50	20,0	79	131
51341980	19,80	20,0	79	131
51342000	20,00	20,0	79	131

Coolant through Drill 521-4, FUTURA

Solid micro grain Carbide



Work Material: steel, castings, stainless and acid resistant, **HARDOX®**

EDP#	D m7 [mm]	d h6 [mm]	l2 [mm]	l1 [mm]
52140300	03,00	6,0	28	66
52140310	03,10	6,0	28	66
52140320	03,20	6,0	28	66
52140330	03,30	6,0	28	66
52140340	03,40	6,0	28	66
52140350	03,50	6,0	28	66
52140360	03,60	6,0	28	66
52140370	03,70	6,0	28	66
52140380	03,80	6,0	36	74
52140390	03,90	6,0	36	74
52140400	04,00	6,0	36	74
52140410	04,10	6,0	36	74
52140420	04,20	6,0	36	74
52140430	04,30	6,0	36	74
52140440	04,40	6,0	36	74
52140450	04,50	6,0	36	74
52140460	04,60	6,0	36	74
52140470	04,70	6,0	36	74
52140480	04,80	6,0	44	82
52140490	04,90	6,0	44	82
52140500	05,00	6,0	44	82

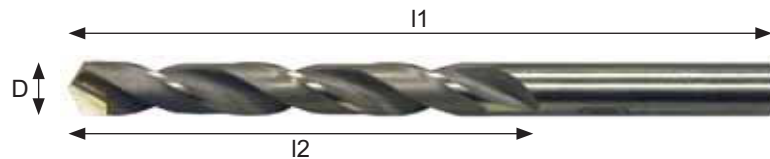
EDP#	D m7 [mm]	d h6 [mm]	l2 [mm]	l1 [mm]
52140510	05,10	6,0	44	82
52140520	05,20	6,0	44	82
52140530	05,30	6,0	44	82
52140540	05,40	6,0	44	82
52140550	05,50	6,0	44	82
52140560	05,60	6,0	44	82
52140570	05,70	6,0	44	82
52140580	05,80	6,0	44	82
52140590	05,90	6,0	44	82
52140600	06,00	6,0	44	82
52140610	06,10	8,0	53	91
52140620	06,20	8,0	53	91
52140630	06,30	8,0	53	91
52140640	06,40	8,0	53	91
52140650	06,50	8,0	53	91
52140660	06,60	8,0	53	91
52140670	06,70	8,0	53	91
52140680	06,80	8,0	53	91
52140690	06,90	8,0	53	91
52140700	07,00	8,0	53	91
52140710	07,10	8,0	53	91

Coolant through Drill 521-4, FUTURA

EDP#	D m7 [mm]	d h6 [mm]	I2 [mm]	I1 [mm]
52140720	07,20	8,0	53	91
52140730	07,30	8,0	53	91
52140740	07,40	8,0	53	91
52140750	07,50	8,0	53	91
52140760	07,60	8,0	53	91
52140770	07,70	8,0	53	91
52140780	07,80	8,0	53	91
52140790	07,90	8,0	53	91
52140800	08,00	8,0	53	91
52140810	08,10	10,0	61	103
52140820	08,20	10,0	61	103
52140830	08,30	10,0	61	103
52140840	08,40	10,0	61	103
52140850	08,50	10,0	61	103
52140860	08,60	10,0	61	103
52140870	08,70	10,0	61	103
52140880	08,80	10,0	61	103
52140890	08,90	10,0	61	103
52140900	09,00	10,0	61	103
52140910	09,10	10,0	61	103
52140920	09,20	10,0	61	103
52140930	09,30	10,0	61	103
52140940	09,40	10,0	61	103
52140950	09,50	10,0	61	103
52140960	09,60	10,0	61	103
52140970	09,70	10,0	61	103
52140980	09,80	10,0	61	103
52140990	09,90	10,0	61	103
52141000	10,00	10,0	61	103
52141010	10,10	12,0	71	118
52141020	10,20	12,0	71	118
52141030	10,30	12,0	71	118
52141040	10,40	12,0	71	118
52141050	10,50	12,0	71	118
52141060	10,60	12,0	71	118
52141070	10,70	12,0	71	118
52141080	10,80	12,0	71	118
52141090	10,90	12,0	71	118

EDP#	D m7 [mm]	d h6 [mm]	I2 [mm]	I1 [mm]
52141100	11,00	12,0	71	118
52141110	11,10	12,0	71	118
52141120	11,20	12,0	71	118
52141130	11,30	12,0	71	118
52141140	11,40	12,0	71	118
52141150	11,50	12,0	71	118
52141160	11,60	12,0	71	118
52141170	11,70	12,0	71	118
52141180	11,80	12,0	71	118
52141190	11,90	12,0	71	118
52141200	12,00	12,0	71	118
52141220	12,20	14,0	77	124
52141230	12,30	14,0	77	124
52141250	12,50	14,0	77	124
52141280	12,80	14,0	77	124
52141300	13,00	14,0	77	124
52141350	13,50	14,0	77	124
52141380	13,80	14,0	77	124
52141400	14,00	14,0	77	124
52141450	14,50	16,0	83	133
52141480	14,80	16,0	83	133
52141500	15,00	16,0	83	133
52141550	15,50	16,0	83	133
52141580	15,80	16,0	83	133
52141600	16,00	16,0	83	133
52141650	16,50	18,0	93	143
52141680	16,80	18,0	93	143
52141700	17,00	18,0	93	143
52141750	17,50	18	93	143
52141780	17,80	18	93	143
52141800	18,00	18	93	143
52141850	18,50	20	101	153
52141900	19,00	20	101	153
52141950	19,50	20	101	153
52142000	20,00	20	101	153

Drill 560-0

Solid micro grain Carbide
(Tip)

Work Material: Hard and abrasive materials such as high strength steel, castings, AISi alloys and hard plastics

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
56000200	02,00	25	49
56000210	02,10	25	49
56000220	02,20	27	53
56000230	02,30	27	53
56000240	02,40	30	57
56000250	02,50	30	57
56000260	02,60	30	57

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
56000270	02,70	33	61
56000280	02,80	33	61
56000290	02,90	33	61
56000300	03,00	33	61
56000310	03,10	36	65
56000320	03,20	36	65
56000330	03,30	36	65

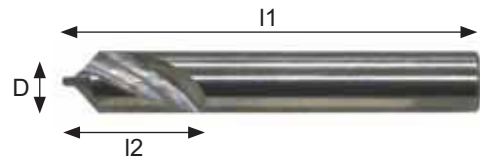
Drill 560-0

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
56000340	03,40	39	70
56000350	03,50	39	70
56000360	03,60	39	70
56000370	03,70	39	70
56000380	03,80	43	75
56000390	03,90	43	75
56000400	04,00	43	75
56000410	04,10	43	75
56000420	04,20	43	75
56000430	04,30	47	80
56000440	04,40	47	80
56000450	04,50	47	80
56000460	04,60	47	80
56000480	04,80	52	86
56000490	04,90	52	86
56000500	05,00	52	86
56000510	05,10	52	86
56000520	05,20	52	86
56000530	05,30	52	86
56000540	05,40	57	93
56000550	05,50	57	93
56000580	05,80	57	93
56000590	05,90	57	93
56000600	06,00	57	93
56000610	06,10	63	101
56000620	06,20	63	101
56000630	06,30	63	101
56000640	06,40	63	101
56000650	06,50	63	101
56000660	06,60	63	101
56000670	06,70	63	101
56000680	06,80	69	109
56000690	06,90	69	109
56000700	07,00	69	109
56000710	07,10	69	109
56000720	07,20	69	109
56000740	07,40	69	109
56000750	07,50	69	109

EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
56000760	07,60	75	117
56000770	07,70	75	117
56000780	07,80	75	117
56000790	07,90	75	117
56000800	08,00	75	117
56000810	08,10	75	117
56000820	08,20	75	117
56000830	08,30	75	117
56000840	08,40	75	117
56000850	08,50	75	117
56000860	08,60	81	125
56000870	08,70	81	125
56000880	08,80	81	125
56000890	08,90	81	125
56000900	09,00	81	125
56000910	09,10	81	125
56000920	09,20	81	125
56000940	09,40	81	125
56000950	09,50	81	125
56000960	09,60	87	133
56000970	09,70	87	133
56000980	09,80	87	133
56000990	09,90	87	133
56001000	10,00	87	133
56001020	10,20	87	133
56001050	10,50	87	133
56001100	11,00	94	142
56001150	11,50	94	142
56001200	12,00	101	151
56001250	12,50	101	151
56001300	13,00	101	151
56001350	13,50	108	160
56001400	14,00	108	160
56001450	14,50	114	169
56001500	15,00	114	169
56001550	15,50	120	178
56001600	16,00	120	178

NC-Spotting Drill 567-0

Solid micro grain Carbide

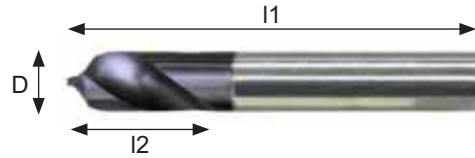


EDP#	D h8 [mm]	[inch]	I2 [mm]	I1 [mm]
56700300	03,00		13	38
567003175	03,175	1/8	13	38
567003969	03,969	5/32	17	50
56700400	04,00		17	50
567004763	04,763	3/16	17	50
56700500	05,00		17	50
56700600	06,00		17	50
567006350	06,350	1/4	17	50

EDP#	D h8 [mm]	[inch]	I2 [mm]	I1 [mm]
567007938	07,938	5/16	21	63
56700800	08,00		21	63
567009525	09,525	3/8	22	66
56701000	10,00		22	66
56701200	12,00		24	73
567012700	12,700	1/2	24	73

Spotting Drill 567-4, FUTURA

Solid micro grain Carbide

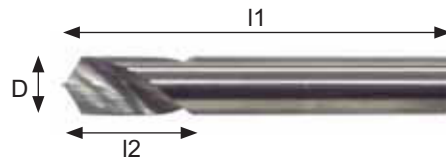


EDP#	D h8 [mm]	[inch]	I2 [mm]	I1 [mm]
56740300	03,00		13	38
567403175	03,175	1/8	13	38
567403969	03,969	5/32	17	50
56740400	04,00		17	50
567404763	04,763	3/16	17	50
56740500	05,00		17	50
56740600	06,00		17	50
567406350	06,350	1/4	17	50
567407938	07,938	5/16	21	63

EDP#	D h8 [mm]	[inch]	I2 [mm]	I1 [mm]
56740800	08,00		21	63
567409525	09,525	3/8	22	66
56741000	10,00		22	66
56741200	12,00		24	73
567412700	12,700	1/2	24	73

Spotting Drill 568-0

Solid micro grain Carbide

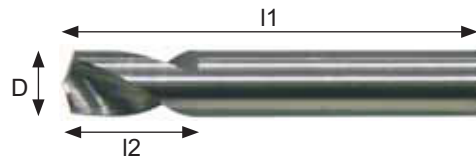


EDP#	D h8 [mm]	[inch]	I2 [mm]	I1 [mm]
56800300	03,00		13	38
568003175	03,175	1/8	13	38
568003969	03,969	5/32	17	50
56800400	04,00		17	50
568004763	04,763	3/16	17	50
56800500	05,00		17	50
56800600	06,00		17	50
568006350	06,350	1/4	17	50
568007938	07,938	5/16	21	63

EDP#	D h8 [mm]	[inch]	I2 [mm]	I1 [mm]
56800800	08,00		21	63
568009525	09,525	3/8	22	66
56801000	10,00		22	66
56801200	12,00		24	73
568012700	12,700	1/2	24	73

Spotting Drill 569-0

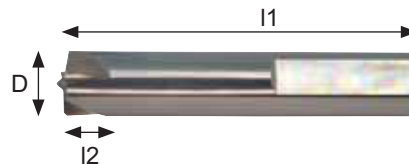
Solid micro grain Carbide



EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
56900600	06,00	17	50
56900800	08,00	21	63
56901000	10,00	22	66
56901200	12,00	24	73
56901600	16,00	30	92

Spot weld Drill 580

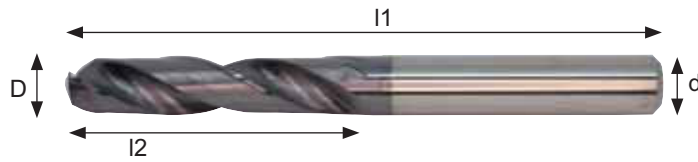
Solid micro grain Carbide



EDP#	D h8 [mm]	I2 [mm]	I1 [mm]
58000800	08,00	7	44

WD015 Solid Carbide Drill

Solid micro grain Carbide

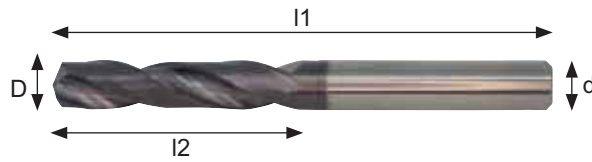


Work Material: General purpose, 30-50 HRC, carbon steel, alloy steel, prehardened steel, cast iron steel, stainless steel

EDP#	D [inch]	Decimal [inch]	L2 [inch]	L1 [inch]	d [inch]
WD015C03175	1/8	.1250	45/64	1-59/64	1/8
WD015C03572	9/64	.1406	25/32	2-3/64	9/64
WD015C03969	5/32	.1562	7/8	2-3/16	5/32
WD015C04366	11/64	.1719	15/16	2-9/32	11/64
WD015C04763	3/16	.1875	1	2-7/16	3/16
WD015C05159	13/64	.2031	1	2-7/16	13/64
WD015C05556	7/32	.2188	1-1/8	2-5/8	7/32
WD015C05953	15/64	.2344	1-1/8	2-5/8	15/64
WD015C06350	1/4	.2500	1-5/8	3-3/16	1/4
WD015C06528	F	.2570	1-11/16	3-17/64	F
WD015C06747	17/64	.2656	1-11/16	3-17/64	17/64
WD015C06909	I	.2720	1-11/16	3-17/64	I
WD015C07144	9/32	.2812	1-3/4	3-7/16	9/32
WD015C07541	19/64	.2969	1-7/8	3-9/16	19/64
WD015C07938	5/16	.3125	1-7/8	3-9/16	5/16
WD015C08334	21/64	.3281	2-1/16	3-3/4	21/64
WD015C08433	Q	.3320	2-1/16	3-3/4	Q
WD015C08731	11/32	.3438	2-3/16	3-7/8	11/32
WD015C09128	23/64	.3594	2-9/32	4	23/64
WD015C09347	U	.3680	2-9/32	4	U
WD015C09525	3/8	.3750	2-3/8	4-1/8	3/8
WD015C09922	25/64	.3906	2-3/8	4-1/8	25/64
WD015C10319	13/32	.4062	2-5/8	4-12/32	13/32
WD015C10716	27/64	.4219	2-11/16	4-1/2	27/64
WD015C11113	7/16	.4375	2-13/16	4-5/8	7/16
WD015C11509	29/64	.4531	2-7/8	4-3/4	29/64
WD015C11906	15/32	.4688	2-7/8	4-3/4	15/32
WD015C12303	31/64	.4844	3	5-5/16	31/64
WD015C12700	1/2	.5000	3-1/16	5-3/8	1/2
WD015C13097	33/64	.5156	3-11/32	5-11/16	33/64
WD015C13494	17/32	.5312	3-11/32	5-11/16	17/32
WD015C14288	9/16	.5625	3-1/2	5-15/16	9/16
WD015C14684	37/64	.5781	3-37/64	6	37/64
WD015C15875	5/8	.6250	3-25/3	6-19/64	5/8

WD017 Coolant through Solid Carbide Drill

Solid micro grain Carbide

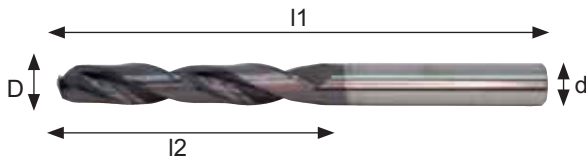


Work Material: General purpose, 30-50 HRC, carbon steel, alloy steel, prehardened steel, cast iron steel, stainless steel

EDP#	D [inch]	Decimal [inch]	L2 [inch]	L1 [inch]	d [inch]
WD017C03175	1/8	.1250	1,102	2,992	15/64
WD017C04366	11/64	.1719	1,417	3,386	15/64
WD017C04763	3/16	.1875	1,575	3,543	15/64
WD017C05159	13/64	.2031	1,082	3,228	15/64
WD017C05556	7/32	.2188	1,181	3,228	15/64
WD017C05953	15/64	.2344	1,181	3,228	15/64
WD017C06350	1/4	.2500	1,279	3,465	17/64
WD017C06528	F	.2570	1,279	3,465	17/64
WD017C06747	17/64	.2656	1,378	3,465	17/64
WD017C06909	I	.2720	1,378	3,465	5/16
WD017C07144	9/32	.2812	1,476	3,701	5/16
WD017C07541	19/64	.2969	1,476	3,701	5/16
WD017C07938	5/16	.3125	1,575	3,701	5/16
WD017C08334	21/64	.3281	1,673	3,937	11/32
WD017C08433	Q	.3320	1,673	3,937	11/32
WD017C08731	11/32	.3438	1,772	3,937	11/32
WD017C09128	23/64	.3594	1,870	4,174	25/64
WD017C09347	U	.3680	1,870	4,174	25/64
WD017C09525	3/8	.3750	1,969	4,174	25/64
WD017C09922	25/64	.3906	1,969	4,174	25/64
WD017C10319	13/32	.4062	2,067	4,567	27/64
WD017C10716	27/64	.4219	2,165	4,567	27/64
WD017C11113	7/16	.4375	2,264	4,803	15/32
WD017C11509	29/64	.4531	2,264	4,803	15/32
WD017C11906	15/32	.4688	2,362	4,803	15/32
WD017C12303	31/64	.4844	2,461	5,039	1/2
WD017C12700	1/2	.5000	2,559	5,039	1/2
WD017C13097	33/64	.5156	2,657	5,276	35/64
WD017C13494	17/32	.5312	2,756	5,276	35/64
WD017C13891	35/64	.5469	2,756	5,276	35/64
WD017C14288	9/16	.5625	2,854	5,512	37/64
WD017C14684	37/64	.5781	2,953	5,512	37/64
WD017C15081	19/32	.5937	3,051	5,709	5/8
WD017C15478	39/64	.6094	3,051	5,709	5/8
WD017C15875	5/8	.6250	3,15	5,709	5/8

WD018 Coolant through Solid Carbide Drill

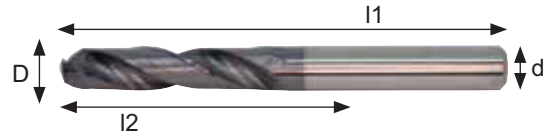
Solid micro grain Carbide



Work Material: General purpose, 30-50 HRc, carbon steel, alloy steel, prehardened steel, cast iron steel, stainless steel

EDP#	D [inch]	Decimal [inch]	L2 [inch]	L1 [inch]	d [inch]
WD018C05159	13/64	.2031	1-3/4	3-15/16	15/64
WD018C05556	7/32	.2188	1-57/64	3-15/16	15/64
WD018C05953	15/64	.2344	1-57/64	3-15/16	15/64
WD018C06350	1/4	.2500	2-3/64	4-19/64	17/64
WD018C06528	F	.2570	2-13/64	4-19/64	17/64
WD018C06747	17/64	.2656	2-13/64	4-19/64	17/64
WD018C06909	I	.2720	2-13/64	4-19/64	5/16
WD018C07144	9/32	.2812	2-23/64	4-19/64	5/16
WD018C07541	19/64	.2969	2-33/64	4-19/64	5/16
WD018C07938	5/16	.3125	2-33/64	4-19/64	5/16
WD018C08334	21/64	.3281	2-43/64	5	11/32
WD018C08433	Q	.3320	2-43/64	5	11/32
WD018C08731	11/32	.3438	2-27/32	5	11/32
WD018C09128	23/64	.3594	3	5-23/64	25/64
WD018C09347	U	.3680	3	5-23/64	25/64
WD018C09525	3/8	.3750	3-5/32	5-23/64	25/64
WD018C09922	25/64	.3906	3-5/32	5-23/64	25/64
WD018C10319	13/32	.4062	3-5/16	5-7/8	27/64
WD018C10716	27/64	.4219	3-5/32	5-7/8	27/64
WD018C11113	7/16	.4375	3-5/8	6-7/32	15/32
WD018C11509	29/64	.4531	3-25/32	6-7/32	15/32
WD018C11906	15/32	.4688	3-25/32	6-7/32	15/32
WD018C12303	31/64	.4844	3-15/16	6-37/64	1/2
WD018C12700	1/2	.5000	4-3/32	6-37/64	1/2

WD025 Solid Carbide Drill

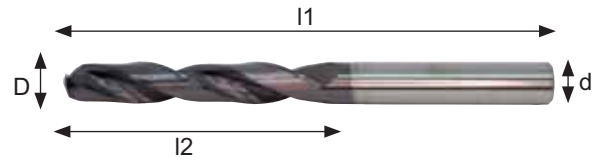
Solid micro grain Carbide

Work Material: General purpose, 30-50 HRC, carbon steel, alloy steel, prehardened steel, cast iron steel, stainless steel

EDP#	D [mm]	Decimal [mm]	L2 [mm]	L1 [mm]	d [mm]
WD025C0300	3,0	.1181	20	62	6
WD025C0310	3,1	.1220	20	62	6
WD025C0320	3,2	.1260	20	62	6
WD025C0330	3,3	.1299	20	62	6
WD025C0340	3,4	.1339	20	62	6
WD025C0350	3,5	.1378	20	62	6
WD025C0360	3,6	.1417	20	62	6
WD025C0370	3,7	.1457	20	62	6
WD025C0380	3,8	.1496	24	66	6
WD025C0390	3,9	.1535	24	66	6
WD025C0400	4,0	.1575	24	66	6
WD025C0410	4,1	.1614	24	66	6
WD025C0420	4,2	.1654	24	66	6
WD025C0430	4,3	.1693	24	66	6
WD025C0440	4,4	.1732	24	66	6
WD025C0450	4,5	.1772	24	66	6
WD025C0460	4,6	.1811	24	66	6
WD025C0470	4,7	.1850	24	66	6
WD025C0480	4,8	.1890	28	66	6
WD025C0490	4,9	.1929	28	66	6
WD025C0500	5,0	.1969	28	66	6
WD025C0510	5,1	.2008	28	66	6
WD025C0520	5,2	.2047	28	66	6
WD025C0530	5,3	.2087	28	66	6
WD025C0540	5,4	.2126	28	66	6
WD025C0550	5,5	.2165	28	66	6
WD025C0560	5,6	.2205	28	66	6
WD025C0570	5,7	.2244	28	66	6
WD025C0580	5,8	.2283	28	66	6
WD025C0590	5,9	.2323	28	66	6
WD025C0600	6,0	.2362	28	66	6
WD025C0610	6,1	.2402	34	79	8
WD025C0620	6,2	.2441	34	79	8
WD025C0630	6,3	.2480	34	79	8
WD025C0640	6,4	.2520	34	79	8
WD025C0650	6,5	.2559	34	79	8
WD025C0660	6,6	.2598	34	79	8
WD025C0670	6,7	.2638	34	79	8
WD025C0680	6,8	.2677	34	79	8
WD025C0690	6,9	.2717	34	79	8
WD025C0700	7,0	.2756	34	79	8
WD025C0710	7,1	.2795	41	79	8
WD025C0720	7,2	.2835	41	79	8
WD025C0730	7,3	.2874	41	79	8
WD025C0740	7,4	.2913	41	79	8
WD025C0750	7,5	.2953	41	79	8
WD025C0760	7,6	.2992	41	79	8
WD025C0770	7,7	.3031	41	79	8
WD025C0780	7,8	.3071	41	79	8
WD025C0790	7,9	.3110	41	79	8
WD025C0800	8,0	.3150	41	79	8
WD025C0810	8,1	.3189	47	89	10
WD025C0820	8,2	.3228	47	89	10
WD025C0830	8,3	.3268	47	89	10
WD025C0840	8,4	.3307	47	89	10
WD025C0850	8,5	.3346	47	89	10
WD025C0860	8,6	.3386	47	89	10
WD025C0870	8,7	.3425	47	89	10

EDP#	D [mm]	Decimal [mm]	L2 [mm]	L1 [mm]	d [mm]
WD025C0880	8,8	.3465	47	89	10
WD025C0890	8,9	.3504	47	89	10
WD025C0900	9,0	.3543	47	89	10
WD025C0910	9,1	.3583	47	89	10
WD025C0920	9,2	.3622	47	89	10
WD025C0930	9,3	.3661	47	89	10
WD025C0940	9,4	.3701	47	89	10
WD025C0950	9,5	.3740	47	89	10
WD025C0960	9,6	.3780	47	89	10
WD025C0970	9,7	.3819	47	89	10
WD025C0980	9,8	.3858	47	89	10
WD025C0990	9,9	.3898	47	89	10
WD025C1000	10,0	.3937	47	89	10
WD025C1010	10,1	.3976	55	102	12
WD025C1020	10,2	.4016	55	102	12
WD025C1030	10,3	.4055	55	102	12
WD025C1040	10,4	.4094	55	102	12
WD025C1050	10,5	.4134	55	102	12
WD025C1060	10,6	.4173	55	102	12
WD025C1070	10,7	.4213	55	102	12
WD025C1080	10,8	.4252	55	102	12
WD025C1090	10,9	.4291	55	102	12
WD025C1100	11,0	.4331	55	102	12
WD025C1110	11,1	.4370	55	102	12
WD025C1120	11,2	.4409	55	102	12
WD025C1130	11,3	.4449	55	102	12
WD025C1140	11,4	.4488	55	102	12
WD025C1150	11,5	.4528	55	102	12
WD025C1160	11,6	.4567	55	102	12
WD025C1170	11,7	.4606	55	102	12
WD025C1180	11,8	.4646	55	102	12
WD025C1190	11,9	.4685	55	102	12
WD025C1200	12,0	.4724	55	102	12
WD025C1230	12,3	.4843	60	107	14
WD025C1250	12,5	.4921	60	107	14
WD025C1280	12,8	.5039	60	107	14
WD025C1300	13,0	.5118	60	107	14
WD025C1350	13,5	.5315	60	107	14
WD025C1380	13,8	.5433	60	107	14
WD025C1400	14,0	.5512	60	107	14
WD025C1450	14,5	.5708	65	115	16
WD025C1480	14,8	.5827	65	115	16
WD025C1500	15,0	.5905	65	115	16
WD025C1550	15,5	.6102	65	115	16
WD025C1580	15,8	.6220	65	115	16
WD025C1600	16,0	.6299	73	115	16
WD025C1650	16,5	.6495	73	123	18
WD025C1680	16,8	.6614	73	123	18
WD025C1700	17,0	.6692	73	123	18
WD025C1750	17,5	.6889	73	123	18
WD025C1780	17,8	.7008	73	123	18
WD025C1800	18,0	.7087	73	123	18
WD025C1850	18,5	.7283	79	131	20
WD025C1900	19,0	.7480	79	131	20
WD025C1950	19,5	.7676	79	131	20
WD025C1980	19,8	.7795	79	131	20
WD025C2000	20,0	.7874	79	131	20

WD026 Solid Carbide Drill

Solid micro grain Carbide

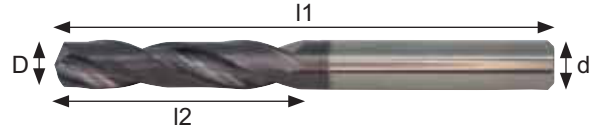
Work Material: General purpose, 30-50 HRC, carbon steel, alloy steel, prehardened steel, cast iron steel, stainless steel

EDP#	D [mm]	Decimal [mm]	L2 [mm]	L1 [mm]	d [mm]	EDP#	D [mm]	Decimal [mm]	L2 [mm]	L1 [mm]	d [mm]
WD026C0100	1,0	.0394	8	55	3	WD026C0620	6,2	.2441	53	91	8
WD026C0110	1,1	.0433	12	55	3	WD026C0630	6,3	.2480	53	91	8
WD026C0120	1,2	.0472	12	55	3	WD026C0640	6,4	.2520	53	91	8
WD026C0130	1,3	.0512	12	55	3	WD026C0650	6,5	.2559	53	91	8
WD026C0140	1,4	.0551	12	55	3	WD026C0660	6,6	.2598	53	91	8
WD026C0150	1,5	.0591	16	55	3	WD026C0670	6,7	.2638	53	91	8
WD026C0160	1,6	.0630	16	55	3	WD026C0680	6,8	.2677	53	91	8
WD026C0170	1,7	.0669	16	55	3	WD026C0690	6,9	.2717	53	91	8
WD026C0180	1,8	.0709	16	55	3	WD026C0700	7,0	.2756	53	91	8
WD026C0190	1,9	.0748	16	55	3	WD026C0710	7,1	.2795	53	91	8
WD026C0200	2,0	.0787	21	57	4	WD026C0720	7,2	.2835	53	91	8
WD026C0210	2,1	.0827	21	57	4	WD026C0730	7,3	.2874	53	91	8
WD026C0220	2,2	.0866	21	57	4	WD026C0740	7,4	.2913	53	91	8
WD026C0230	2,3	.0906	21	57	4	WD026C0750	7,5	.2953	53	91	8
WD026C0240	2,4	.0945	21	57	4	WD026C0760	7,6	.2992	53	91	8
WD026C0250	2,5	.0984	21	57	4	WD026C0770	7,7	.3031	53	91	8
WD026C0260	2,6	.1024	21	57	4	WD026C0780	7,8	.3071	53	91	8
WD026C0270	2,7	.1063	21	57	4	WD026C0790	7,9	.3110	53	91	8
WD026C0280	2,8	.1102	21	57	4	WD026C0800	8,0	.3150	53	91	8
WD026C0290	2,9	.1142	21	57	4	WD026C0810	8,1	.3189	61	103	10
WD026C0300	3,0	.1181	28	66	6	WD026C0820	8,2	.3228	61	103	10
WD026C0310	3,1	.1220	28	66	6	WD026C0830	8,3	.3268	61	103	10
WD026C0320	3,2	.1260	28	66	6	WD026C0840	8,4	.3307	61	103	10
WD026C0330	3,3	.1299	28	66	6	WD026C0850	8,5	.3346	61	103	10
WD026C0340	3,4	.1339	28	66	6	WD026C0860	8,6	.3386	61	103	10
WD026C0350	3,5	.1378	28	66	6	WD026C0870	8,7	.3425	61	103	10
WD026C0360	3,6	.1417	28	66	6	WD026C0880	8,8	.3465	61	103	10
WD026C0370	3,7	.1457	28	66	6	WD026C0890	8,9	.3504	61	103	10
WD026C0380	3,8	.1496	36	74	6	WD026C0900	9,0	.3543	61	103	10
WD026C0390	3,9	.1535	36	74	6	WD026C0910	9,1	.3583	61	103	10
WD026C0400	4,0	.1575	36	74	6	WD026C0920	9,2	.3622	61	103	10
WD026C0410	4,1	.1614	36	74	6	WD026C0930	9,3	.3661	61	103	10
WD026C0420	4,2	.1654	36	74	6	WD026C0940	9,4	.3701	61	103	10
WD026C0430	4,3	.1693	36	74	6	WD026C0950	9,5	.3740	61	103	10
WD026C0440	4,4	.1732	36	74	6	WD026C0960	9,6	.3780	61	103	10
WD026C0450	4,5	.1772	36	74	6	WD026C0970	9,7	.3819	61	103	10
WD026C0460	4,6	.1811	36	74	6	WD026C0980	9,8	.3858	61	103	10
WD026C0470	4,7	.1850	36	74	6	WD026C0990	9,9	.3898	61	103	10
WD026C0480	4,8	.1890	44	82	6	WD026C1000	10,0	.3937	61	103	10
WD026C0490	4,9	.1929	44	82	6	WD026C1010	10,1	.3976	71	118	12
WD026C0500	5,0	.1969	44	82	6	WD026C1020	10,2	.4016	71	118	12
WD026C0510	5,1	.2008	44	82	6	WD026C1030	10,3	.4055	71	118	12
WD026C0520	5,2	.2047	44	82	6	WD026C1040	10,4	.4094	71	118	12
WD026C0530	5,3	.2087	44	82	6	WD026C1050	10,5	.4134	71	118	12
WD026C0540	5,4	.2126	44	82	6	WD026C1060	10,6	.4173	71	118	12
WD026C0550	5,5	.2165	44	82	6	WD026C1070	10,7	.4213	71	118	12
WD026C0560	5,6	.2205	44	82	6	WD026C1080	10,8	.4252	71	118	12
WD026C0570	5,7	.2244	44	82	6	WD026C1090	10,9	.4291	71	118	12
WD026C0580	5,8	.2283	44	82	6	WD026C1100	11,0	.4331	71	118	12
WD026C0590	5,9	.2323	44	82	6	WD026C1110	11,1	.4370	71	118	12
WD026C0600	6,0	.2362	44	82	6	WD026C1120	11,2	.4409	71	118	12
WD026C0610	6,1	.2402	53	91	8	WD026C1130	11,3	.4449	71	118	12

WD026 Solid Carbide Drill (continued)

EDP#	D [mm]	Decimal [mm]	l2 [mm]	l1 [mm]	d [mm]
WD026C1140	11,4	.4488	71	118	12
WD026C1150	11,5	.4528	71	118	12
WD026C1160	11,6	.4567	71	118	12
WD026C1170	11,7	.4606	71	118	12
WD026C1180	11,8	.4646	71	118	12
WD026C1190	11,9	.4685	71	118	12
WD026C1200	12,0	.4724	71	118	12
WD026C1230	12,3	.4843	77	124	14
WD026C1250	12,5	.4921	77	124	14
WD026C1280	12,8	.5039	77	124	14
WD026C1300	13,0	.5118	77	124	14
WD026C1350	13,5	.5315	77	124	14
WD026C1380	13,8	.5433	77	124	14
WD026C1400	14,0	.5512	77	124	14
WD026C1450	14,5	.5708	83	133	16
WD026C1480	14,8	.5827	83	133	16
WD026C1500	15,0	.5905	83	133	16
WD026C1550	15,5	.6102	83	133	16
WD026C1580	15,8	.6220	83	133	16
WD026C1600	16,0	.6299	83	133	16
WD026C1650	16,5	.6495	93	143	18
WD026C1680	16,8	.6614	93	143	18
WD026C1700	17,0	.6692	93	143	18
WD026C1750	17,5	.6889	93	143	18
WD026C1780	17,8	.7008	93	143	18
WD026C1800	18,0	.7087	93	143	18
WD026C1850	18,5	.7283	101	153	20
WD026C1900	19,0	.7480	101	153	20
WD026C1950	19,5	.7676	101	153	20
WD026C1980	19,8	.7795	101	153	20
WD026C2000	20,0	.7874	101	153	20

WD027 Coolant through Solid Carbide Drill

Solid micro grain Carbide

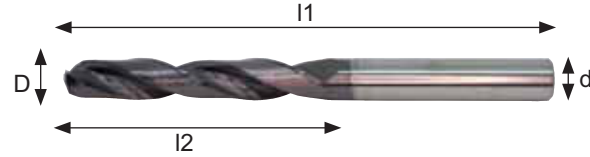
Work Material: General purpose, 30-50 HRC, carbon steel, alloy steel, prehardened steel, cast iron steel, stainless steel

EDP#	D [mm]	Decimal [mm]	L2 [mm]	L1 [mm]	d [mm]
WD027C0300	3,0	.1181	20	62	6
WD027C0310	3,1	.1220	20	62	6
WD027C0320	3,2	.1260	20	62	6
WD027C0330	3,3	.1299	20	62	6
WD027C0340	3,4	.1339	20	62	6
WD027C0350	3,5	.1378	20	62	6
WD027C0360	3,6	.1417	20	62	6
WD027C0370	3,7	.1457	20	62	6
WD027C0380	3,8	.1496	24	66	6
WD027C0390	3,9	.1535	24	66	6
WD027C0400	4,0	.1575	24	66	6
WD027C0410	4,1	.1614	24	66	6
WD027C0420	4,2	.1654	24	66	6
WD027C0430	4,3	.1693	24	66	6
WD027C0440	4,4	.1732	24	66	6
WD027C0450	4,5	.1772	24	66	6
WD027C0460	4,6	.1811	24	66	6
WD027C0470	4,7	.1850	24	66	6
WD027C0480	4,8	.1890	28	66	6
WD027C0490	4,9	.1929	28	66	6
WD027C0500	5,0	.1969	28	66	6
WD027C0510	5,1	.2008	28	66	6
WD027C0520	5,2	.2047	28	66	6
WD027C0530	5,3	.2087	28	66	6
WD027C0540	5,4	.2126	28	66	6
WD027C0550	5,5	.2165	28	66	6
WD027C0560	5,6	.2205	28	66	6
WD027C0570	5,7	.2244	28	66	6
WD027C0580	5,8	.2283	28	66	6
WD027C0590	5,9	.2323	28	66	6
WD027C0600	6,0	.2362	28	66	6
WD027C0610	6,1	.2402	34	79	8
WD027C0620	6,2	.2441	34	79	8
WD027C0630	6,3	.2480	34	79	8
WD027C0640	6,4	.2520	34	79	8
WD027C0650	6,5	.2559	34	79	8
WD027C0660	6,6	.2598	34	79	8
WD027C0670	6,7	.2638	34	79	8
WD027C0680	6,8	.2677	34	79	8
WD027C0690	6,9	.2717	34	79	8
WD027C0700	7,0	.2756	34	79	8
WD027C0710	7,1	.2795	41	79	8
WD027C0720	7,2	.2835	41	79	8
WD027C0730	7,3	.2874	41	79	8
WD027C0740	7,4	.2913	41	79	8
WD027C0750	7,5	.2953	41	79	8
WD027C0760	7,6	.2992	41	79	8
WD027C0770	7,7	.3031	41	79	8
WD027C0780	7,8	.3071	41	79	8
WD027C0790	7,9	.3110	41	79	8
WD027C0800	8,0	.3150	41	79	8
WD027C0810	8,1	.3189	47	89	10
WD027C0820	8,2	.3228	47	89	10
WD027C0830	8,3	.3268	47	89	10

EDP#	D [mm]	Decimal [mm]	L2 [mm]	L1 [mm]	d [mm]
WD027C0840	8,4	.3307	47	89	10
WD027C0850	8,5	.3346	47	89	10
WD027C0860	8,6	.3386	47	89	10
WD027C0870	8,7	.3425	47	89	10
WD027C0880	8,8	.3465	47	89	10
WD027C0890	8,9	.3504	47	89	10
WD027C0900	9,0	.3543	47	89	10
WD027C0910	9,1	.3583	47	89	10
WD027C0920	9,2	.3622	47	89	10
WD027C0930	9,3	.3661	47	89	10
WD027C0940	9,4	.3701	47	89	10
WD027C0950	9,5	.3740	47	89	10
WD027C0960	9,6	.3780	47	89	10
WD027C0970	9,7	.3819	47	89	10
WD027C0980	9,8	.3858	47	89	10
WD027C0990	9,9	.3898	47	89	10
WD027C1000	10,0	.3937	47	89	10
WD027C1010	10,1	.3976	55	102	12
WD027C1020	10,2	.4016	55	102	12
WD027C1030	10,3	.4055	55	102	12
WD027C1040	10,4	.4094	55	102	12
WD027C1050	10,5	.4134	55	102	12
WD027C1060	10,6	.4173	55	102	12
WD027C1070	10,7	.4213	55	102	12
WD027C1080	10,8	.4252	55	102	12
WD027C1090	10,9	.4291	55	102	12
WD027C1100	11,0	.4331	55	102	12
WD027C1110	11,1	.4370	55	102	12
WD027C1120	11,2	.4409	55	102	12
WD027C1130	11,3	.4449	55	102	12
WD027C1140	11,4	.4488	55	102	12
WD027C1150	11,5	.4528	55	102	12
WD027C1160	11,6	.4567	55	102	12
WD027C1170	11,7	.4606	55	102	12
WD027C1180	11,8	.4646	55	102	12
WD027C1190	11,9	.4685	55	102	12
WD027C1200	12,0	.4724	55	102	12
WD027C1250	12,5	.4921	60	107	14
WD027C1300	13,0	.5118	60	107	14
WD027C1350	13,5	.5315	60	107	14
WD027C1400	14,0	.5512	60	107	14
WD027C1450	14,5	.5708	65	115	16
WD027C1500	15,0	.5905	65	115	16
WD027C1550	15,5	.6102	65	115	16
WD027C1600	16,0	.6299	73	115	16
WD027C1650	16,5	.6495	73	123	18
WD027C1700	17,0	.6692	73	123	18
WD027C1750	17,5	.6889	73	123	18
WD027C1800	18,0	.7087	73	123	18
WD027C1850	18,5	.7283	79	131	20
WD027C1900	19,0	.7480	79	131	20
WD027C1950	19,5	.7676	79	131	20
WD027C2000	20,0	.7874	79	131	20

WD028 Coolant through Solid Carbide Drill

Solid micro grain Carbide



Work Material: General purpose, 30-50 HRC, carbon steel, alloy steel, prehardened steel, cast iron steel, stainless steel

EDP#	D [mm]	Decimal [mm]	L2 [mm]	L1 [mm]	d [mm]
WD028C0100	1,0	.0394	8	55	3
WD028C0110	1,1	.0433	12	55	3
WD028C0120	1,2	.0472	12	55	3
WD028C0130	1,3	.0512	12	55	3
WD028C0140	1,4	.0551	12	55	3
WD028C0150	1,5	.0591	16	55	3
WD028C0160	1,6	.0630	16	55	3
WD028C0170	1,7	.0669	16	55	3
WD028C0180	1,8	.0709	16	55	3
WD028C0190	1,9	.0748	16	55	3
WD028C0200	2,0	.0787	21	57	4
WD028C0210	2,1	.0827	21	57	4
WD028C0220	2,2	.0866	21	57	4
WD028C0230	2,3	.0906	21	57	4
WD028C0240	2,4	.0945	21	57	4
WD028C0250	2,5	.0984	21	57	4
WD028C0260	2,6	.1024	21	57	4
WD028C0270	2,7	.1063	21	57	4
WD028C0280	2,8	.1102	21	57	4
WD028C0290	2,9	.1142	21	57	4
WD028C0300	3,0	.1181	28	66	6
WD028C0310	3,1	.1220	28	66	6
WD028C0320	3,2	.1260	28	66	6
WD028C0330	3,3	.1299	28	66	6
WD028C0340	3,4	.1339	28	66	6
WD028C0350	3,5	.1378	28	66	6
WD028C0360	3,6	.1417	28	66	6
WD028C0370	3,7	.1457	28	66	6
WD028C0380	3,8	.1496	36	74	6
WD028C0390	3,9	.1535	36	74	6
WD028C0400	4,0	.1575	36	74	6
WD028C0410	4,1	.1614	36	74	6
WD028C0420	4,2	.1654	36	74	6
WD028C0430	4,3	.1693	36	74	6
WD028C0440	4,4	.1732	36	74	6
WD028C0450	4,5	.1772	36	74	6
WD028C0460	4,6	.1811	36	74	6
WD028C0470	4,7	.1850	36	74	6
WD028C0480	4,8	.1890	44	82	6
WD028C0490	4,9	.1929	44	82	6
WD028C0500	5,0	.1969	44	82	6
WD028C0510	5,1	.2008	44	82	6
WD028C0520	5,2	.2047	44	82	6
WD028C0530	5,3	.2087	44	82	6
WD028C0540	5,4	.2126	44	82	6
WD028C0550	5,5	.2165	44	82	6
WD028C0560	5,6	.2205	44	82	6
WD028C0570	5,7	.2244	44	82	6
WD028C0580	5,8	.2283	44	82	6

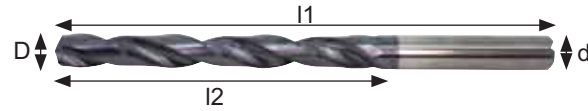
EDP#	D [mm]	Decimal [mm]	L2 [mm]	L1 [mm]	d [mm]
WD028C0590	5,9	.2323	44	82	6
WD028C0600	6,0	.2362	44	82	6
WD028C0610	6,1	.2402	53	91	8
WD028C0620	6,2	.2441	53	91	8
WD028C0630	6,3	.2480	53	91	8
WD028C0640	6,4	.2520	53	91	8
WD028C0650	6,5	.2559	53	91	8
WD028C0660	6,6	.2598	53	91	8
WD028C0670	6,7	.2638	53	91	8
WD028C0680	6,8	.2677	53	91	8
WD028C0690	6,9	.2717	53	91	8
WD028C0700	7,0	.2756	53	91	8
WD028C0710	7,1	.2795	53	91	8
WD028C0720	7,2	.2835	53	91	8
WD028C0730	7,3	.2874	53	91	8
WD028C0740	7,4	.2913	53	91	8
WD028C0750	7,5	.2953	53	91	8
WD028C0760	7,6	.2992	53	91	8
WD028C0770	7,7	.3031	53	91	8
WD028C0780	7,8	.3071	53	91	8
WD028C0790	7,9	.3110	53	91	8
WD028C0800	8,0	.3150	53	91	8
WD028C0810	8,1	.3189	61	103	10
WD028C0820	8,2	.3228	61	103	10
WD028C0830	8,3	.3268	61	103	10
WD028C0840	8,4	.3307	61	103	10
WD028C0850	8,5	.3346	61	103	10
WD028C0860	8,6	.3386	61	103	10
WD028C0870	8,7	.3425	61	103	10
WD028C0880	8,8	.3465	61	103	10
WD028C0890	8,9	.3504	61	103	10
WD028C0900	9,0	.3543	61	103	10
WD028C0910	9,1	.3583	61	103	10
WD028C0920	9,2	.3622	61	103	10
WD028C0930	9,3	.3661	61	103	10
WD028C0940	9,4	.3701	61	103	10
WD028C0950	9,5	.3740	61	103	10
WD028C0960	9,6	.3780	61	103	10
WD028C0970	9,7	.3819	61	103	10
WD028C0980	9,8	.3858	61	103	10
WD028C0990	9,9	.3898	61	103	10
WD028C1000	10,0	.3937	61	103	10
WD028C1010	10,1	.3976	71	118	12
WD028C1020	10,2	.4016	71	118	12
WD028C1030	10,3	.4055	71	118	12
WD028C1040	10,4	.4094	71	118	12
WD028C1050	10,5	.4134	71	118	12
WD028C1060	10,6	.4173	71	118	12
WD028C1070	10,7	.4213	71	118	12

WD028 Coolant through Solid Carbide Drill *(continued)*

EDP#	D [mm]	Decimal [mm]	l2 [mm]	l1 [mm]	d [mm]
WD028C1080	10,8	.4252	71	118	12
WD028C1090	10,9	.4291	71	118	12
WD028C1100	11,0	.4331	71	118	12
WD028C1110	11,1	.4370	71	118	12
WD028C1120	11,2	.4409	71	118	12
WD028C1130	11,3	.4449	71	118	12
WD028C1140	11,4	.4488	71	118	12
WD028C1150	11,5	.4528	71	118	12
WD028C1160	11,6	.4567	71	118	12
WD028C1170	11,7	.4606	71	118	12
WD028C1180	11,8	.4646	71	118	12
WD028C1190	11,9	.4685	71	118	12
WD028C1200	12,0	.4724	71	118	12
WD028C1250	12,5	.4921	77	124	14
WD028C1300	13,0	.5118	77	124	14
WD028C1350	13,5	.5315	77	124	14
WD028C1400	14,0	.5512	77	124	14
WD028C1450	14,5	.5708	83	133	16
WD028C1500	15,0	.5905	83	133	16
WD028C1550	15,5	.6102	83	133	16
WD028C1600	16,0	.6299	83	133	16
WD028C1650	16,5	.6495	93	143	18
WD028C1700	17,0	.6692	93	143	18
WD028C1750	17,5	.6889	93	143	18
WD028C1800	18,0	.7087	93	143	18
WD028C1850	18,5	.7283	101	153	20
WD028C1900	19,0	.7480	101	153	20
WD028C1950	19,5	.7676	101	153	20
WD028C2000	20,0	.7874	101	153	20

WD029 Coolant through Solid Carbide Drill

Solid micro grain Carbide

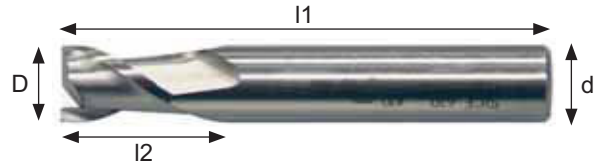


Work Material: General purpose, 30-50 HRc, carbon steel, alloy steel, prehardened steel, cast iron steel, stainless steel

EDP#	D [mm]	Decimal [mm]	L2 [mm]	L1 [mm]	d [mm]	EDP#	D [mm]	Decimal [mm]	L2 [mm]	L1 [mm]	d [mm]
WD029C0300	3,0	.1181	34	72	6	WD029C0870	8,7	.3425	95	142	10
WD029C0310	3,1	.1220	34	72	6	WD029C0880	8,8	.3465	95	142	10
WD029C0320	3,2	.1260	34	72	6	WD029C0890	8,9	.3504	95	142	10
WD029C0330	3,3	.1299	34	72	6	WD029C0900	9,0	.3543	95	142	10
WD029C0340	3,4	.1339	34	72	6	WD029C0910	9,1	.3583	95	142	10
WD029C0350	3,5	.1378	34	72	6	WD029C0920	9,2	.3622	95	142	10
WD029C0360	3,6	.1417	34	72	6	WD029C0930	9,3	.3661	95	142	10
WD029C0370	3,7	.1457	34	72	6	WD029C0940	9,4	.3701	95	142	10
WD029C0380	3,8	.1496	43	81	6	WD029C0950	9,5	.3740	95	142	10
WD029C0390	3,9	.1535	43	81	6	WD029C0960	9,6	.3780	95	142	10
WD029C0400	4,0	.1575	43	81	6	WD029C0970	9,7	.3819	95	142	10
WD029C0410	4,1	.1614	43	81	6	WD029C0980	9,8	.3858	95	142	10
WD029C0420	4,2	.1654	43	81	6	WD029C0990	9,9	.3898	95	142	10
WD029C0430	4,3	.1693	43	81	6	WD029C1000	10,0	.3937	95	142	10
WD029C0440	4,4	.1732	43	81	6	WD029C1010	10,1	.3976	114	162	12
WD029C0450	4,5	.1772	43	81	6	WD029C1020	10,2	.4016	114	162	12
WD029C0460	4,6	.1811	43	81	6	WD029C1030	10,3	.4055	114	162	12
WD029C0470	4,7	.1850	43	81	6	WD029C1040	10,4	.4094	114	162	12
WD029C0480	4,8	.1890	57	95	6	WD029C1050	10,5	.4134	114	162	12
WD029C0490	4,9	.1929	57	95	6	WD029C1060	10,6	.4173	114	162	12
WD029C0500	5,0	.1969	57	95	6	WD029C1070	10,7	.4213	114	162	12
WD029C0510	5,1	.2008	57	95	6	WD029C1080	10,8	.4252	114	162	12
WD029C0520	5,2	.2047	57	95	6	WD029C1090	10,9	.4291	114	162	12
WD029C0530	5,3	.2087	57	95	6	WD029C1100	11,0	.4331	114	162	12
WD029C0540	5,4	.2126	57	95	6	WD029C1110	11,1	.4370	114	162	12
WD029C0550	5,5	.2165	57	95	6	WD029C1120	11,2	.4409	114	162	12
WD029C0560	5,6	.2205	57	95	6	WD029C1130	11,3	.4449	114	162	12
WD029C0570	5,7	.2244	57	95	6	WD029C1140	11,4	.4488	114	162	12
WD029C0580	5,8	.2283	57	95	6	WD029C1150	11,5	.4528	114	162	12
WD029C0590	5,9	.2323	57	95	6	WD029C1160	11,6	.4567	114	162	12
WD029C0600	6,0	.2362	57	95	6	WD029C1170	11,7	.4606	114	162	12
WD029C0610	6,1	.2402	76	114	8	WD029C1180	11,8	.4646	114	162	12
WD029C0620	6,2	.2441	76	114	8	WD029C1190	11,9	.4685	114	162	12
WD029C0630	6,3	.2480	76	114	8	WD029C1200	12,0	.4724	114	162	12
WD029C0640	6,4	.2520	76	114	8	WD029C1250	12,5	.4921	133	178	14
WD029C0650	6,5	.2559	76	114	8	WD029C1300	13,0	.5118	133	178	14
WD029C0660	6,6	.2598	76	114	8	WD029C1350	13,5	.5315	133	178	14
WD029C0670	6,7	.2638	76	114	8	WD029C1400	14,0	.5512	133	178	14
WD029C0680	6,8	.2677	76	114	8	WD028C1050	10,5	.4134	71	118	12
WD029C0690	6,9	.2717	76	114	8	WD028C1060	10,6	.4173	71	118	12
WD029C0700	7,0	.2756	76	114	8	WD028C1070	10,7	.4213	71	118	12
WD029C0710	7,1	.2795	76	114	8	WD028C1080	10,8	.4252	71	118	12
WD029C0720	7,2	.2835	76	114	8	WD028C1090	10,9	.4291	71	118	12
WD029C0730	7,3	.2874	76	114	8	WD028C1100	11,0	.4331	71	118	12
WD029C0740	7,4	.2913	76	114	8	WD028C1110	11,1	.4370	71	118	12
WD029C0750	7,5	.2953	76	114	8	WD028C1120	11,2	.4409	71	118	12
WD029C0760	7,6	.2992	76	114	8	WD028C1130	11,3	.4449	71	118	12
WD029C0770	7,7	.3031	76	114	8	WD028C1140	11,4	.4488	71	118	12
WD029C0780	7,8	.3071	76	114	8	WD028C1150	11,5	.4528	71	118	12
WD029C0790	7,9	.3110	76	114	8	WD028C1160	11,6	.4567	71	118	12
WD029C0800	8,0	.3150	76	114	8	WD028C1170	11,7	.4606	71	118	12
WD029C0810	8,1	.3189	95	142	10	WD028C1180	11,8	.4646	71	118	12
WD029C0820	8,2	.3228	95	142	10	WD028C1190	11,9	.4685	71	118	12
WD029C0830	8,3	.3268	95	142	10	WD028C1200	12,0	.4724	71	118	12
WD029C0840	8,4	.3307	95	142	10	WD028C1250	12,5	.4921	77	124	14
WD029C0850	8,5	.3346	95	142	10	WD028C1300	13,0	.5118	77	124	14
WD029C0860	8,6	.3386	95	142	10						

Keyway End Mill 620-01

HSS-Co



Work Material: Steel, cast iron, stainless steel and copper

EDP#	D [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
620010100	01,00	2,5	47	6
620010150	01,50	3	47	6
620010200	02,00	4	48	6
620010250	02,50	5	49	6
620010300	03,00	5	49	6
620010350	03,50	6	50	6
620010400	04,00	7	51	6
620010450	04,50	7	51	6
620010500	05,00	8	52	6
620010550	05,50	8	52	6
620010600	06,00	8	52	6
620010650	06,50	10	60	10
620010700	07,00	10	60	10
620010750	07,50	10	60	10
620010800	08,00	11	61	10
620010850	08,50	11	61	10
620010900	09,00	11	61	10
620010950	09,50	11	61	10
620011000	10,00	13	63	10
620011050	10,50	13	70	12
620011100	11,00	13	70	12
620011150	11,50	13	73	12
620011200	12,00	16	73	12
620011250	12,50	16	73	12

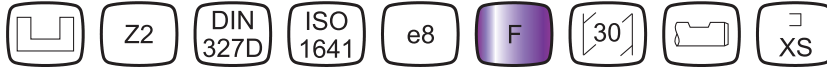
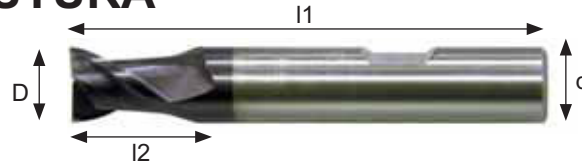
EDP#	D [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
620011300	13,00	16	73	12
620011350	13,50	16	73	12
620011400	14,00	16	73	12
620011450	14,50	16	73	12
620011500	15,00	16	73	12
620011550	15,50	19	79	16
620011600	16,00	19	79	16
620011650	16,50	19	79	16
620011700	17,00	19	79	16
620011750	17,50	19	79	16
620011800	18,00	19	79	16
620011850	18,50	19	79	16
620011900	19,00	19	79	16
620011950	19,50	22	88	20
620012000	20,00	22	88	20
620012200	22,00	22	88	20
620012400	24,00	26	102	25
620012500	25,00	26	102	25
620012600	26,00	26	102	25
620012800	28,00	26	102	25
620013000	30,00	26	102	25
620013200	32,00	32	112	32
620013600	36,00	32	112	32
620014000	40,00	38	130	40

END
MILLS

HSS
-Co

Keyway End Mill 620-41, FUTURA

HSS-Co



Work Material: Steel, cast iron, stainless steel

EDP#	D [mm]	L2 [mm]	L1 [mm]	d h6 [mm]
620410100	01,00	2,5	47	6
620410150	01,50	3	47	6
620410200	02,00	4	48	6
620410250	02,50	5	49	6
620410300	03,00	5	49	6
620410350	03,50	6	50	6
620410400	04,00	7	51	6
620410450	04,50	7	51	6
620410500	05,00	8	52	6
620410550	05,50	8	52	6
620410600	06,00	8	52	6
620410650	06,50	10	60	10
620410700	07,00	10	60	10
620410750	07,50	10	60	10
620410800	08,00	11	61	10
620410850	08,50	11	61	10
620410900	09,00	11	61	10
620410950	09,50	11	61	10
620411000	10,00	13	63	10
620411050	10,50	13	70	12
620411100	11,00	13	70	12
620411150	11,50	13	73	12
620411200	12,00	16	73	12
620411250	12,50	16	73	12

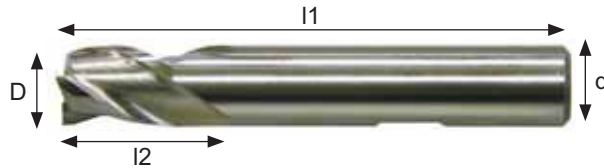
EDP#	D [mm]	L2 [mm]	L1 [mm]	d h6 [mm]
620411300	13,00	16	73	12
620411350	13,50	16	73	12
620411400	14,00	16	73	12
620411450	14,50	16	73	12
620411500	15,00	16	73	12
620411550	15,50	19	79	16
620411600	16,00	19	79	16
620411650	16,50	19	79	16
620411700	17,00	19	79	16
620411750	17,50	19	79	16
620411800	18,00	19	79	16
620411850	18,50	19	79	16
620411900	19,00	19	79	16
620411950	19,50	22	88	20
620412000	20,00	22	88	20
620412200	22,00	22	88	20
620412400	24,00	26	102	25
620412500	25,00	26	102	25
620412600	26,00	26	102	25
620412800	28,00	26	102	25
620413000	30,00	26	102	25
620413200	32,00	32	112	32
620413600	36,00	32	112	32
620414000	40,00	38	130	40

END MILLS

HSS-Co

MaxiMax 631-01

HSS-Co



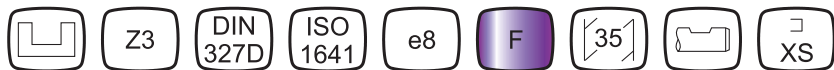
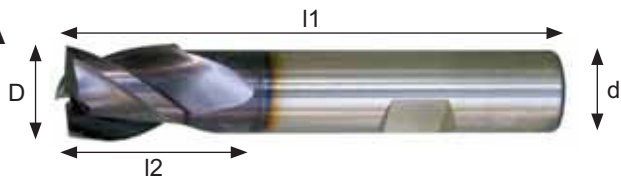
Work Material: Steel, cast iron, stainless steel and copper

EDP#	D [mm]	L2 [mm]	L1 [mm]	d h6 [mm]
631010200	02,00	4	48	6
631010300	03,00	5	49	6
631010400	04,00	7	51	6
631010500	05,00	8	52	6
631010600	06,00	8	52	6
631010700	07,00	10	60	10
631010800	08,00	11	61	10
631010900	09,00	11	61	10
631011000	10,00	13	63	10
631011100	11,00	13	70	12
631011200	12,00	16	73	12
631011300	13,00	16	73	12

EDP#	D [mm]	L2 [mm]	L1 [mm]	d h6 [mm]
631011400	14,00	16	73	12
631011500	15,00	16	73	12
631011600	16,00	19	79	16
631011800	18,00	19	79	16
631012000	20,00	22	88	20
631012200	22,00	22	88	20
631012400	24,00	26	102	25
631012500	25,00	26	102	25
631012800	28,00	26	102	25
631013000	30,00	26	102	25
631013200	32,00	32	112	32

MaxiMax 631-41, FUTURA

HSS-Co



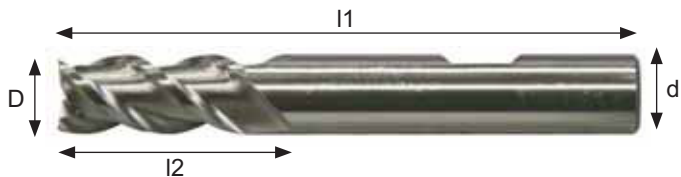
Work Material: Steel, cast iron, stainless steel

EDP#	D [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
631410200	02,00	4	48	6
631410300	03,00	5	49	6
631410400	04,00	7	51	6
631410500	05,00	8	52	6
631410600	06,00	8	52	6
631410700	07,00	10	60	10
631410800	08,00	11	61	10
631410900	09,00	11	61	10
631411000	10,00	13	63	10
631411100	11,00	13	70	12
631411200	12,00	16	73	12
631411300	13,00	16	73	12

EDP#	D [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
631411400	14,00	16	73	12
631411500	15,00	16	73	12
631411600	16,00	19	79	16
631411800	18,00	19	79	16
631412000	20,00	22	88	20
631412200	22,00	22	88	20
631412400	24,00	26	102	25
631412500	25,00	26	102	25
631412800	28,00	26	102	25
631413000	30,00	26	102	25
631413200	32,00	32	112	32

MaxiMax 633-01

HSS-Co



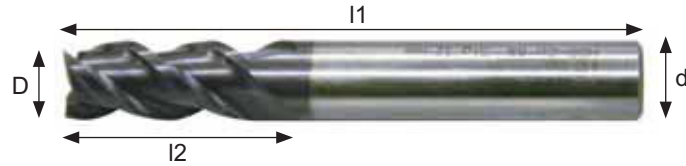
Work Material: Steel, cast iron, stainless steel and copper

EDP#	D [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
633010300	03,00	8	52	6
633010350	03,50	10	54	6
633010400	04,00	11	55	6
633010450	04,50	11	55	6
633010500	05,00	13	57	6
633010550	05,50	13	57	6
633010600	06,00	13	57	6
633010650	06,50	16	66	10
633010700	07,00	16	66	10
633010750	07,50	16	66	10
633010800	08,00	19	69	10
633010850	08,50	19	69	10

EDP#	D [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
633010900	09,00	19	69	10
633010950	09,50	19	69	10
633011000	10,00	22	72	10
633011100	11,00	22	72	12
633011200	12,00	26	83	12
633011400	14,00	26	83	12
633011600	16,00	32	92	16
633011800	18,00	32	92	16
633012000	20,00	38	104	20
633012200	22,00	38	104	20
633012400	24,00	45	121	25
633012500	25,00	45	121	25
633013200	32,00	53	133	32

MaxiMax 633-41, FUTURA

HSS-Co



Work Material: Steel, cast iron, stainless steel

EDP#	D [mm]	L2 [mm]	L1 [mm]	d h6 [mm]
633410300	03,00	8	52	6
633410350	03,50	10	54	6
633410400	04,00	11	55	6
633410450	04,50	11	55	6
633410500	05,00	13	57	6
633410550	05,50	13	57	6
633410600	06,00	13	57	6
633410650	06,50	16	66	10
633410700	07,00	16	66	10
633410750	07,50	16	66	10
633410800	08,00	19	69	10
633410850	08,50	19	69	10

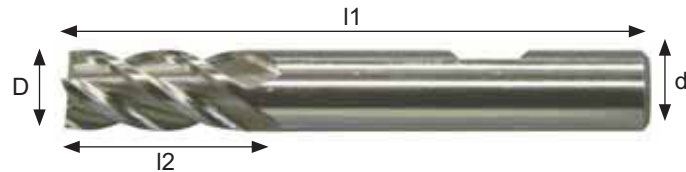
EDP#	D [mm]	L2 [mm]	L1 [mm]	d h6 [mm]
633410900	09,00	19	69	10
633410950	09,50	19	69	10
633411000	10,00	22	72	10
633411100	11,00	22	72	12
633411200	12,00	26	83	12
633411400	14,00	26	83	12
633411600	16,00	32	92	16
633411800	18,00	32	92	16
633412000	20,00	38	104	20
633412200	22,00	38	104	20
633412400	24,00	45	121	25
633412500	25,00	45	121	25
633413200	32,00	53	133	32

END
MILLS

HSS
-Co

MaxiMax 642-01

HSS-Co



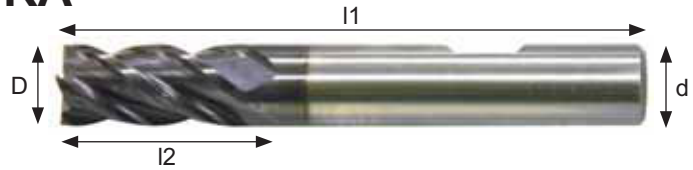
Work Material: Steel, cast iron, stainless steel and copper

EDP#	D k10 [mm]	L2 [mm]	L1 [mm]	d h6 [mm]
642010200	02,00	7	51	6
642010250	02,50	8	52	6
642010300	03,00	8	52	6
642010350	03,50	10	54	6
642010400	04,00	11	55	6
642010450	04,50	11	55	6
642010500	05,00	13	57	6
642010600	06,00	13	57	6
642010700	07,00	16	66	10
642010800	08,00	19	69	10
642010900	09,00	19	69	10
642011000	10,00	22	72	10
642011100	11,00	22	79	12
642011200	12,00	26	83	12
642011300	13,00	26	83	12

EDP#	D k10 [mm]	L2 [mm]	L1 [mm]	d h6 [mm]
642011400	14,00	26	83	12
642011500	15,00	26	83	12
642011600	16,00	32	92	16
642011800	18,00	32	92	16
642012000	20,00	38	104	20
642012200	22,00	38	104	20
642012400	24,00	45	121	25
642012500	25,00	45	121	25
642012800	28,00	45	121	25
642013000	30,00	45	121	25
642013200	32,00	53	133	32
642013600	36,00	53	133	32
642014000	40,00	63	155	40

MaxiMax 642-41, FUTURA

HSS-Co



Work Material: steel, cast iron and stainless steel

EDP#	D k10 [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
642410200	02,00	7	51	6
642410250	02,50	8	52	6
642410300	03,00	8	52	6
642410350	03,50	10	54	6
642410400	04,00	11	55	6
642410450	04,50	11	55	6
642410500	05,00	13	57	6
642410600	06,00	13	57	6
642410700	07,00	16	66	10
642410800	08,00	19	69	10
642410900	09,00	19	69	10
642411000	10,00	22	72	10
642411100	11,00	22	79	12
642411200	12,00	26	83	12
642411300	13,00	26	83	12

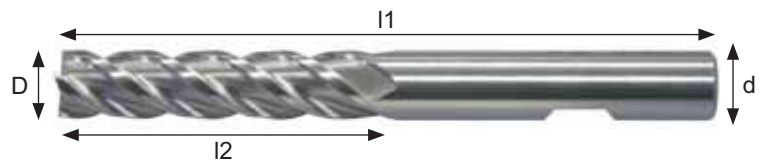
EDP#	D k10 [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
642411400	14,00	26	83	12
642411500	15,00	26	83	12
642411600	16,00	32	92	16
642411800	18,00	32	92	16
642412000	20,00	38	104	20
642412200	22,00	38	104	20
642412400	24,00	45	121	25
642412500	25,00	45	121	25
642412800	28,00	45	121	25
642413000	30,00	45	121	25
642413200	32,00	53	133	32
642413600	36,00	53	133	32
642414000	40,00	63	155	40

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MaxiMax 643-01

HSS-Co



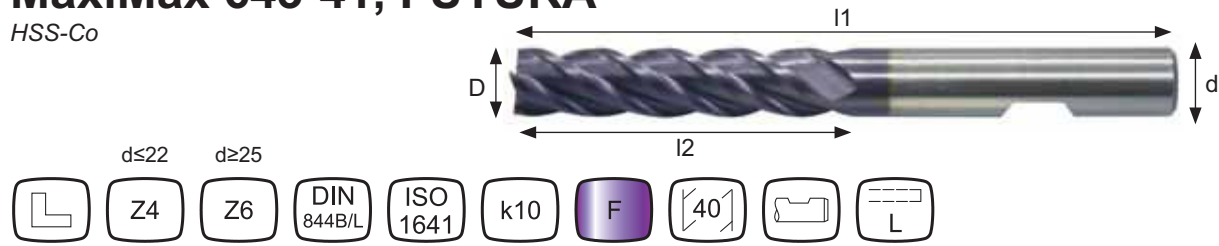
Work Material: Steel, cast iron, stainless steel and copper

EDP#	D k10 [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
643010400	04,00	19	63	6
643010500	05,00	24	68	6
643010600	06,00	24	68	6
643010800	08,00	38	88	10
643011000	10,00	45	95	10
643011200	12,00	53	110	12
643011400	14,00	53	110	12
643011600	16,00	63	123	16
643011800	18,00	63	123	16

EDP#	D k10 [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
643012000	20,00	75	141	20
643012200	22,00	75	141	20
643012500	25,00	90	166	25
643012800	28,00	90	166	25
643013000	30,00	90	166	25
643013200	32,00	106	186	32
643013600	36,00	106	186	32
643014000	40,00	125	217	40

MaxiMax 643-41, FUTURA

HSS-Co



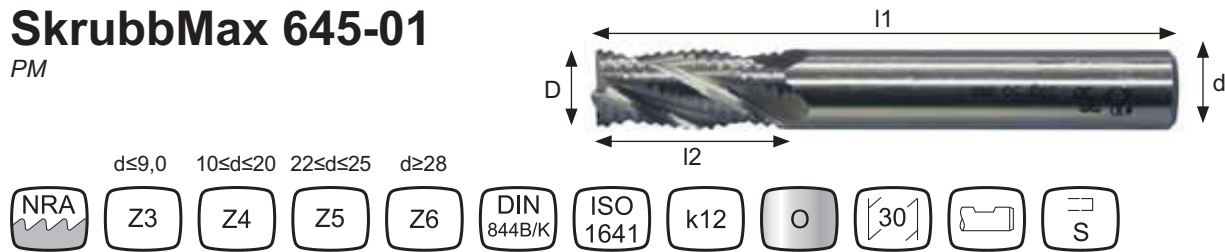
Work Material: steel, cast iron and stainless steel

EDP#	D k10 [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
643410400	04,00	19	63	6
643410500	05,00	24	68	6
643410600	06,00	24	68	6
643410800	08,00	38	88	10
643411000	10,00	45	95	10
643411200	12,00	53	110	12
643411400	14,00	53	110	12
643411600	16,00	63	123	16
643411800	18,00	63	123	16

EDP#	D k10 [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
643412000	20,00	75	141	20
643412200	22,00	75	141	20
643412500	25,00	90	166	25
643412800	28,00	90	166	25
643413000	30,00	90	166	25
643413200	32,00	106	186	32
643413600	36,00	106	186	32
643414000	40,00	125	217	40

SkrubbMax 645-01

PM



Work Material: steel, cast iron, stainless steel and aluminum

EDP#	D k12 [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
645010600	06,00	13	57	6
645010700	07,00	16	66	10
645010800	08,00	19	69	10
645010900	09,00	19	69	10
645011000	10,00	22	72	10
645011200	12,00	26	83	12
645011400	14,00	26	83	12
645011600	16,00	32	92	16
645011800	18,00	32	92	16
645012000	20,00	38	104	20

EDP#	D k12 [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
645012200	22,00	38	104	20
645012500	25,00	45	121	25
645012800	28,00	45	121	25
645013000	30,00	45	121	25
645013200	32,00	53	133	32
645013600	36,00	53	133	32
645014000	40,00	63	155	40

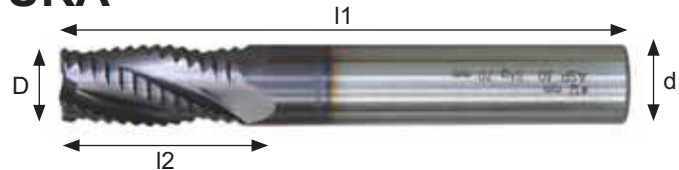
Center cutting edge $\leq$ diameter 20,0 mm

END
MILLS

HSS
-Co

SkrubbMax 645-41, FUTURA

PM



Work Material: steel, cast iron and stainless steel

EDP#	D k12 [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
645410600	06,00	13	57	6
645410700	07,00	16	66	10
645410800	08,00	19	69	10
645410900	09,00	19	69	10
645411000	10,00	22	72	10
645411200	12,00	26	83	12
645411400	14,00	26	83	12
645411600	16,00	32	92	16
645411800	18,00	32	92	16

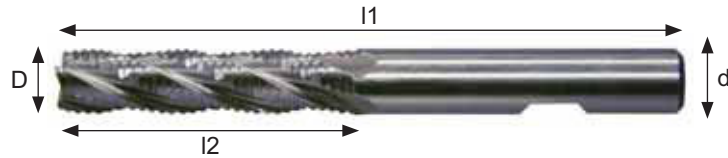
EDP#	D k12 [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
645412000	20,00	38	104	20
645412200	22,00	38	104	20
645412500	25,00	45	121	25
645412800	28,00	45	121	25
645413000	30,00	45	121	25
645413200	32,00	53	133	32
645413600	36,00	53	133	32
645414000	40,00	63	155	40

Center cutting edge $\leq$ diameter 20,0 mm

END
MILLS

SkrubbMax 646-01

PM



Work Material: Steel, cast iron, stainless steel and copper

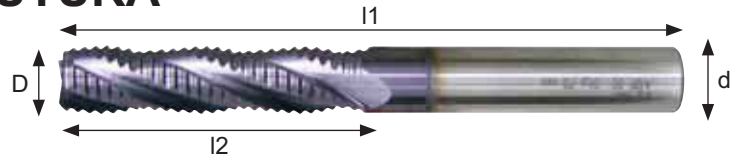
EDP#	D k12 [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
646010800	08,00	38	88	10
646011000	10,00	45	95	10
646011200	12,00	53	110	12
646011400	14,00	53	110	12
646011600	16,00	63	123	16
646011800	18,00	63	123	16

Center cutting edge $\leq$ diameter 20,0 mm

EDP#	D k12 [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
646012000	20,00	75	141	20
646012200	22,00	75	141	20
646012500	25,00	90	166	25
646012800	28,00	90	166	25
646013000	30,00	90	166	25
646013200	32,00	106	186	32
646013600	36,00	106	186	32
646014000	40,00	125	217	40

SkrubbMax 646-41, FUTURA

PM



Work Material: steel, cast iron and stainless steel

EDP#	D k12 [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
646410800	08,00	38	88	10
646411000	10,00	45	95	10
646411200	12,00	53	110	12
646411400	14,00	53	110	12
646411600	16,00	63	123	16
646411800	18,00	63	123	16

Center cutting edge ≤ diameter 20,0 mm

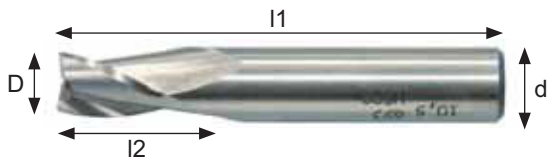
EDP#	D k12 [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
646412000	20,00	75	141	20
646412200	22,00	75	141	20
646412500	25,00	90	166	25
646412800	28,00	90	166	25
646413000	30,00	90	166	25
646413200	32,00	106	186	32
646413600	36,00	106	186	32
646414000	40,00	125	217	40

END
MILLS

HSS
-Co

EnMax 693-01

HSS-Co



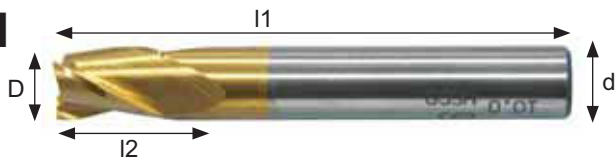
Work Material: Steel and cast iron

EDP#	D [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
693010100	01,00	2,0	34	6
693010150	01,50	3,0	34	6
693010200	02,00	4,0	35	6
693010250	02,50	5,0	36	6
693010300	03,00	5,0	36	6
693010350	03,50	6,0	37	6
693010400	04,00	7,0	38	6
693010450	04,50	7,0	38	6
693010500	05,00	8,0	39	6

EDP#	D [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
693010550	05,50	8,0	39	6
693010600	06,00	8,0	39	6
693010650	06,50	10,0	50	8
693010700	07,00	10,0	42	8
693010750	07,50	10,0	42	8
693010800	08,00	11,0	43	8
693010900	09,00	11,0	48	10
693011000	10,00	13,0	50	10
693011200	12,00	16,0	58	12

EnMax 693-11, TiN

HSS-Co



Work Material: Steel and cast iron

EDP#	D [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
693110100	01,00	2,0	34	6
693110150	01,50	3,0	34	6
693110200	02,00	4,0	35	6
693110250	02,50	5,0	36	6
693110300	03,00	5,0	36	6
693110350	03,50	6,0	37	6
693110400	04,00	7,0	38	6
693110450	04,50	7,0	38	6
693110500	05,00	8,0	39	6

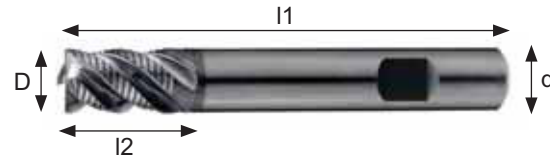
EDP#	D [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
693110550	05,50	8,0	39	6
693110600	06,00	8,0	39	6
693110650	06,50	10,0	50	8
693110700	07,00	10,0	42	8
693110750	07,50	10,0	42	8
693110800	08,00	11,0	43	8
693110900	09,00	12,0	48	10
693111000	10,00	13,0	50	10
693111200	12,00	16,0	58	12

W485 Carbide roughing End Mill

Solid micro grain Carbide, Multiple Helix, Stub length



Work Material: Steel alloys and cast iron



EDP#	Corner radius [inch]	D [inch]	l2 [inch]	l1 [inch]	d h6 [inch]	Number of flutes
WS48506350	R.020	1/4	3/8	2	1/4	4
WS48507938	R.020	5/16	7/16	2	5/16	4
WS48509525	R.020	3/8	1/2	2-1/4	3/8	4
WS48512700	R.020	1/2	5/8	2-1/2	1/2	4
WS48515875	R.040	5/8	3/4	3	5/8	5
WS48519050	R.040	3/4	1	3-1/4	3/4	5
WS48525400	R.040	1	1-1/4	4	1	5

Inch

Weldon/Flat

EDP#	Corner radius [inch]	D [inch]	l2 [inch]	l1 [inch]	d h6 [inch]	Number of flutes
WS48609525	R.020	3/8	1/2	2-1/4	3/8	4
WS48612700	R.020	1/2	5/8	2-1/2	1/2	4
WS48615875	R.040	5/8	3/4	3	5/8	5
WS48619050	R.040	3/4	1	3-1/4	3/4	5
WS48625400	R.040	1	1-1/4	4	1	5

Inch

EDP#	Corner radius [mm]	D [mm]	l2 [mm]	l1 [mm]	d h6 [mm]	Number of flutes
WS4850600	R0.5	6,00	9	57	6	4
WS4850800	R0.5	8,00	12	63	8	4
WS4851000	R0.5	10,00	15	72	10	4
WS4851200	R0.5	12,00	18	83	12	4
WS4851600	R0.1	16,00	24	92	16	5
WS4852000	R0.1	20,00	30	104	20	5

Metric

Weldon/Flat

EDP#	Corner radius [mm]	D [mm]	l2 [mm]	l1 [mm]	d h6 [mm]	Number of flutes
WS4860600	R0.5	6,00	9	57	6	4
WS4860800	R0.5	8,00	12	63	8	4
WS4861000	R0.5	10,00	15	72	10	4
WS4861200	R0.5	12,00	18	83	12	4
WS4861600	R0.1	16,00	24	92	16	5
WS4862000	R0.1	20,00	30	104	20	5

Metric

END MILLS

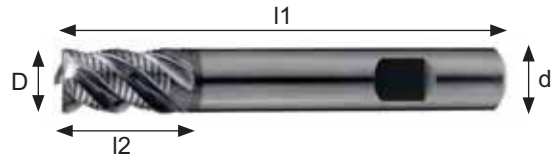
CARBIDE

W485 Carbid roughing End Mill

Solid micro grain Carbide, Multiple Helix



Work Material: Steel alloys and cast iron



EDP#	Corner radius [inch]	D [inch]	L2 [inch]	L1 [inch]	d h6 [inch]	Number of flutes
WM48506350	R.020	1/4	5/8	2-1/2	1/4	4
WM48507938	R.020	5/16	3/4	2-1/2	5/16	4
WM48509525	R.020	3/8	7/8	2-1/2	3/8	4
WM48512700	R.020	1/2	1	3	1/2	4
WM48515875	R.040	5/8	1-1/4	3-1/2	5/8	5
WM48519050	R.040	3/4	1-5/8	4	3/4	5
WM48525400	R.040	1	1-3/4	4-1/4	1	5

Inch

Weldon/Flat

EDP#	Corner radius [inch]	D [inch]	L2 [inch]	L1 [inch]	d h6 [inch]	Number of flutes
WM48609525	R.020	3/8	7/8	2-1/2	3/8	4
WM48612700	R.020	1/2	1	3	1/2	4
WM48615875	R.040	5/8	1-1/4	3-1/2	5/8	5
WM48619050	R.040	3/4	1-5/8	4	3/4	5
WM48625400	R.040	1	1-3/4	4-1/4	1	5

Inch

EDP#	Corner radius [mm]	D [mm]	L2 [mm]	L1 [mm]	d h6 [mm]	Number of flutes
WM4850600	R0.5	6,00	12	57	6	4
WM4850800	R0.5	8,00	16	63	8	4
WM4851000	R0.5	10,00	20	72	10	4
WM4851200	R0.5	12,00	24	83	12	4
WM4851600	R0.1	16,00	32	92	16	5
WM4852000	R0.1	20,00	40	104	20	5

Metric

Weldon/Flat

EDP#	Corner radius [mm]	D [mm]	L2 [mm]	L1 [mm]	d h6 [mm]	Number of flutes
WM4860600	R0.5	6,00	12	57	6	4
WM4860800	R0.5	8,00	16	63	8	4
WM4861000	R0.5	10,00	20	72	10	4
WM4861200	R0.5	12,00	24	83	12	4
WM4861600	R0.1	16,00	32	92	16	5
WM4862000	R0.1	20,00	40	104	20	5

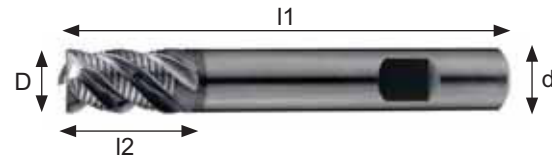
Metric

END MILLS

CARBIDE

W485 Carbide roughing End Mill

Solid micro grain Carbide, Multiple Helix extra long



Work Material: Steel alloys and cast iron

EDP#	Corner radius [inch]	D [inch]	l2 [inch]	l1 [inch]	l3 [inch]	d h6 [inch]	Number of flutes
WL48506350	R.020	1/4	3/8	2-1/2	7/8	1/4	4
WL48507938	R.020	5/16	7/16	2-1/2	1	5/16	4
WL48509525	R.020	3/8	1/2	2-3/4	1	3/8	4
WL48512700	R.020	1/2	5/8	3-1/4	1-1/4	1/2	4
WL48515875	R.040	5/8	3/4	4	2	5/8	5
WL48519050	R.040	3/4	1	4-1/2	2-3/8	3/4	5
WM48525400	R.040	1	1-3/4	4-1/4		1	5

Inch

Weldon/Flat

EDP#	Corner radius [inch]	D [inch]	l2 [inch]	l1 [inch]	l3 [inch]	d h6 [inch]	Number of flutes
WL48609525	R.020	3/8	1/2	2-3/4	1	3/8	4
WL48612700	R.020	1/2	5/8	3-1/4	1-1/4	1/2	4
WL48615875	R.040	5/8	3/4	4	2	5/8	5

Inch

END MILLS

CARBIDE

EDP#	Corner radius [mm]	D [mm]	l2 [mm]	l1 [mm]	l3 [mm]	d h6 [mm]	Number of flutes
WL4850600	R0.5	6,00	9	57	18	6,00	4
WL4850800	R0.5	8,00	12	63	24	8,00	4
WL4851000	R0.5	10,00	15	72	30	10,00	4
WL4851200	R0.5	12,00	18	83	36	12,00	4
WL4851600	R0.1	16,00	24	100	48	16,00	5
WL4852000	R0.1	20,00	30	110	60	20,00	5

Metric

Weldon/Flat

EDP#	Corner radius [mm]	D [mm]	l2 [mm]	l1 [mm]	l3 [mm]	d h6 [mm]	Number of flutes
WL4860600	R0.5	6,00	9	57	18	6,00	4
WL4860800	R0.5	8,00	12	63	24	8,00	4
WL4861000	R0.5	10,00	15	72	30	10,00	4
WL4861200	R0.5	12,00	18	83	36	12,00	4
WL4861600	R0.1	16,00	24	100	48	16,00	5
WL4862000	R0.1	20,00	30	110	60	20,00	5

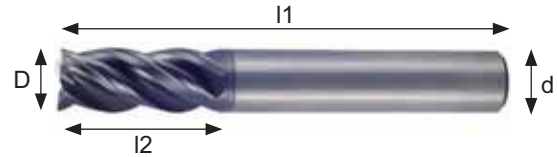
Metric

W480 Carbid End Mill

Solid micro grain Carbide, Multiple Helix. Square end



Work Material: Steel alloys, cast iron, stainless steel, High nickel alloys



Weldon/Flat

EDP#	D [inch]	L2 [inch]	L1 [inch]	d h6 [inch]
WS48003175	1/8	1/8	1-1/2	1/8
WS48003969	5/32	3/16	2	3/16
WS48004763	3/16	3/16	2	3/16
WS48005556	7/32	1/4	2	1/4
WS48006350	1/4	3/8	2	1/4
WS48007144	9/32	5/8	2-1/2	5/16
WS48007938	5/16	7/16	2	5/16
WS48008731	11/32	1/2	2-1/2	3/8
WS48009525	3/8	1/2	2-1/2	3/8
WS48011113	7/16	5/8	2-1/2	7/16
WS48012700	1/2	5/8	2-1/2	1/2
WS48015875	5/8	3/4	3	5/8
WS48019050	3/4	3/4	3	3/4
WS48025400	1	1	4	1
WM48003175	1/8	3/8	1-1/2	1/8
WM48003969	5/32	7/16	2	3/16
WM48004763	3/16	7/16	2	3/16
WM48005556	7/32	7/16	2-1/2	1/4
WM48006350	1/4	3/4	2-1/2	1/4
WM48007938	5/16	13/16	2-1/2	5/16
WM48009525	3/8	7/8	2-1/2	3/8
WM48011113	7/16	1	2-3/4	7/16
WM48012700	1/2	1	3	1/2
WM48015875	5/8	1-1/4	3-1/2	5/8
WM48019050	3/4	1-1/2	4	3/4
WM48025400	1	1-1/2	4	1
WL48012700	1/2	1-1/4	3-1/2	1/2
WL48025400	1	2	5	1

Inch

EDP#	D [inch]	L2 [inch]	L1 [inch]	d h6 [inch]
WS48108731	11/32	1/2	2-1/2	3/8
WS48109525	3/8	1/2	2-1/2	3/8
WS48111113	7/16	5/8	2-1/2	7/16
WS48112700	1/2	5/8	2-1/2	1/2
WS48115875	5/8	3/4	3	5/8
WS48119050	3/4	3/4	3	3/4
WS48125400	1	1	4	1
WM48109525	3/8	7/8	2-1/2	3/8
WM48111113	7/16	1	2-3/4	7/16
WM48112700	1/2	1	3	1/2
WM48115875	5/8	1-1/4	3-1/2	5/8
WM48119050	3/4	1-1/2	4	3/4
WM48125400	1	1-1/2	4	1
WL48112700	1/2	1-1/4	3-1/2	1/2
WL48125400	1	2	5	1

Inch

Weldon/Flat

EDP#	D [mm]	L2 [mm]	L1 [mm]	d h6 [mm]
WM4800300	3,0	8	57	6
WM4800400	4,0	11	57	6
WM4800500	5,0	13	57	6
WM4800600	6,0	13	57	6
WM4800800	8,0	19	63	8
WM4801000	10,0	22	72	10
WM4801200	12,0	26	83	12
WM4801400	14,0	26	83	14
WM4801600	16,0	32	92	16
WM4801800	18,0	32	92	18
WM4802000	20,0	38	104	20
WM4802500	25,0	38	104	25

Metric

EDP#	D [mm]	L2 [mm]	L1 [mm]	d h6 [mm]
WM4810300	3,0	8	57	6
WM4810400	4,0	11	57	6
WM4810500	5,0	13	57	6
WM4810600	6,0	13	57	6
WM4810800	8,0	19	63	8
WM4811000	10,0	22	72	10
WM4811200	12,0	26	83	12
WM4811400	14,0	26	83	14
WM4811600	16,0	32	92	16
WM4811800	18,0	32	92	18
WM4812000	20,0	38	104	20
WM4812500	25,0	38	104	25

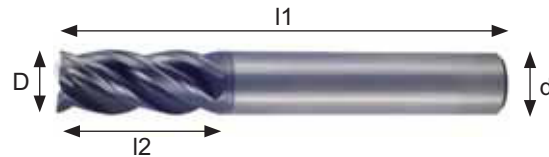
Metric

W480 Carbid End Mill

Solid micro grain Carbide, Multiple Helix, Corner radius



Work Material: Steel alloys, cast iron, stainless steel, High nickel alloys



Inch

EDP#	Corner radius [inch]	D [inch]	L2 [inch]	L1 [inch]	d h6 [inch]
WS48003175.010	R.010	1/8	1/8	1-1/2	1/8
WS48004763.010	R.010	3/16	3/16	2	3/16
WS48006350.010	R.010	1/4	3/8	2	1/4
WS48006350.030	R.030	1/4	3/8	2	1/4
WS48006350.060	R.060	1/4	3/8	2	1/4
WS48007938.030	R.030	5/16	7/16	2	5/16
WS48009525.010	R.010	3/8	1/2	2-1/2	3/8
WS48009525.030	R.030	3/8	1/2	2-1/2	3/8
WS48009525.060	R.060	3/8	1/2	2-1/2	3/8
WS48011113.015	R.015	7/16	5/8	2-1/2	7/16
WS48011113.030	R.030	7/16	5/8	2-1/2	7/16
WS48012700.010	R.010	1/2	5/8	2-1/2	1/2
WS48012700.015	R.015	1/2	5/8	2-1/2	1/2
WS48012700.030	R.030	1/2	5/8	2-1/2	1/2
WS48012700.060	R.060	1/2	5/8	2-1/2	1/2
WS48015875.010	R.010	5/8	3/4	3	5/8
WS48015875.030	R.030	5/8	3/4	3	5/8
WS48015875.060	R.060	5/8	3/4	3	5/8
WS48019050.030	R.030	3/4	3/4	3	3/4
WS48019050.060	R.060	3/4	3/4	3	3/4
WS48025400.015	R.015	1	1	4	1
WS48025400.030	R.030	1	1	4	1
WS48025400.060	R.060	1	1	4	1
WM48003175.010	R.010	1/8	3/8	1-1/2	1/8
WM48003175.030	R.030	1/8	3/8	1-1/2	1/8
WM48004763.010	R.010	3/16	7/16	2	3/16
WM48004763.030	R.030	3/16	7/16	2	3/16
WM48006350.010	R.010	1/4	3/4	2-1/2	1/4
WM48006350.015	R.015	1/4	3/4	2-1/2	1/4
WM48006350.030	R.030	1/4	3/4	2-1/2	1/4
WM48007938.010	R.010	5/16	13/16	2-1/2	5/16
WM48007938.030	R.030	5/16	13/16	2-1/2	5/16
WM48007938.060	R.060	5/16	13/16	2-1/2	5/16
WM48009525.010	R.010	3/8	7/8	2-1/2	3/8

EDP#	Corner radius [inch]	D [inch]	L2 [inch]	L1 [inch]	d h6 [inch]
WM48009525.030	R.030	3/8	7/8	2-1/2	3/8
WM48009525.060	R.060	3/8	7/8	2-1/2	3/8
WM48011113.010	R.010	7/16	1	2-3/4	7/16
WM48011113.030	R.030	7/16	1	2-3/4	7/16
WM48011113.060	R.060	7/16	1	2-3/4	7/16
WM48012700.010	R.010	1/2	1	3	1/2
WM48012700.030	R.030	1/2	1	3	1/2
WM48012700.060	R.060	1/2	1	3	1/2
WM48012700.125	R.125	1/2	1	3	1/2
WM48015875.010	R.010	5/8	1-1/4	3-1/2	5/8
WM48015875.015	R.015	5/8	1-1/4	3-1/2	5/8
WM48015875.030	R.030	5/8	1-1/4	3-1/2	5/8
WM48015875.060	R.060	5/8	1-1/4	3-1/2	5/8
WM48015875.125	R.125	5/8	1-1/4	3-1/2	5/8
WM48019050.015	R.015	3/4	1-1/2	4	3/4
WM48019050.030	R.030	3/4	1-1/2	4	3/4
WM48019050.060	R.060	3/4	1-1/2	4	3/4
WM48019050.125	R.125	3/4	1-1/2	4	3/4
WM48025400.015	R.015	1	1-1/2	4	1
WM48025400.030	R.030	1	1-1/2	4	1
WM48025400.060	R.060	1	1-1/2	4	1
WM48025400.125	R.125	1	1-1/2	4	1
WL48012700.010	R.010	1/2	1-1/4	3-1/2	1/2
WL48012700.015	R.015	1/2	1-1/4	3-1/2	1/2
WL48012700.030	R.030	1/2	1-1/4	3-1/2	1/2
WL48012700.060	R.060	1/2	1-1/4	3-1/2	1/2
WL48012700.125	R.125	1/2	1-1/4	3-1/2	1/2
WL48025400.015	R.015	1	2	5	1
WL48025400.030	R.030	1	2	5	1
WL48025400.060	R.060	1	2	5	1

END MILLS

CARBIDE

Metric

EDP#	Corner radius [mm]	D [mm]	L2 [mm]	L1 [mm]	d h6 [mm]
WM4800300.03	R0.3	3,0	8	57	6
WM4800300.05	R0.5	3,0	8	57	6
WM4800400.03	R0.3	4,0	11	57	6
WM4800400.05	R0.5	4,0	11	57	6
WM4800500.03	R0.3	5,0	13	57	6
WM4800500.05	R0.5	5,0	13	57	6
WM4800600.03	R0.3	6,0	13	57	6
WM4800600.05	R0.5	6,0	13	57	6
WM4800600.10	R1.0	6,0	13	57	6
WM4800800.05	R0.5	8,0	19	63	8
WM4800800.10	R1.0	8,0	19	63	8
WM4801000.05	R0.5	10,0	22	72	10
WM4801000.10	R1.0	10,0	22	72	10

EDP#	Corner radius [mm]	D [mm]	L2 [mm]	L1 [mm]	d h6 [mm]
WM4801200.05	R0.5	12,0	26	83	12
WM4801200.10	R1.0	12,0	26	83	12
WM4801200.20	R2.0	12,0	26	83	12
WM4801400.05	R0.5	14,0	26	83	14
WM4801600.10	R1.0	16,0	32	92	16
WM4801600.20	R2.0	16,0	32	92	16
WM4801600.30	R3.0	16,0	32	92	16
WM4801800.10	R1.0	18,0	32	92	18
WM4802000.10	R1.0	20,0	38	104	20
WM4802000.20	R2.0	20,0	38	104	20
WM4802000.30	R3.0	20,0	38	104	20
WM4802500.10	R1.0	25,0	38	104	25

W480 Solid Carbide End Mill (Continued)

Solid micro grain Carbide, Multiple Helix, Corner radius

Weldon/Flat

Inch

EDP#	Corner radius [inch]	D [inch]	l2 [inch]	l1 [inch]	d h6 [inch]
WS48109525.010	R.010	3/8	1/2	2-1/2	3/8
WS48109525.030	R.030	3/8	1/2	2-1/2	3/8
WS48109525.060	R.060	3/8	1/2	2-1/2	3/8
WS48111113.015	R.015	7/16	5/8	2-1/2	7/16
WS48111113.030	R.030	7/16	5/8	2-1/2	7/16
WS48112700.010	R.010	1/2	5/8	2-1/2	1/2
WS48112700.015	R.015	1/2	5/8	2-1/2	1/2
WS48112700.030	R.030	1/2	5/8	2-1/2	1/2
WS48112700.060	R.060	1/2	5/8	2-1/2	1/2
WS48115875.010	R.010	5/8	3/4	3	5/8
WS48115875.030	R.030	5/8	3/4	3	5/8
WS48115875.060	R.060	5/8	3/4	3	5/8
WS48119050.030	R.030	3/4	3/4	3	3/4
WS48119050.060	R.060	3/4	3/4	3	3/4
WS48125400.015	R.015	1	1	4	1
WS48125400.030	R.030	1	1	4	1
WS48125400.060	R.060	1	1	4	1
WM48109525.010	R.010	3/8	7/8	2-1/2	3/8
WM48109525.030	R.030	3/8	7/8	2-1/2	3/8
WM48109525.060	R.060	3/8	7/8	2-1/2	3/8
WM48111113.010	R.010	7/16	1	2-3/4	7/16
WM48111113.030	R.030	7/16	1	2-3/4	7/16
WM48111113.060	R.060	7/16	1	2-3/4	7/16
WM48112700.010	R.010	1/2	1	3	1/2
WM48112700.030	R.030	1/2	1	3	1/2
WM48112700.060	R.060	1/2	1	3	1/2
WM48112700.125	R.125	1/2	1	3	1/2
WM48115875.010	R.010	5/8	1-1/4	3-1/2	5/8
WM48115875.015	R.015	5/8	1-1/4	3-1/2	5/8

Inch

EDP#	Corner radius [inch]	D [inch]	l2 [inch]	l1 [inch]	d h6 [inch]
WM48115875.030	R.030	5/8	1-1/4	3-1/2	5/8
WM48115875.060	R.060	5/8	1-1/4	3-1/2	5/8
WM48115875.125	R.125	5/8	1-1/4	3-1/2	5/8
WM48119050.015	R.015	3/4	1-1/2	4	3/4
WM48119050.030	R.030	3/4	1-1/2	4	3/4
WM48119050.060	R.060	3/4	1-1/2	4	3/4
WM48119050.125	R.125	3/4	1-1/2	4	3/4
WM48125400.015	R.015	1	1-1/2	4	1
WM48125400.030	R.030	1	1-1/2	4	1
WM48125400.060	R.060	1	1-1/2	4	1
WM48125400.125	R.125	1	1-1/2	4	1
WL48112700.010	R.010	1/2	1-1/4	3-1/2	1/2
WL48112700.015	R.015	1/2	1-1/4	3-1/2	1/2
WL48112700.030	R.030	1/2	1-1/4	3-1/2	1/2
WL48112700.060	R.060	1/2	1-1/4	3-1/2	1/2
WL48112700.125	R.125	1/2	1-1/4	3-1/2	1/2
WL48125400.015	R.015	1	2	5	1
WL48125400.030	R.030	1	2	5	1
WL48125400.060	R.060	1	2	5	1

END MILLS**CARBIDE**

Weldon/Flat

Metric

EDP#	Corner radius [mm]	D [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
WM4810300.03	R0.3	3,0	8	57	6
WM4810300.05	R0.5	3,0	8	57	6
WM4810400.03	R0.3	4,0	11	57	6
WM4810400.05	R0.5	4,0	11	57	6
WM4810500.03	R0.3	5,0	13	57	6
WM4810500.05	R0.5	5,0	13	57	6
WM4810600.03	R0.3	6,0	13	57	6
WM4810600.05	R0.5	6,0	13	57	6
WM4810600.10	R1.0	6,0	13	57	6
WM4810800.05	R0.5	8,0	19	63	8
WM4810800.10	R1.0	8,0	19	63	8
WM4811000.05	R0.5	10,0	22	72	10
WM4811000.10	R1.0	10,0	22	72	10
WM4811200.05	R0.5	12,0	26	83	12

Metric

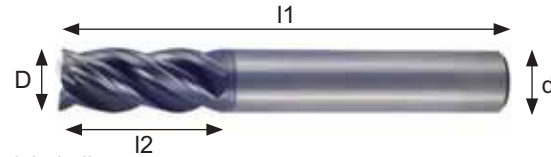
EDP#	Corner radius [mm]	D [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
WM4811200.10	R1.0	12,0	26	83	12
WM4811200.20	R2.0	12,0	26	83	12
WM4811400.05	R0.5	14,0	26	83	14
WM4811600.10	R1.0	16,0	32	92	16
WM4811600.20	R2.0	16,0	32	92	16
WM4811600.30	R3.0	16,0	32	92	16
WM4811800.10	R1.0	18,0	32	92	18
WM4812000.10	R1.0	20,0	38	104	20
WM4812000.20	R2.0	20,0	38	104	20
WM4812000.30	R3.0	20,0	38	104	20
WM4812500.10	R1.0	25,0	38	104	25

W480 Solid Carbide End Mill

Solid micro grain Carbide, Multiple Helix, Corner radius, Stub length



Work Material: Steel alloys, cast iron, stainless steel, High nickel alloys



EDP#	Corner radius [mm]	D [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
WS4800300.03	R0.3	3,0	7	54	6
WS4800300.05	R0.5	3,0	7	54	6
WS4800400.03	R0.3	4,0	8	54	6
WS4800400.05	R0.5	4,0	8	54	6
WS4800500.03	R0.3	5,0	10	54	6
WS4800500.05	R0.5	5,0	10	54	6
WS4800600.03	R0.3	6,0	10	54	6
WS4800600.05	R0.5	6,0	10	54	6
WS4800600.10	R1.0	6,0	10	54	6
WS4800800.05	R0.5	8,0	12	58	8
WS4800800.10	R1.0	8,0	12	58	8
WS4801000.05	R0.5	10,0	14	66	10
WS4801000.10	R1.0	10,0	14	66	10
WS4801200.05	R0.5	12,0	16	73	12
WS4801200.10	R1.0	12,0	16	73	12
WS4801200.20	R2.0	12,0	16	73	12
WS4801400.05	R0.5	14,0	18	75	14
WS4801600.10	R1.0	16,0	22	82	16
WS4801600.20	R2.0	16,0	22	82	16
WS4801600.30	R3.0	16,0	22	82	16
WS4801800.10	R1.0	18,0	24	84	18
WS4802000.10	R1.0	20,0	26	92	20
WS4802000.20	R2.0	20,0	26	92	20
WS4802000.30	R3.0	20,0	26	92	20

Metric

Weldon/Flat

EDP#	Corner radius [mm]	D [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
WS4810300.03	R0.3	3,0	7	54	6
WS4810300.05	R0.5	3,0	7	54	6
WS4810400.03	R0.3	4,0	8	54	6
WS4810400.05	R0.5	4,0	8	54	6
WS4810500.03	R0.3	5,0	10	54	6
WS4810500.05	R0.5	5,0	10	54	6
WS4810600.03	R0.3	6,0	10	54	6
WS4810600.05	R0.5	6,0	10	54	6
WS4810600.10	R1.0	6,0	10	54	6
WS4810800.05	R0.5	8,0	12	58	8
WS4810800.10	R1.0	8,0	12	58	8
WS4811000.05	R0.5	10,0	14	66	10
WS4811000.10	R1.0	10,0	14	66	10
WS4811200.05	R0.5	12,0	16	73	12
WS4811200.10	R1.0	12,0	16	73	12
WS4811200.20	R2.0	12,0	16	73	12
WS4811400.05	R0.5	14,0	18	75	14
WS4811600.10	R1.0	16,0	22	82	16
WS4811600.20	R2.0	16,0	22	82	16
WS4811600.30	R3.0	16,0	22	82	16
WS4811800.10	R1.0	18,0	24	84	18
WS4812000.10	R1.0	20,0	26	92	20
WS4812000.20	R2.0	20,0	26	92	20
WS4812000.30	R3.0	20,0	26	92	20

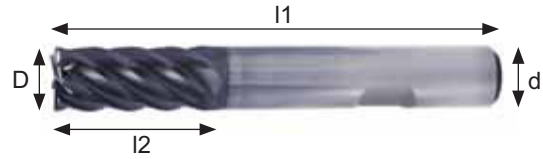
Metric

END MILLS

CARBIDE

W680 Solid Carbide End Mill

Multiple Helix, Square end



Work Material: Steel alloys, cast iron, stainless steel, High nickel alloys

END MILLS

CARBIDE

EDP#	D [inch]	L2 [inch]	L1 [inch]	d h6 [inch]
WS68006350	1/4	3/4	2-1/2	1/4
WS68007938	5/16	3/4	2-1/2	5/16
WS68009525	3/8	1	3	3/8
WS68012700	1/2	1	3-1/4	1/2
WS68015875	5/8	1-1/4	3-1/2	5/8
WS68019050	3/4	1-1/2	4	3/4
WS68025400	1	1-1/2	4	1
WM68006350	1/4	1-1/8	3	1/4
WM68007938	5/16	1-1/4	3	5/16
WM68009525	3/8	1-1/2	4	3/8
WM68012700	1/2	1-1/4	3-1/2	1/2
WM68015875	5/8	2	4	5/8
WM68019050	3/4	3	5-1/2	3/4
WM68025400	1	4	7	1
WL68006350	1/4	1-1/2	4	1/4
WL68007938	5/16	1-5/8	4	5/16
WL68009525	3/8	2	4	3/8
WL68012700	1/2	2	4	1/2
WL68015876	5/8	3	5	5/8
WE68012700	1/2	3	5	1/2

Inch

Weldon/Flat

EDP#	D [inch]	L2 [inch]	L1 [inch]	d h6 [inch]
WS68106350	1/4	3/4	2-1/2	1/4
WS68107938	5/16	3/4	2-1/2	5/16
WS68109525	3/8	1	3	3/8
WS68112700	1/2	1	3-1/4	1/2
WS68115875	5/8	1-1/4	3-1/2	5/8
WS68119050	3/4	1-1/2	4	3/4
WS68125400	1	1-1/2	4	1
WM68106350	1/4	1-1/8	3	1/4
WM68107938	5/16	1-1/4	3	5/16
WM68109525	3/8	1-1/2	4	3/8
WM68112700	1/2	1-1/4	3-1/2	1/2
WM68115875	5/8	2	4	5/8
WM68119050	3/4	3	5-1/2	3/4
WM68125400	1	4	7	1
WL68106350	1/4	1-1/2	4	1/4
WL68107938	5/16	1-5/8	4	5/16
WL68109525	3/8	2	4	3/8
WL68112700	1/2	2	4	1/2
WL68115876	5/8	3	5	5/8
WE68112700	1/2	3	5	1/2

Inch

EDP#	D [mm]	L2 [mm]	L1 [mm]	d h6 [mm]
WM6800600	6,0	13	57	6
WM6800800	8,0	19	63	8
WM6801000	10,0	22	72	10
WM6801200	12,0	26	83	12
WM6801600	16,0	32	92	16
WM6802000	20,0	38	104	20
WM6802500	25,0	44	104	25

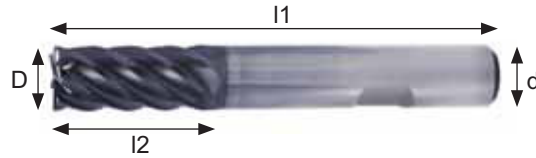
Metric

Weldon/Flat

EDP#	D [mm]	L2 [mm]	L1 [mm]	d h6 [mm]
WM6810600	6,0	13	57	6
WM6810800	8,0	19	63	8
WM6811000	10,0	22	72	10
WM6811200	12,0	26	83	12
WM6811600	16,0	32	92	16
WM6812000	20,0	38	104	20
WM6812500	25,0	44	104	25

Metric

W680 Solid Carbide End Mill

Solid micro grain Carbide, Multiple Helix, Corner radius

Work Material: Steel alloys, cast iron, stainless steel, High nickel alloys

Inch

EDP#	Corner radius [inch]	D [inch]	L2 [inch]	L1 [inch]	d h6 [inch]
WS68006350.015	R.015	1/4	3/4	2-1/2	1/4
WS68007938.015	R.015	5/16	3/4	2-1/2	5/16
WS68009525.015	R.015	3/8	1	3	3/8
WS68009525.030	R.030	3/8	1	3	3/8
WS68009525.060	R.060	3/8	1	3	3/8
WS68012700.015	R.015	1/2	1	3	1/2
WS68012700.030	R.030	1/2	1	3	1/2
WS68012700.060	R.060	1/2	1	3	1/2
WS68015875.030	R.030	5/8	1-1/4	3-1/2	5/8
WS68015875.060	R.060	5/8	1-1/4	3-1/2	5/8
WS68015875.090	R.090	5/8	1-1/4	3-1/2	5/8
WS68015875.120	R.120	5/8	1-1/4	3-1/2	5/8
WS68019050.030	R.030	3/4	1-1/2	4	3/4
WS68019050.060	R.060	3/4	1-1/2	4	3/4
WS68019050.090	R.090	3/4	1-1/2	4	3/4
WS68019050.120	R.120	3/4	1-1/2	4	3/4
WS68025400.030	R.030	1	1-1/2	4	1
WS68025400.060	R.060	1	1-1/2	4	1
WS68025400.090	R.090	1	1-1/2	4	1
WS68025400.120	R.120	1	1-1/2	4	1
WM68006350.015	R.015	1/4	1-1/8	3	1/4
WM68006350.030	R.030	1/4	1-1/8	3	1/4
WM68007938.015	R.015	5/16	1-1/4	3	5/16
WM68007938.030	R.030	5/16	1-1/4	3	5/16
WM68009525.015	R.015	3/8	1-1/2	4	3/8
WM68009525.030	R.030	3/8	1-1/2	4	3/8
WM68009525.060	R.060	3/8	1-1/2	4	3/8
WM68012700.030	R.030	1/2	1-1/4	3-1/2	1/2
WM68012700.060	R.060	1/2	1-1/4	3-1/2	1/2
WM68012700.090	R.090	1/2	1-1/4	3-1/2	1/2
WM68012700.120	R.120	1/2	1-1/4	3-1/2	1/2
WM68015875.030	R.030	5/8	2	4	5/8
WM68015875.060	R.060	5/8	2	4	5/8
WM68015875.090	R.090	5/8	2	4	5/8
WM68015875.120	R.120	5/8	2	4	5/8
WM68019050.030	R.030	3/4	3	5-1/2	3/4
WM68019050.060	R.060	3/4	3	5-1/2	3/4
WM68019050.090	R.090	3/4	3	5-1/2	3/4
WM68019050.120	R.120	3/4	3	5-1/2	3/4
WM68025400.030	R.030	1	4	7	1
WM68025400.060	R.060	1	4	7	1
WM68025400.090	R.090	1	4	7	1
WM68025400.120	R.120	1	4	7	1
WL68006350.015	R.015	1/4	1-1/2	4	1/4
WL68006350.030	R.030	1/4	1-1/2	4	1/4
WL68007938.015	R.015	5/16	1-5/8	4	5/16
WL68007938.030	R.030	5/16	1-5/8	4	5/16
WL68009525.015	R.015	3/8	2	4	3/8
WL68009525.030	R.030	3/8	2	4	3/8
WL68009525.060	R.060	3/8	2	4	3/8
WL68012700.030	R.030	1/2	2	4	1/2

EDP#	Corner radius [inch]	D [inch]	L2 [inch]	L1 [inch]	d h6 [inch]
WL68012700.060	R.060	1/2	2	4	1/2
WL68012700.090	R.090	1/2	2	4	1/2
WL68012700.120	R.120	1/2	2	4	1/2
WL68015875.030	R.030	5/8	3	5	5/8
WL68015875.060	R.060	5/8	3	5	5/8
WL68015875.090	R.090	5/8	3	5	5/8
WL68015875.120	R.120	5/8	3	5	5/8
WE68012700.030	R.030	1/2	3	5	1/2
WE68012700.060	R.060	1/2	3	5	1/2
WE68012700.090	R.090	1/2	3	5	1/2
WE68012700.120	R.120	1/2	3	5	1/2

Weldon/Flat

Inch

EDP#	Corner radius [inch]	D [inch]	L2 [inch]	L1 [inch]	d h6 [inch]
WS68109525.015	R.015	3/8	1	3	3/8
WS68109525.030	R.030	3/8	1	3	3/8
WS68109525.060	R.060	3/8	1	3	3/8
WS68112700.015	R.015	1/2	1	3	1/2
WS68112700.030	R.030	1/2	1	3	1/2
WS68112700.060	R.060	1/2	1	3	1/2
WS68115875.030	R.030	5/8	1-1/4	3-1/2	5/8
WS68115875.060	R.060	5/8	1-1/4	3-1/2	5/8
WS68115875.090	R.090	5/8	1-1/4	3-1/2	5/8
WS68115875.120	R.120	5/8	1-1/4	3-1/2	5/8
WS68119050.030	R.030	3/4	1-1/2	4	3/4
WS68119050.060	R.060	3/4	1-1/2	4	3/4
WS68119050.090	R.090	3/4	1-1/2	4	3/4
WS68119050.120	R.120	3/4	1-1/2	4	3/4
WS68125400.030	R.030	1	1-1/2	4	1
WS68125400.060	R.060	1	1-1/2	4	1
WS68125400.090	R.090	1	1-1/2	4	1
WS68125400.120	R.120	1	1-1/2	4	1
WM68109525.015	R.015	3/8	1-1/2	4	3/8
WM68109525.030	R.030	3/8	1-1/2	4	3/8
WM68109525.060	R.060	3/8	1-1/2	4	3/8
WM68112700.030	R.030	1/2	1-1/4	3-1/2	1/2
WM68112700.060	R.060	1/2	1-1/4	3-1/2	1/2
WM68112700.090	R.090	1/2	1-1/4	3-1/2	1/2
WM68112700.120	R.120	1/2	1-1/4	3-1/2	1/2
WM68115875.030	R.030	5/8	2	4	5/8
WM68115875.060	R.060	5/8	2	4	5/8
WM68115875.090	R.090	5/8	2	4	5/8
WM68115875.120	R.120	5/8	2	4	5/8
WM68119050.030	R.030	3/4	3	5-1/2	3/4
WM68119050.060	R.060	3/4	3	5-1/2	3/4
WM68119050.090	R.090	3/4	3	5-1/2	3/4

END MILLS

CARBIDE

W680 Solid Carbide End Mill (Continued)

Solid micro grain Carbide, Multiple Helix, Corner radius

Weldon/Flat

EDP#	Corner radius [inch]	D [inch]	l2 [inch]	l1 [inch]	d h6 [inch]
WM68119050.120	R.120	3/4	3	5-1/2	3/4
WM68125400.030	R.030	1	4	7	1
WM68125400.060	R.060	1	4	7	1
WM68125400.090	R.090	1	4	7	1
WM68125400.120	R.120	1	4	7	1
WL68109525.015	R.015	3/8	2	4	3/8
WL68109525.030	R.030	3/8	2	4	3/8
WL68109525.060	R.060	3/8	2	4	3/8
WL68112700.030	R.030	1/2	2	4	1/2
WL68112700.060	R.060	1/2	2	4	1/2
WL68112700.090	R.090	1/2	2	4	1/2
WL68112700.120	R.120	1/2	2	4	1/2
WL68115875.030	R.030	5/8	3	5	5/8
WL68115875.060	R.060	5/8	3	5	5/8

EDP#	Corner radius [inch]	D [inch]	l2 [inch]	l1 [inch]	d h6 [inch]
WL68115875.090	R.090	5/8	3	5	5/8
WL68115875.120	R.120	5/8	3	5	5/8
WE68112700.030	R.030	1/2	3	5	1/2
WE68112700.060	R.060	1/2	3	5	1/2
WE68112700.090	R.090	1/2	3	5	1/2
WE68112700.120	R.120	1/2	3	5	1/2

Inch

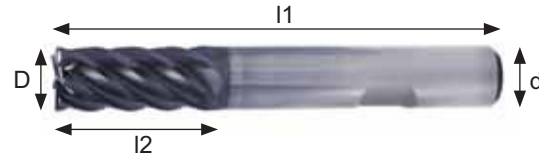
END MILLS

W680 Solid Carbide End Mill

Solid micro grain Carbide, Multiple Helix, Corner radius



Work Material: Steel alloys, cast iron, stainless steel, High nickel alloys



EDP#	Corner radius [mm]	D [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
WM6800600.05	R0.5	6,0	13	57	6
WM6800600.10	R1.0	6,0	13	57	6
WM6800800.05	R0.5	8,0	19	63	8
WM6800800.10	R1.0	8,0	19	63	8
WM6801000.05	R0.5	10,0	22	72	10
WM6801000.10	R1.0	10,0	22	72	10
WM6801000.15	R1.5	10,0	22	72	10
WM6801000.20	R2.0	10,0	22	72	10
WM6801200.05	R0.5	12,0	26	83	12
WM6801200.10	R1.0	12,0	26	83	12
WM6801200.15	R1.5	12,0	26	83	12
WM6801200.20	R2.0	12,0	26	83	12
WM6801200.30	R3.0	12,0	26	83	12
WM6801600.10	R1.0	16,0	32	92	16
WM6801600.15	R1.5	16,0	32	92	16
WM6801600.20	R2.0	16,0	32	92	16

EDP#	Corner radius [mm]	D [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
WM6801600.30	R3.0	16,0	32	92	16
WM6802000.10	R1.0	20,0	38	104	20
WM6802000.15	R1.5	20,0	38	104	20
WM6802000.20	R2.0	20,0	38	104	20
WM6802000.30	R3.0	20,0	38	104	20
WM6802500.10	R1.0	25,0	44	104	25
WM6802500.15	R1.5	25,0	44	104	25
WM6802500.20	R2.0	25,0	44	104	25
WM6802500.30	R3.0	25,0	44	104	25

Metric

W680 Solid Carbide End Mill (Continued)

Solid micro grain Carbide, Multiple Helix, Corner radius

Weldon/Flat

EDP#	Corner radius [mm]	D [mm]	l2 [mm]	l1 [mm]	d h6 [mm]
WM6810600.05	R0.5	6,0	13	57	6
WM6810600.10	R1.0	6,0	13	57	6
WM6810800.05	R0.5	8,0	19	63	8
WM6810800.10	R1.0	8,0	19	63	8
WM6811000.05	R0.5	10,0	22	72	10
WM6811000.10	R1.0	10,0	22	72	10
WM6811000.15	R1.5	10,0	22	72	10
WM6811000.20	R2.0	10,0	22	72	10
WM681200.05	R0.5	12,0	26	83	12
WM6811200.10	R1.0	12,0	26	83	12
WM6811200.15	R1.5	12,0	26	83	12
WM6811200.20	R2.0	12,0	26	83	12
WM6811200.30	R3.0	12,0	26	83	12
WM6811600.10	R1.0	16,0	32	92	16
WM6811600.15	R1.5	16,0	32	92	16
WM6811600.20	R2.0	16,0	32	92	16
WM6811600.30	R3.0	16,0	32	92	16
WM6812000.10	R1.0	20,0	38	104	20
WM6812000.15	R1.5	20,0	38	104	20
WM6812000.20	R2.0	20,0	38	104	20
WM6812000.30	R3.0	20,0	38	104	20
WM6812500.10	R1.0	25,0	44	104	25
WM6812500.15	R1.5	25,0	44	104	25
WM6812500.20	R2.0	25,0	44	104	25
WM6812500.30	R3.0	25,0	44	104	25

Metric

END
MILLS

CARBIDE

Fusion Tap 100B, Multi Application

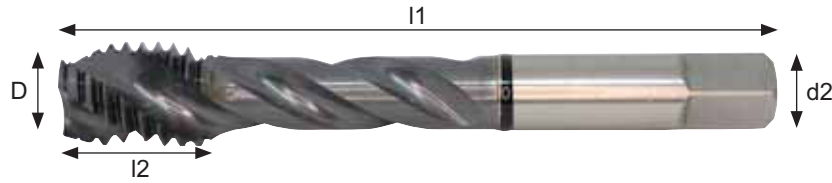
HSS-E



Work Material: Multi application

EDP#	Class	Size [inch]	TPI	L2 [inch]	L1 [inch]	d2 [inch]	Square [inch]	Number of Flutes
WT1538B101	GH2	#4	40 UNC	.236	1,88	.141	.110	2
WT1538B102	GH2	#4	48 UNF	.236	1,88	.141	.110	2
WT1538B103	GH2	#5	40 UNC	.236	1,94	.141	.110	3
WT1538B104	GH2	#5	44 UNF	.236	1,94	.141	.110	3
WT1538B105	GH3	#6	32 UNC	.276	2,00	.141	.110	3
WT1538B106	GH2	#6	40 UNF	.276	2,00	.141	.110	3
WT1538B107	GH3	#8	32 UNC	.276	2,13	.168	.131	3
WT1538B108	GH2	#8	36 UNF	.276	2,13	.168	.131	3
WT1538B109	GH3	#10	24 UNC	.354	2,38	.194	.152	3
WT1538B110	GH3	#10	32 UNF	.276	2,38	.194	.152	3
WT1538B111	GH3	#12	24 UNC	.354	2,38	.220	.165	3
WT1538B112	GH3	#12	28 UNF	.276	2,38	.220	.165	3
WT1538B113	GH3	1/4	20 UNC	.433	2,50	.255	.191	3
WT1538B114	GH5	1/4	20 UNC	.433	2,50	.255	.191	3
WT1538B115	GH3	1/4	28 UNF	.354	2,50	.255	.191	3
WT1538B116	GH4	1/4	28 UNF	.354	2,50	.255	.191	3
WT1538B117	GH3	5/16	18 UNC	.472	2,72	.318	.238	3
WT1538B118	GH5	5/16	18 UNC	.472	2,72	.318	.238	3
WT1538B119	GH3	5/16	24 UNF	.394	2,72	.318	.238	3
WT1538B120	GH5	5/16	24 UNF	.394	2,72	.318	.238	3
WT1538B121	GH3	3/8	16 UNC	.551	2,94	.381	.286	3
WT1538B122	GH5	3/8	16 UNC	.551	2,94	.381	.286	3
WT1538B123	GH3	3/8	24 UNF	.394	2,94	.381	.286	3
WT1538B124	GH4	3/8	24 UNF	.394	2,94	.381	.286	3
WT1538B125	GH3	7/16	14 UNC	.591	3,16	.323	.242	3
WT1538B126	GH5	7/16	14 UNC	.591	3,16	.323	.242	3
WT1538B127	GH3	7/16	20 UNF	.472	3,16	.323	.242	3
WT1538B128	GH5	7/16	20 UNF	.472	3,16	.323	.242	3
WT1538B129	GH5	1/2	13 UNC	.630	3,38	.367	.275	3
WT1538B130	GH5	1/2	20 UNF	.472	3,38	.367	.275	3
WT1538B131	GH5	9/16	12 UNC	.709	3,59	.429	.322	3
WT1538B132	GH5	9/16	18 UNF	.512	3,59	.429	.322	3
WT1538B133	GH5	5/8	11 UNC	.748	3,81	.480	.360	4
WT1538B134	GH5	5/8	18 UNF	.512	3,81	.480	.360	4
WT1538B135	GH5	3/4	10 UNC	.827	4,25	.590	.442	4
WT1538B136	GH5	3/4	16 UNF	.591	4,25	.590	.442	4
WT1538B137	GH6	7/8	9 UNC	.827	4,69	.697	.523	4
WT1538B138	GH6	7/8	14 UNF	.709	4,69	.697	.523	4
WT1538B139	GH6	1	8 UNC	.984	5,13	.800	.600	4
WT1538B140	GH6	1	12 UNF	.709	5,13	.800	.600	4

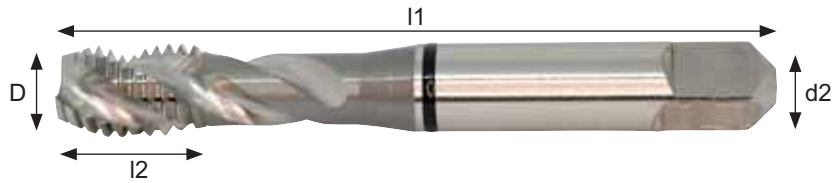
Fusion Tap 100C, Multi Application

HSS-E*Work Material: Multi application*

EDP#	Class	Size [inch]	TPI	L2 [inch]	L1 [inch]	d2 [inch]	Square [inch]	Number of Flutes
WT1538C101	GH2	#4	40 UNC	.236	1,88	.141	.110	2
WT1538C102	GH2	#4	48 UNF	.236	1,88	.141	.110	2
WT1538C103	GH2	#5	40 UNC	.236	1,94	.141	.110	3
WT1538C104	GH2	#5	44 UNF	.236	1,94	.141	.110	3
WT1538C105	GH3	#6	32 UNC	.276	2,00	.141	.110	3
WT1538C106	GH2	#6	40 UNF	.276	2,00	.141	.110	3
WT1538C107	GH3	#8	32 UNC	.276	2,13	.168	.131	3
WT1538C108	GH2	#8	36 UNF	.276	2,13	.168	.131	3
WT1538C109	GH3	#10	24 UNC	.354	2,38	.194	.152	3
WT1538C110	GH3	#10	32 UNF	.276	2,38	.194	.152	3
WT1538C111	GH3	#12	24 UNC	.354	2,38	.220	.165	3
WT1538C112	GH3	#12	28 UNF	.276	2,38	.220	.165	3
WT1538C113	GH3	1/4	20 UNC	.433	2,50	.255	.191	3
WT1538C114	GH5	1/4	20 UNC	.433	2,50	.255	.191	3
WT1538C115	GH3	1/4	28 UNF	.354	2,50	.255	.191	3
WT1538C116	GH4	1/4	28 UNF	.354	2,50	.255	.191	3
WT1538C117	GH3	5/16	18 UNC	.472	2,72	.318	.238	3
WT1538C118	GH5	5/16	18 UNC	.472	2,72	.318	.238	3
WT1538C119	GH3	5/16	24 UNF	.394	2,72	.318	.238	3
WT1538C120	GH5	5/16	24 UNF	.394	2,72	.318	.238	3
WT1538C121	GH3	3/8	16 UNC	.551	2,94	.381	.286	3
WT1538C122	GH5	3/8	16 UNC	.551	2,94	.381	.286	3
WT1538C123	GH3	3/8	24 UNF	.394	2,94	.381	.286	3
WT1538C124	GH4	3/8	24 UNF	.394	2,94	.381	.286	3
WT1538C125	GH3	7/16	14 UNC	.591	3,16	.323	.242	3
WT1538C126	GH5	7/16	14 UNC	.591	3,16	.323	.242	3
WT1538C127	GH3	7/16	20 UNF	.472	3,16	.323	.242	3
WT1538C128	GH5	7/16	20 UNF	.472	3,16	.323	.242	3
WT1538C129	GH5	1/2	13 UNC	.630	3,38	.367	.275	3
WT1538C130	GH5	1/2	20 UNF	.472	3,38	.367	.275	3
WT1538C131	GH5	9/16	12 UNC	.709	3,59	.429	.322	3
WT1538C132	GH5	9/16	18 UNF	.512	3,59	.429	.322	3
WT1538C133	GH5	5/8	11 UNC	.748	3,81	.480	.360	4
WT1538C134	GH5	5/8	18 UNF	.512	3,81	.480	.360	4
WT1538C135	GH5	3/4	10 UNC	.827	4,25	.590	.442	4
WT1538C136	GH5	3/4	16 UNF	.591	4,25	.590	.442	4
WT1538C137	GH6	7/8	9 UNC	.827	4,69	.697	.523	4
WT1538C138	GH6	7/8	14 UNF	.709	4,69	.697	.523	4
WT1538C139	GH6	1	8 UNC	.984	5,13	.800	.600	4
WT1538C140	GH6	1	12 UNF	.709	5,13	.800	.600	4

Fusion Tap 200B, Multi Application

HSS-E

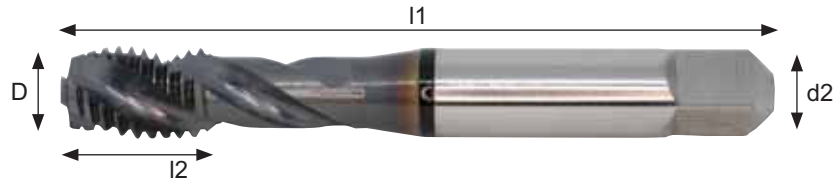


Work Material: Multi application

EDP#	Class	Size [mm]	Pitch [mm]	l2 [inch]	l1 [inch]	d2 [inch]	Square [inch]	Number of Flutes
WT1538B201	D3	M3	0,50	.197	1,94	.141	.110	3
WT1538B202	D4	M3,5	0,60	.276	2,00	.141	.110	3
WT1538B203	D4	M4	0,70	.276	2,13	.168	.131	3
WT1538B204	D4	M6	0,80	.354	2,38	.194	.152	3
WT1538B205	D5	M6	1,00	.433	2,50	.255	.191	3
WT1538B206	D5	M7	1,00	.433	2,72	.318	.238	3
WT1538B207	D5	M8	1,25	.472	2,72	.318	.238	3
WT1538B208	D5	M8	1,00	.433	2,72	.318	.238	3
WT1538B209	D6	M10	1,50	.512	2,94	.381	.286	3
WT1538B210	D5	M10	1,25	.472	2,94	.381	.286	3
WT1538B211	D6	M12	1,75	.591	3,38	.367	.275	3
WT1538B212	D5	M12	1,25	.551	3,38	.367	.275	3
WT1538B213	D7	M14	2,00	.709	3,59	.429	.322	3
WT1538B214	D6	M14	1,50	.551	3,59	.429	.322	3
WT1538B215	D7	M16	2,00	.709	3,81	.480	.360	3
WT1538B216	D6	M16	1,50	.551	3,81	.480	.360	3
WT1538B217	D7	M18	2,50	.787	4,03	.542	.406	4
WT1538B218	D6	M18	1,50	.551	4,03	.542	.406	4
WT1538B219	D7	M20	2,50	.787	4,47	.652	.489	4
WT1538B220	D6	M20	1,50	.551	4,47	.652	.489	4
WT1538B221	D7	M22	2,50	.787	4,69	.697	.523	4
WT1538B222	D6	M22	1,50	.551	4,69	.697	.523	4
WT1538B223	D8	M24	3,00	.945	4,91	.760	.570	4

Fusion Tap 200C, Multi Application

HSS-E

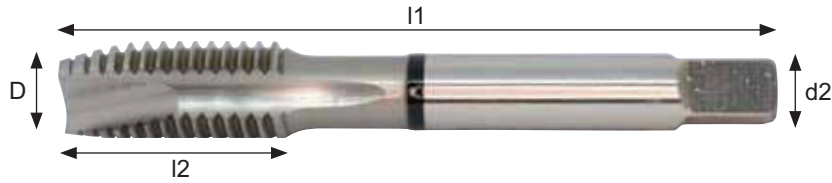


Work Material: Multi application

EDP#	Class	Size [mm]	Pitch [mm]	I2 [inch]	I1 [inch]	d2 [inch]	Square [inch]	Number of Flutes
WT1538C201	D3	M3	0,50	.197	1,94	.141	.110	3
WT1538C202	D4	M3,5	0,60	.276	2,00	.141	.110	3
WT1538C203	D4	M4	0,70	.276	2,13	.168	.131	3
WT1538C204	D4	M6	0,80	.354	2,38	.194	.152	3
WT1538C205	D5	M6	1,00	.433	2,50	.255	.191	3
WT1538C206	D5	M7	1,00	.433	2,72	.318	.238	3
WT1538C207	D5	M8	1,25	.472	2,72	.318	.238	3
WT1538C208	D5	M8	1,00	.433	2,72	.318	.238	3
WT1538C209	D6	M10	1,50	.512	2,94	.381	.286	3
WT1538C210	D5	M10	1,25	.472	2,94	.381	.286	3
WT1538C211	D6	M12	1,75	.591	3,38	.367	.275	3
WT1538C212	D5	M12	1,25	.551	3,38	.367	.275	3
WT1538C213	D7	M14	2,00	.709	3,59	.429	.322	3
WT1538C214	D6	M14	1,50	.551	3,59	.429	.322	3
WT1538C215	D7	M16	2,00	.709	3,81	.480	.360	3
WT1538C216	D6	M16	1,50	.551	3,81	.480	.360	3
WT1538C217	D7	M18	2,50	.787	4,03	.542	.406	4
WT1538C218	D6	M18	1,50	.551	4,03	.542	.406	4
WT1538C219	D7	M20	2,50	.787	4,47	.652	.489	4
WT1538C220	D6	M20	1,50	.551	4,47	.652	.489	4
WT1538C221	D7	M22	2,50	.787	4,69	.697	.523	4
WT1538C222	D6	M22	1,50	.551	4,69	.697	.523	4
WT1538C223	D8	M24	3,00	.945	4,91	.760	.570	4

Fusion Tap 300B, Multi Application

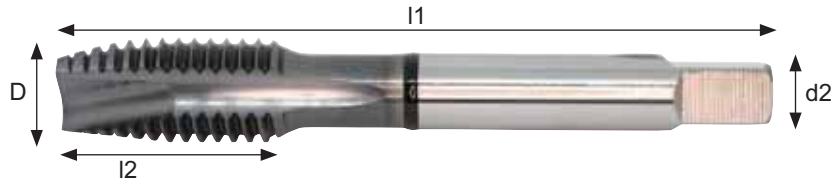
HSS-E



Work Material: Multi application

EDP#	Class	Size [inch]	TPI	L2 [inch]	L1 [inch]	d2 [inch]	Square [inch]	Number of Flutes
WT1538B301	GH2	#4	40 UNC	.335	1,88	.141	.110	2
WT1538B302	GH2	#4	48 UNF	.335	1,88	.141	.110	2
WT1538B303	GH2	#5	40 UNC	.374	1,94	.141	.110	3
WT1538B304	GH2	#5	44 UNF	.374	1,94	.141	.110	3
WT1538B305	GH3	#6	32 UNC	.413	2,00	.141	.110	3
WT1538B306	GH2	#6	40 UNF	.413	2,00	.141	.110	3
WT1538B307	GH3	#8	32 UNC	.453	2,13	.168	.131	3
WT1538B308	GH2	#8	36 UNF	.453	2,13	.168	.131	3
WT1538B309	GH3	#10	24 UNC	.531	2,38	.194	.152	3
WT1538B310	GH3	#10	32 UNF	.531	2,38	.194	.152	3
WT1538B311	GH3	#12	24 UNC	.571	2,38	.220	.165	3
WT1538B312	GH3	#12	28 UNF	.571	2,38	.220	.165	3
WT1538B313	GH3	1/4	20 UNC	.591	2,50	.255	.191	3
WT1538B314	GH5	1/4	20 UNC	.591	2,50	.255	.191	3
WT1538B315	GH3	1/4	28 UNF	.591	2,50	.255	.191	3
WT1538B316	GH4	1/4	28 UNF	.591	2,50	.255	.191	3
WT1538B317	GH3	5/16	18 UNC	.669	2,72	.318	.238	3
WT1538B318	GH5	5/16	18 UNC	.669	2,72	.318	.238	3
WT1538B319	GH3	5/16	24 UNF	.669	2,72	.318	.238	3
WT1538B320	GH5	5/16	24 UNF	.669	2,72	.318	.238	3
WT1538B321	GH3	3/8	16 UNC	.748	2,94	.381	.286	3
WT1538B322	GH5	3/8	16 UNC	.748	2,94	.381	.286	3
WT1538B323	GH3	3/8	24 UNF	.748	2,94	.381	.286	3
WT1538B324	GH4	3/8	24 UNF	.748	2,94	.381	.286	3
WT1538B325	GH3	7/16	14 UNC	.866	3,16	.323	.242	3
WT1538B326	GH5	7/16	14 UNC	.866	3,16	.323	.242	3
WT1538B327	GH3	7/16	20 UNF	.866	3,16	.323	.242	3
WT1538B328	GH5	7/16	20 UNF	.866	3,16	.323	.242	3
WT1538B329	GH5	1/2	13 UNC	.984	3,38	.367	.275	3
WT1538B330	GH5	1/2	20 UNF	.984	3,38	.367	.275	3
WT1538B331	GH5	9/16	12 UNC	.984	3,59	.429	.322	3
WT1538B332	GH5	9/16	18 UNF	.984	3,59	.429	.322	3
WT1538B333	GH5	5/8	11 UNC	1.083	3,81	.480	.360	3
WT1538B334	GH5	5/8	18 UNF	1.083	3,81	.480	.360	3
WT1538B335	GH5	3/4	10 UNC	1.201	4,25	.590	.442	3
WT1538B336	GH5	3/4	16 UNF	1.201	4,25	.590	.442	3
WT1538B337	GH6	7/8	9 UNC	1.339	4,69	.697	.523	3
WT1538B338	GH6	7/8	14 UNF	1.339	4,69	.697	.523	3
WT1538B339	GH6	1	8 UNC	1.496	5,13	.800	.600	3
WT1538B340	GH6	1	12 UNF	1.496	5,13	.800	.600	3

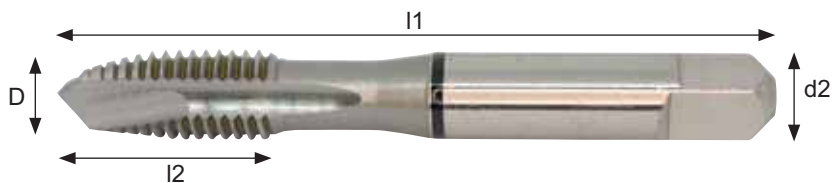
Fusion Tap 300C, Multi Application

HSS-E*Work Material: Multi application*

EDP#	Class	Size [inch]	TPI	L2 [inch]	L1 [inch]	d2 [inch]	Square [inch]	Number of Flutes
WT1538C301	GH2	#4	40 UNC	.335	1,88	.141	.110	2
WT1538C302	GH2	#4	48 UNF	.335	1,88	.141	.110	2
WT1538C303	GH2	#5	40 UNC	.374	1,94	.141	.110	3
WT1538C304	GH2	#5	44 UNF	.374	1,94	.141	.110	3
WT1538C305	GH3	#6	32 UNC	.413	2,00	.141	.110	3
WT1538C306	GH2	#6	40 UNF	.413	2,00	.141	.110	3
WT1538C307	GH3	#8	32 UNC	.453	2,13	.168	.131	3
WT1538C308	GH2	#8	36 UNF	.453	2,13	.168	.131	3
WT1538C309	GH3	#10	24 UNC	.531	2,38	.194	.152	3
WT1538C310	GH3	#10	32 UNF	.531	2,38	.194	.152	3
WT1538C311	GH3	#12	24 UNC	.571	2,38	.220	.165	3
WT1538C312	GH3	#12	28 UNF	.571	2,38	.220	.165	3
WT1538C313	GH3	1/4	20 UNC	.591	2,50	.255	.191	3
WT1538C314	GH5	1/4	20 UNC	.591	2,50	.255	.191	3
WT1538C315	GH3	1/4	28 UNF	.591	2,50	.255	.191	3
WT1538C316	GH4	1/4	28 UNF	.591	2,50	.255	.191	3
WT1538C317	GH3	5/16	18 UNC	.669	2,72	.318	.238	3
WT1538C318	GH5	5/16	18 UNC	.669	2,72	.318	.238	3
WT1538C319	GH3	5/16	24 UNF	.669	2,72	.318	.238	3
WT1538C320	GH5	5/16	24 UNF	.669	2,72	.318	.238	3
WT1538C321	GH3	3/8	16 UNC	.748	2,94	.381	.286	3
WT1538C322	GH5	3/8	16 UNC	.748	2,94	.381	.286	3
WT1538C323	GH3	3/8	24 UNF	.748	2,94	.381	.286	3
WT1538C324	GH4	3/8	24 UNF	.748	2,94	.381	.286	3
WT1538C325	GH3	7/16	14 UNC	.866	3,16	.323	.242	3
WT1538C326	GH5	7/16	14 UNC	.866	3,16	.323	.242	3
WT1538C327	GH3	7/16	20 UNF	.866	3,16	.323	.242	3
WT1538C328	GH5	7/16	20 UNF	.866	3,16	.323	.242	3
WT1538C329	GH5	1/2	13 UNC	.984	3,38	.367	.275	3
WT1538C330	GH5	1/2	20 UNF	.984	3,38	.367	.275	3
WT1538C331	GH5	9/16	12 UNC	.984	3,59	.429	.322	3
WT1538C332	GH5	9/16	18 UNF	.984	3,59	.429	.322	3
WT1538C333	GH5	5/8	11 UNC	1.083	3,81	.480	.360	3
WT1538C334	GH5	5/8	18 UNF	1.083	3,81	.480	.360	3
WT1538C335	GH5	3/4	10 UNC	1.201	4,25	.590	.442	3
WT1538C336	GH5	3/4	16 UNF	1.201	4,25	.590	.442	3
WT1538C337	GH6	7/8	9 UNC	1.339	4,69	.697	.523	3
WT1538C338	GH6	7/8	14 UNF	1.339	4,69	.697	.523	3
WT1538C339	GH6	1	8 UNC	1.496	5,13	.800	.600	3
WT1538C340	GH6	1	12 UNF	1.496	5,13	.800	.600	3

Fusion Tap 400B, Multi Application

HSS-E



Work Material: Multi application

EDP#	Class	Size [mm]	Pitch [mm]	l2 [inch]	l1 [inch]	d2 [inch]	Square [inch]	Number of Flutes
WT1538B401	D3	M3	0,50	.374	1,94	.141	.110	3
WT1538B402	D4	M3,5	0,60	.413	2,00	.141	.110	3
WT1538B403	D4	M4	0,70	.453	2,13	.168	.131	3
WT1538B404	D4	M6	0,80	.531	2,38	.194	.152	3
WT1538B405	D5	M6	1,00	.591	2,50	.255	.191	3
WT1538B406	D5	M7	1,00	.669	2,72	.318	.238	3
WT1538B407	D5	M8	1,25	.669	2,72	.318	.238	3
WT1538B408	D5	M8	1,00	.669	2,72	.318	.238	3
WT1538B409	D6	M10	1,50	.748	2,94	.381	.286	3
WT1538B410	D5	M10	1,25	.748	2,94	.381	.286	3
WT1538B411	D6	M12	1,75	.984	3,38	.367	.275	3
WT1538B412	D5	M12	1,25	.984	3,38	.367	.275	3
WT1538B413	D7	M14	2,00	.984	3,59	.429	.322	3
WT1538B414	D6	M14	1,50	.984	3,59	.429	.322	3
WT1538B415	D7	M16	2,00	1.083	3,81	.480	.360	3
WT1538B416	D6	M16	1,50	1.083	3,81	.480	.360	3
WT1538B417	D7	M18	2,50	1.083	4,03	.542	.406	3
WT1538B418	D6	M18	1,50	1.083	4,03	.542	.406	3
WT1538B419	D7	M20	2,50	1.201	4,47	.652	.489	3
WT1538B420	D6	M20	1,50	1.201	4,47	.652	.489	3
WT1538B421	D7	M22	2,50	1.339	4,69	.697	.523	3
WT1538B422	D6	M22	1,50	1.339	4,69	.697	.523	3
WT1538B423	D8	M24	3,00	1.339	4,91	.760	.570	3

Fusion Tap Series 400C, Multi Application

HSS-E*Work Material: Multi application*

EDP#	Class	Size [mm]	Pitch [mm]	l2 [inch]	l1 [inch]	d2 [inch]	Square [inch]	Number of Flutes
WT1538C401	D3	M3	0,50	.374	1,94	.141	.110	3
WT1538C402	D4	M3,5	0,60	.413	2,00	.141	.110	3
WT1538C403	D4	M4	0,70	.453	2,13	.168	.131	3
WT1538C404	D4	M6	0,80	.531	2,38	.194	.152	3
WT1538C405	D5	M6	1,00	.591	2,50	.255	.191	3
WT1538C406	D5	M7	1,00	.669	2,72	.318	.238	3
WT1538C407	D5	M8	1,25	.669	2,72	.318	.238	3
WT1538C408	D5	M8	1,00	.669	2,72	.318	.238	3
WT1538C409	D6	M10	1,50	.748	2,94	.381	.286	3
WT1538C410	D5	M10	1,25	.748	2,94	.381	.286	3
WT1538C411	D6	M12	1,75	.984	3,38	.367	.275	3
WT1538C412	D5	M12	1,25	.984	3,38	.367	.275	3
WT1538C413	D7	M14	2,00	.984	3,59	.429	.322	3
WT1538C414	D6	M14	1,50	.984	3,59	.429	.322	3
WT1538C415	D7	M16	2,00	1.083	3,81	.480	.360	3
WT1538C416	D6	M16	1,50	1.083	3,81	.480	.360	3
WT1538C417	D7	M18	2,50	1.083	4,03	.542	.406	3
WT1538C418	D6	M18	1,50	1.083	4,03	.542	.406	3
WT1538C419	D7	M20	2,50	1.201	4,47	.652	.489	3
WT1538C420	D6	M20	1,50	1.201	4,47	.652	.489	3
WT1538C421	D7	M22	2,50	1.339	4,69	.697	.523	3
WT1538C422	D6	M22	1,50	1.339	4,69	.697	.523	3
WT1538C423	D8	M24	3,00	1.339	4,91	.760	.570	3

Fusion Tap 500B, Multi Application

HSS-E

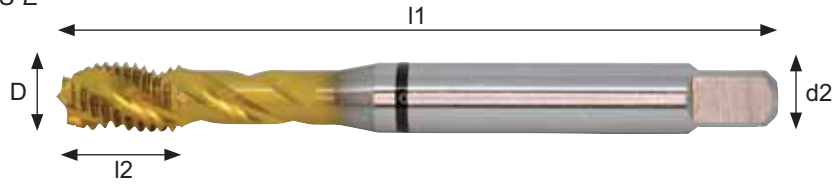


Work Material: Multi application

EDP#	Class	Size [mm]	Pitch [mm]	L2 [mm]	L1 [mm]	d2 [mm]	Square [mm]
WT1538B501	6H	M2	0,40	8,0	45,00	2,8	2,1
WT1538B502	6H	M2,2	0,45	8,0	45,00	2,8	2,1
WT1538B503	6H	M2,3	0,40	8,0	45,00	2,8	2,1
WT1538B504	6H	M2,5	0,45	9,0	50,00	2,8	2,1
WT1538B505	6H	M2,6	0,45	9,0	50,00	2,8	2,1
WT1538B506	6H	M3	0,50	6,0	56,00	3,5	2,7
WT1538B507	6H	M3,5	0,60	7,0	56,00	4,0	3,0
WT1538B508	6H	M4	0,70	7,0	63,00	4,5	3,4
WT1538B509	6H	M4,5	0,75	8,0	70,00	6,0	4,9
WT1538B510	6H	M5	0,80	8,0	70,00	6,0	4,9
WT1538B511	6H	M6	1,00	10,0	80,00	6,0	4,9
WT1538B512	6H	M7	1,00	10,0	80,00	7,0	5,5
WT1538B513	6H	M8	1,25	13,0	90,00	8,0	6,2
WT1538B514	6H	M9	1,25	13,0	90,00	9,0	7,0
WT1538B515	6H	M10	1,50	15,0	100,00	10,0	8,0
WT1538B516	6H	M11	1,50	17,0	100,00	8,0	6,2
WT1538B517	6H	M12	1,75	18,0	110,00	9,0	7,0
WT1538B518	6H	M14	2,00	20,0	110,00	11,0	9,0
WT1538B519	6H	M16	2,00	20,0	110,00	12,0	9,0
WT1538B520	6H	M18	2,50	25,0	125,00	14,0	11,0
WT1538B521	6H	M20	2,50	25,0	140,00	16,0	12,0
WT1538B522	6H	M22	2,50	25,0	140,00	18,0	14,5
WT1538B523	6H	M24	3,00	30,0	160,00	18,0	14,5
WT1538B524	6H	M27	3,0	30,0	160,00	20,0	16,0
WT1538B525	6H	M30	3,50	35,0	180,00	22,0	18,0

Fusion Tap 500C, Multi Application

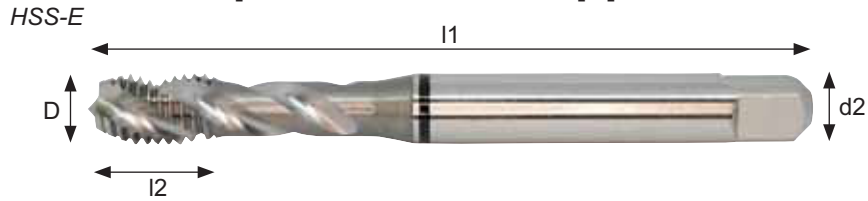
HSS-E



Work Material: Multi application

EDP#	Class	Size [mm]	Pitch [mm]	l2 [mm]	l1 [mm]	d2 [inch]	Square [inch]
WT1538C501	6H	M2	0,40	8,0	45,00	2,8	2,1
WT1538C502	6H	M2,2	0,45	8,0	45,00	2,8	2,1
WT1538C503	6H	M2,3	0,40	8,0	45,00	2,8	2,1
WT1538C504	6H	M2,5	0,45	9,0	50,00	2,8	2,1
WT1538C505	6H	M2,6	0,45	9,0	50,00	2,8	2,1
WT1538C506	6H	M3	0,50	6,0	56,00	3,5	2,7
WT1538C507	6H	M3,5	0,60	7,0	56,00	4,0	3,0
WT1538C508	6H	M4	0,70	7,0	63,00	4,5	3,4
WT1538C509	6H	M4,5	0,75	8,0	70,00	6,0	4,9
WT1538C510	6H	M5	0,80	8,0	70,00	6,0	4,9
WT1538C511	6H	M6	1,00	10,0	80,00	6,0	4,9
WT1538C512	6H	M7	1,00	10,0	80,00	7,0	5,5
WT1538C513	6H	M8	1,25	13,0	90,00	8,0	6,2
WT1538C514	6H	M9	1,25	13,0	90,00	9,0	7,0
WT1538C515	6H	M10	1,50	15,0	100,00	10,0	8,0
WT1538C516	6H	M11	1,50	17,0	100,00	8,0	6,2
WT1538C517	6H	M12	1,75	18,0	110,00	9,0	7,0
WT1538C518	6H	M14	2,00	20,0	110,00	11,0	9,0
WT1538C519	6H	M16	2,00	20,0	110,00	12,0	9,0
WT1538C520	6H	M18	2,50	25,0	125,00	14,0	11,0
WT1538C521	6H	M20	2,50	25,0	140,00	16,0	12,0
WT1538C522	6H	M22	2,50	25,0	140,00	18,0	14,5
WT1538C523	6H	M24	3,00	30,0	160,00	18,0	14,5
WT1538C524	6H	M27	3,0	30,0	160,00	20,0	16,0
WT1538C525	6H	M30	3,50	35,0	180,00	22,0	18,0

Fusion Tap 600B, Multi Application

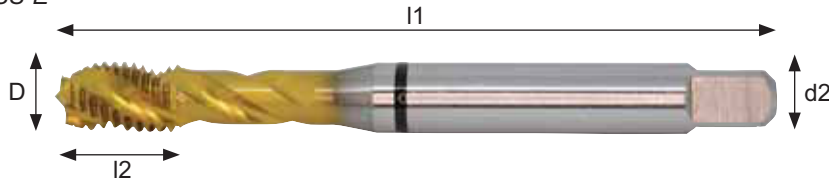


Work Material: Multi application

EDP#	Class	Size [mm]	Pitch [mm]	l2 [mm]	l1 [mm]	d2 [mm]	Square [mm]
WT1538B601	6H	M4	0,50	5,0	63,00	2,8	2,1
WT1538B602	6H	M5	0,50	5,0	70,00	3,5	2,7
WT1538B603	6H	M6	0,75	8,0	80,00	4,5	3,4
WT1538B604	6H	M6	0,50	5,0	80,00	4,5	3,4
WT1538B605	6H	M7	0,75	10,0	80,00	5,5	4,3
WT1538B606	6H	M8	1,00	10,0	90,00	6,0	4,9
WT1538B607	6H	M8	0,75	8,0	80,00	6,0	4,9
WT1538B608	6H	M10	1,25	16,0	100,00	7,0	5,5
WT1538B609	6H	M10	1,00	10,0	90,00	7,0	5,5
WT1538B610	6H	M10	0,75	10,0	90,00	7,0	5,5
WT1538B611	6H	M12	1,50	15,0	100,00	9,0	7,0
WT1538B612	6H	M12	1,25	15,0	100,00	9,0	7,0
WT1538B613	6H	M12	1,00	11,0	100,00	9,0	7,0
WT1538B614	6H	M14	1,50	15,0	100,00	11,0	9,0
WT1538B615	6H	M14	1,25	15,0	100,00	11,0	9,0
WT1538B616	6H	M14	1,00	11,0	100,00	11,0	9,0
WT1538B617	6H	M16	1,50	15,0	100,00	12,0	9,0
WT1538B618	6H	M16	1,00	12,0	100,00	12,0	9,0
WT1538B619	6H	M18	1,50	17,0	110,00	14,0	11,0
WT1538B620	6H	M18	1,00	13,0	110,00	14,0	11,0
WT1538B621	6H	M20	1,50	17,0	125,00	16,0	12,0
WT1538B622	6H	M20	1,00	14,0	125,00	16,0	12,0
WT1538B623	6H	M22	1,50	17,0	125,00	18,0	14,5
WT1538B624	6H	M22	1,0	14,0	125,00	18,0	14,5
WT1538B625	6H	M24	2,00	20,0	140,00	18,0	14,5
WT1538B626	6H	M24	1,50	20,0	140,00	18,0	14,5
WT1538B627	6H	M26	1,50	20,0	140,00	18,0	14,5
WT1538B628	6H	M27	2,00	20,0	140,00	20,0	16,0
WT1538B629	6H	M27	1,50	20,0	140,00	20,0	16,0
WT1538B630	6H	M28	1,50	20,0	140,00	20,0	16,0
WT1538B631	6H	M30	2,00	20,0	150,00	22,0	18,0
WT1538B632	6H	M30	1,50	20,0	150,00	22,0	18,0

Fusion Tap 600C, Multi Application

HSS-E

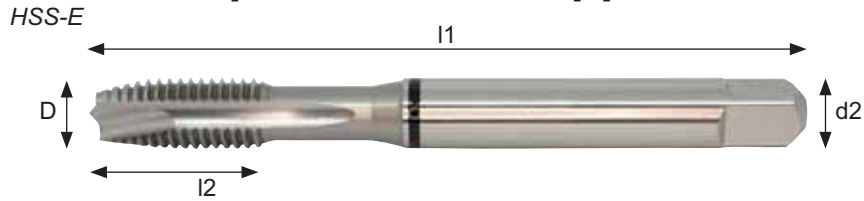


Work Material: Multi application

EDP#	Class	Size [mm]	Pitch [mm]	L2 [mm]	L1 [mm]	d2 [mm]	Square [mm]
WT1538C601	6H	M4	0,50	5,0	63,00	2,8	2,1
WT1538C602	6H	M5	0,50	5,0	70,00	3,5	2,7
WT1538C603	6H	M6	0,75	8,0	80,00	4,5	3,4
WT1538C604	6H	M6	0,50	5,0	80,00	4,5	3,4
WT1538C605	6H	M7	0,75	10,0	80,00	5,5	4,3
WT1538C606	6H	M8	1,00	10,0	90,00	6,0	4,9
WT1538C607	6H	M8	0,75	8,0	80,00	6,0	4,9
WT1538C608	6H	M10	1,25	16,0	100,00	7,0	5,5
WT1538C609	6H	M10	1,00	10,0	90,00	7,0	5,5
WT1538C610	6H	M10	0,75	10,0	90,00	7,0	5,5
WT1538C611	6H	M12	1,50	15,0	100,00	9,0	7,0
WT1538C612	6H	M12	1,25	15,0	100,00	9,0	7,0
WT1538C613	6H	M12	1,00	11,0	100,00	9,0	7,0
WT1538C614	6H	M14	1,50	15,0	100,00	11,0	9,0
WT1538C615	6H	M14	1,25	15,0	100,00	11,0	9,0
WT1538C616	6H	M14	1,00	11,0	100,00	11,0	9,0
WT1538C617	6H	M16	1,50	15,0	100,00	12,0	9,0
WT1538C618	6H	M16	1,00	12,0	100,00	12,0	9,0
WT1538C619	6H	M18	1,50	17,0	110,00	14,0	11,0
WT1538C620	6H	M18	1,00	13,0	110,00	14,0	11,0
WT1538C621	6H	M20	1,50	17,0	125,00	16,0	12,0
WT1538C622	6H	M20	1,00	14,0	125,00	16,0	12,0
WT1538C623	6H	M22	1,50	17,0	125,00	18,0	14,5
WT1538C624	6H	M22	1,0	14,0	125,00	18,0	14,5
WT1538C625	6H	M24	2,00	20,0	140,00	18,0	14,5
WT1538C626	6H	M24	1,50	20,0	140,00	18,0	14,5
WT1538C627	6H	M26	1,50	20,0	140,00	18,0	14,5
WT1538C628	6H	M27	2,00	20,0	140,00	20,0	16,0
WT1538C629	6H	M27	1,50	20,0	140,00	20,0	16,0
WT1538C630	6H	M28	1,50	20,0	140,00	20,0	16,0
WT1538C631	6H	M30	2,00	20,0	150,00	22,0	18,0
WT1538C632	6H	M30	1,50	20,0	150,00	22,0	18,0

TAPS

Fusion Tap 700B, Multi Application

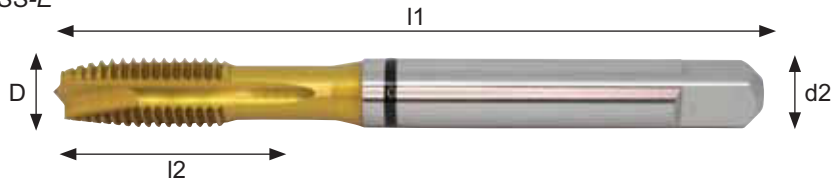


Work Material: Multi application

EDP#	Class	Size [mm]	Pitch [mm]	I2 [mm]	I1 [mm]	d2 [mm]	Square [mm]
WT1538B701	6H	M2	0,40	8,0	45,00	2,8	2,1
WT1538B702	6H	M2,2	0,45	8,0	45,00	2,8	2,1
WT1538B703	6H	M2,3	0,40	8,0	45,00	2,8	2,1
WT1538B704	6H	M2,5	0,45	9,0	50,00	2,8	2,1
WT1538B705	6H	M2,6	0,45	9,0	50,00	2,8	2,1
WT1538B706	6H	M3	0,50	11,0	56,00	3,5	2,7
WT1538B707	6H	M3,5	0,60	12,0	56,00	4,0	3,0
WT1538B708	6H	M4	0,70	13,0	63,00	4,5	3,4
WT1538B709	6H	M4,5	0,75	14,0	70,00	6,0	4,9
WT1538B710	6H	M5	0,80	15,0	70,00	6,0	4,9
WT1538B711	6H	M6	1,00	17,0	80,00	6,0	4,9
WT1538B712	6H	M7	1,00	17,0	80,00	7,0	5,5
WT1538B713	6H	M8	1,25	20,0	90,00	8,0	6,2
WT1538B714	6H	M9	1,25	20,0	90,00	9,0	7,0
WT1538B715	6H	M10	1,50	22,0	100,00	10,0	8,0
WT1538B716	6H	M11	1,50	22,0	100,00	8,0	6,2
WT1538B717	6H	M12	1,75	24,0	110,00	9,0	7,0
WT1538B718	6H	M14	2,00	26,0	110,00	11,0	9,0
WT1538B719	6H	M16	2,00	27,0	110,00	12,0	9,0
WT1538B720	6H	M18	2,50	30,0	125,00	14,0	11,0
WT1538B721	6H	M20	2,50	32,0	140,00	16,0	12,0
WT1538B722	6H	M22	2,50	32,0	140,00	18,0	14,5
WT1538B723	6H	M24	3,00	34,0	160,00	18,0	14,5
WT1538B724	6H	M27	3,0	36,0	160,00	20,0	16,0
WT1538B725	6H	M30	3,50	40,0	180,00	22,0	18,0

Fusion Tap 700C, Multi Application

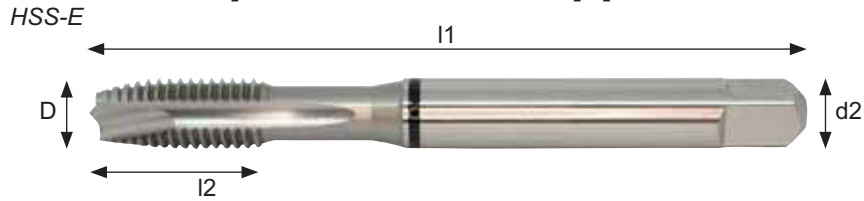
HSS-E



Work Material: Multi application

EDP#	Class	Size [mm]	Pitch [mm]	I2 [mm]	I1 [mm]	d2 [mm]	Square [mm]
WT1538C701	6H	M2	0,40	8,0	45,00	2,8	2,1
WT1538C702	6H	M2,2	0,45	8,0	45,00	2,8	2,1
WT1538C703	6H	M2,3	0,40	8,0	45,00	2,8	2,1
WT1538C704	6H	M2,5	0,45	9,0	50,00	2,8	2,1
WT1538C705	6H	M2,6	0,45	9,0	50,00	2,8	2,1
WT1538C706	6H	M3	0,50	11,0	56,00	3,5	2,7
WT1538C707	6H	M3,5	0,60	12,0	56,00	4,0	3,0
WT1538C708	6H	M4	0,70	13,0	63,00	4,5	3,4
WT1538C709	6H	M4,5	0,75	14,0	70,00	6,0	4,9
WT1538C710	6H	M5	0,80	15,0	70,00	6,0	4,9
WT1538C711	6H	M6	1,00	17,0	80,00	6,0	4,9
WT1538C712	6H	M7	1,00	17,0	80,00	7,0	5,5
WT1538C713	6H	M8	1,25	20,0	90,00	8,0	6,2
WT1538C714	6H	M9	1,25	20,0	90,00	9,0	7,0
WT1538C715	6H	M10	1,50	22,0	100,00	10,0	8,0
WT1538C716	6H	M11	1,50	22,0	100,00	8,0	6,2
WT1538C717	6H	M12	1,75	24,0	110,00	9,0	7,0
WT1538C718	6H	M14	2,00	26,0	110,00	11,0	9,0
WT1538C719	6H	M16	2,00	27,0	110,00	12,0	9,0
WT1538C720	6H	M18	2,50	30,0	125,00	14,0	11,0
WT1538C721	6H	M20	2,50	32,0	140,00	16,0	12,0
WT1538C722	6H	M22	2,50	32,0	140,00	18,0	14,5
WT1538C723	6H	M24	3,00	34,0	160,00	18,0	14,5
WT1538C724	6H	M27	3,0	36,0	160,00	20,0	16,0
WT1538C725	6H	M30	3,50	40,0	180,00	22,0	18,0

Fusion Tap 800B, Multi Application

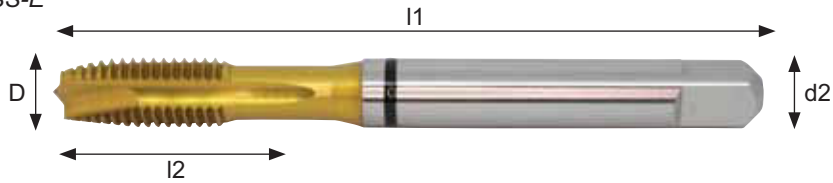


Work Material: Multi application

EDP#	Class	Size [mm]	Pitch [mm]	I2 [mm]	I1 [mm]	d2 [mm]	Square [mm]
WT1538B801	6H	M4	0,50	10,0	63,00	2,8	2,1
WT1538B802	6H	M5	0,50	11,0	70,00	3,5	2,7
WT1538B803	6H	M6	0,75	13,0	80,00	4,5	3,4
WT1538B804	6H	M6	0,50	13,0	80,00	4,5	3,4
WT1538B805	6H	M7	0,75	14,0	80,00	5,5	4,3
WT1538B806	6H	M8	1,00	17,0	90,00	6,0	4,9
WT1538B807	6H	M8	0,75	14,0	80,00	6,0	4,9
WT1538B808	6H	M10	1,25	22,0	100,00	7,0	5,5
WT1538B809	6H	M10	1,00	18,0	90,00	7,0	5,5
WT1538B810	6H	M10	0,75	18,0	90,00	7,0	5,5
WT1538B811	6H	M12	1,50	22,0	100,00	9,0	7,0
WT1538B812	6H	M12	1,25	22,0	100,00	9,0	7,0
WT1538B813	6H	M12	1,00	18,0	100,00	9,0	7,0
WT1538B814	6H	M14	1,50	22,0	100,00	11,0	9,0
WT1538B815	6H	M14	1,25	22,0	100,00	11,0	9,0
WT1538B816	6H	M14	1,00	18,0	100,00	11,0	9,0
WT1538B817	6H	M16	1,50	22,0	100,00	12,0	9,0
WT1538B818	6H	M16	1,00	18,0	100,00	12,0	9,0
WT1538B819	6H	M18	1,50	25,0	110,00	14,0	11,0
WT1538B820	6H	M18	1,00	20,0	110,00	14,0	11,0
WT1538B821	6H	M20	1,50	25,0	125,00	16,0	12,0
WT1538B822	6H	M20	1,00	20,0	125,00	16,0	12,0
WT1538B823	6H	M22	1,50	25,0	125,00	18,0	14,5
WT1538B824	6H	M22	1,0	20,0	125,00	18,0	14,5
WT1538B825	6H	M24	2,00	27,0	140,00	18,0	14,5
WT1538B826	6H	M24	1,50	27,0	140,00	18,0	14,5
WT1538B827	6H	M26	1,50	28,0	140,00	18,0	14,5
WT1538B828	6H	M27	2,00	28,0	140,00	20,0	16,0
WT1538B829	6H	M27	1,50	28,0	140,00	20,0	16,0
WT1538B830	6H	M28	1,50	28,0	140,00	20,0	16,0
WT1538B831	6H	M30	2,00	30,0	150,00	22,0	18,0
WT1538B832	6H	M30	1,50	30,0	150,00	22,0	18,0

Fusion Tap 800C, Multi Application

HSS-E



Work Material: Multi application

EDP#	Class	Size [mm]	Pitch [mm]	L2 [mm]	L1 [mm]	d2 [mm]	Square [mm]
WT1538C801	6H	M4	0,50	10,0	63,00	2,8	2,1
WT1538C802	6H	M5	0,50	11,0	70,00	3,5	2,7
WT1538C803	6H	M6	0,75	13,0	80,00	4,5	3,4
WT1538C804	6H	M6	0,50	13,0	80,00	4,5	3,4
WT1538C805	6H	M7	0,75	14,0	80,00	5,5	4,3
WT1538C806	6H	M8	1,00	17,0	90,00	6,0	4,9
WT1538C807	6H	M8	0,75	14,0	80,00	6,0	4,9
WT1538C808	6H	M10	1,25	22,0	100,00	7,0	5,5
WT1538C809	6H	M10	1,00	18,0	90,00	7,0	5,5
WT1538C810	6H	M10	0,75	18,0	90,00	7,0	5,5
WT1538C811	6H	M12	1,50	22,0	100,00	9,0	7,0
WT1538C812	6H	M12	1,25	22,0	100,00	9,0	7,0
WT1538C813	6H	M12	1,00	18,0	100,00	9,0	7,0
WT1538C814	6H	M14	1,50	22,0	100,00	11,0	9,0
WT1538C815	6H	M14	1,25	22,0	100,00	11,0	9,0
WT1538C816	6H	M14	1,00	18,0	100,00	11,0	9,0
WT1538C817	6H	M16	1,50	22,0	100,00	12,0	9,0
WT1538C818	6H	M16	1,00	18,0	100,00	12,0	9,0
WT1538C819	6H	M18	1,50	25,0	110,00	14,0	11,0
WT1538C820	6H	M18	1,00	20,0	110,00	14,0	11,0
WT1538C821	6H	M20	1,50	25,0	125,00	16,0	12,0
WT1538C822	6H	M20	1,00	20,0	125,00	16,0	12,0
WT1538C823	6H	M22	1,50	25,0	125,00	18,0	14,5
WT1538C824	6H	M22	1,0	20,0	125,00	18,0	14,5
WT1538C825	6H	M24	2,00	27,0	140,00	18,0	14,5
WT1538C826	6H	M24	1,50	27,0	140,00	18,0	14,5
WT1538C827	6H	M26	1,50	28,0	140,00	18,0	14,5
WT1538C828	6H	M27	2,00	28,0	140,00	20,0	16,0
WT1538C829	6H	M27	1,50	28,0	140,00	20,0	16,0
WT1538C830	6H	M28	1,50	28,0	140,00	20,0	16,0
WT1538C831	6H	M30	2,00	30,0	150,00	22,0	18,0
WT1538C832	6H	M30	1,50	30,0	150,00	22,0	18,0

SEMI-STANDARD

Drill with one step

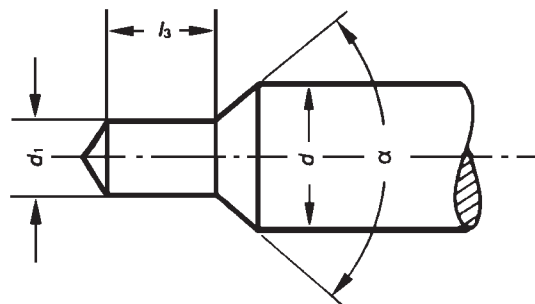
The starting material is standard layered, standard drill
 The stitch length must be max 3 times the small diameter.
 The Angle α between 40° and 180° .

Tolerances:

Diameter, d_1	h8
Angle α	$\pm 1^\circ 30'$
Step length, l_3	$\pm 0,2 \text{ mm}$

Necessary data for ordering

1. Drill type
2. Both diameters, d , d_1
3. Angle α
4. Step length, l_3
5. Lace angle



- For a length of up to $2 \times$ small diameter (d_1), the small diameter should not be less than $0.5 \times$ the diameter (d).
- At a step length of $2 - 3 \times$ small diameter, the small diameter should not be less than $0.7 \times$ the diameter.

Normal delivery time 2 - 3 business days. Fast 24-hour service against 50% surcharge.

In order to provide the best and fastest service, we recommend that you always contact us or our reseller when ordering quick service.

Other types and dimensions of drill bits are offered on request.

Drills and core drills in non-standard dimensions

Standard stock items, with cylindrical or tapered shank, are used as blanks.
 Diameter adjustment by grinding.

Tolerance h8

Necessary data for ordering:

1. Drill type
2. Desired diameter, D



Normal world wide delivery time: two weeks.

SEMI-STANDARD

Precision ground reamers

Standard stock items are used as blanks
Ground to produce desired hole tolerance under normal working conditions.

Necessary data for ordering

1. Type o reamer
2. Diameter
3. Tolerance
4. Blind or through hole

Normal world wide delivery time: two weeks.

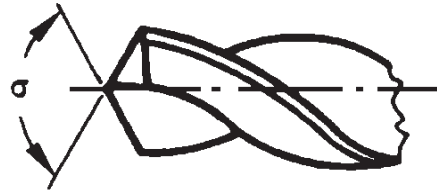
Drill point angle

Standard stock items are used as blanks
The drill point is re-sharpened to desired angle.

Necessary data for ordering

1. Drill type
2. Diameter
3. Point angle

Normal world wide delivery time: two weeks.



Morse taper

Change of MT to smaller than standard.
Standard stock items are used as blanks; drills, core drills and reamers.

Necessary data for ordering

1. Type of tool
2. Standard MT
3. Requested MT

Normal world wide delivery time: three weeks.

Tool material

HSS (High Speed Steel)

In the toolgroup HSS there is a large number of materials mainly for tools in manufacturing where heat is a byproduct, for example at high speeds.

Wolfram (Tungsten), Vanadium, Molybdenum and Cobalt, in mid- to high concentrations are the most used alloys. What makes them stand out is their ability of hardness, toughness and wear resistance.

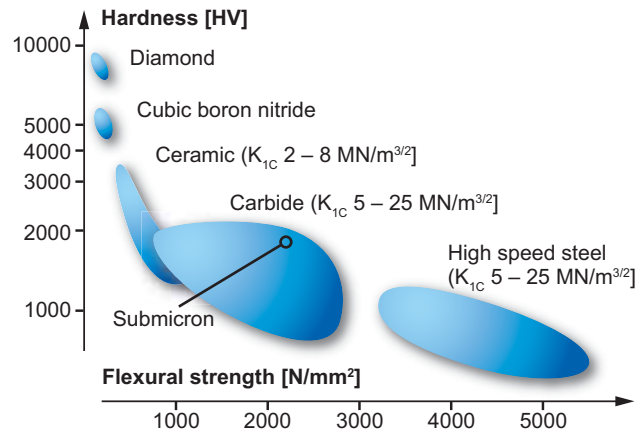
Their abilities are enhanced with increasing mixture of alloys. Example: Wolfram (Tungsten) and Vanadium makes hard carbides and therefore contributes to higher wear resistance.

Molybdenum increases toughness and Cobalt increases heat resistance. Most common designations are:

HSS - for basic work materials

HSS-Co - (sometimes HSS-E. Take notice that HSS-E doesn't always contain Cobalt) for material with > 5% Cobalt

HSS-PM - (sometimes HSS-EE, HSS-ES) for powder metallurgy HSS



Comparison of hardness and toughness of different materials.
 K_{1c} is a measurement of fracture toughness.

Solid Carbide

Solid Carbide is a quick name for a group of composite materials, in general built with hard constituents together with a metallic binder. For cutting tools the constituents are normally carbides of Wolfram (tungsten) Titanium, tantalum and niobium. Most common binder is Cobalt. Material properties are primarily controlled by the compound of hard constituents. The manufacturing process is also important, when imperfections in the material directly could affect the performance of the tool. Wedevåg Tools uses exclusively a type of solid submicron carbide which gives the material excellent toughness and wear resistance.

Material groups, Drilling

WTS group	Material	Example	
		SIS	Name
1.1	Non-Alloy Steel < 100 HB	1370-00	Hardened steel
		1411-00	General Structural Steel
		1412	
		1414	
		1430	Boiler Steel
		1432-01	
		1450-00	Machine Steel
		1450-01	
		1550	Free Cutting Steel
		1572-00	
		1590-00	
		1912	
		1914	
		1922	
		1926	
		1957	
1.2	Non-Alloy Steel < 200 HB	1300	General Structural Steel
		1311	
		1312	
		1330	Boiler Steel
		1350	Machine steel
		1572-03	Hardened steel
		1650	Carbon steel
		1655	
		1672-00	Carbon steel
		1672-08	
		1973	Free Cutting steel
		2101	Boiler Steel
		2103-01	
		2511-00	Carbon Steel
		2512-02	
		2515-02	

WTS group corresponds to material classifications according to Wedevåg Tools cutting data program WTS 2005. A user-friendly tool for selecting tools and processing conditions. The program deals with drilling and milling separately.

Available via the website at www.wedevag.com

NOTE: Group divisions for drilling is somewhat different from milling. For milling: Use the corresponding table for material classification.

WTS group	Material	Example	
		SIS	Name
1.3	Alloy Steel < 300 HB	1572-04	Hardened steel
		1672-03	
		1770-00	Spring steel
		1770-02	
		1770-05	Tool Steel
		1880-02	
		2090	Spring Steel
		2092-02	Tool Steel
		2120-02	Carbon Steel
		2120-03	
		2140-02	Tool Steel
		2172	General Structural Steel
		2173	
		2174	Boiler steel
		2216-04	
		2218-04	Carbon Steel
		2225-00	
		2225-01	
		2225-02	
		2225-03	
		2225-04	Tool- & Spring Steel
		2242-02	
		2244-02	Carbon steel
1.3	Alloy Steel < 300 HB	2260-02	Tool Steel
		2514-02	Carbon Steel
		2534-02	
		2541-02	
		2541-03	
1.4	Alloy Steel < 400 HB	2225-05	Carbon Steel
		2230	Spring Steel
		2234-02	Carbon Steel
		2234-03	
		2234-04	
		2234-05	
		2240-02	
		2245-02	
		2245-03	
		2245-04	Structural Steel
		2258-02	
		2534-03	Carbon Steel
		2534-04	
		2541-04	
		2541-05	Tool Steel
		2710-02	
			HARDOX 400
1.5	Alloy Steel > 400 HB		HARDOX 450
			HARDOX 500
1.6	Hardened < 50 HRC		
1.7	Hardened < 55 HRC		
1.8	Hardened < 65 HRC		

Material groups, drilling

WTS group	Material	Example	
		SIS	Name
2.1	Stainless Steel, light	2302-02	Stainless Steel
		2302-03	
		2302-12	
		2302-13	
		2303-02	
		2304-02	
		2320-02	
		2322	
		2324	
		2325	
		2346-02	
		2383-02	
		2383-03	
2.2	Stainless Steel, Medium	2304-04	Stainless Steel
		2321-03	
		2326	
		2331	
		2331-14	
		2331-16	
		2333	
		2337	
		2343	
		2347	
		2352	
		2353	
		2371	
		2375	
2.3	Stainless Steel, Difficult	2328	Stainless Steel
		2333-H	
		2361	
		2368	
		2372	
		2376	
		2377	
		2378	
		2562	
		2564	
3.1	Cast Iron <210 HB	0100-00	Grey cast iron
		0110-00	
		0115	
		0120	
		0810-00	Malleable cast iron
3.2	Cast Iron >210 HB	0125	Grey cast iron
		0130	
		0135	
		0854-03	Malleable cast iron
		0856-03	
3.3	Cast Steel	1505-02	Cast Steel
		1606-02	
		2223-03	Heat resisting Steel for castings
		2224-03	
3.4	Ductile cast Iron	0707	Ductile cast Iron
		0717	
		0727	
		0737	

WTS group	Material	Example	
		SIS	Name
4.1	Aluminium < 5% Si	4007	Aluminium alloy
		4125	
		4212	
4.2	Aluminium 5 - 10 % Si	4244	Aluminium
		4245	
		4247	
		4250	
		4252	
4.3	Aluminium >10% Si	4253	Aluminium
		4255	
		4260	
		4261	
5.1	Copper	5010	Copper
		5011	
		5030	
		5032	
		5039	
		5052	
5.2	Copper/Nickel		C 96200
			C 96400
5.4	Brass < 140 HB	5112-04	Brass
		5122-05	
		5144-03	
		5148-10	
		5150-02	
5.5	Brass > 140 HB	5150-04	Brass
		5150-07	
		5150-10	
		5165-02	
		5165-04	
		5165-06	
		5168	
		5170-00	Machine Brass
		5170-02	
		5170-04	
		5173-00	Brass
		5246-06	
		5431-04	
		5431-05	
		5431-07	
5.7	Bronze, Soft	5421	Bronze
		5426	
		5428	
5.8	Bronze, Special <200 HB		AMPCO 12
			AMPCO 15
			AMPCO 16
5.9	Bronze, Special >200 HB		AMPCO 18
			AMPCO 20
6.1	Titan < 700 N/mm ²		
6.2	Titan < 900 N/mm ²		
6.3	Titan < 1300 N/mm ²		
7.1	Ni-Co-alloy < 900 N/mm ²		Hastelloy C
			Hastelloy X
			Inconel 600
			Inconel 625
			Monel 400
			Nimonic 75

Material groups, drilling

WTS group	Material	Example	
		SIS	Name
7.2	Ni-Co-alloy. < 1200 N/mm ²		Inconel 713
			Inconel X-750
			M-252
			Nimonic 90
			Stellite 306
			Waspalloy
7.3	Ni-Co-alloy. >1200 N/mm ²		Inconel 718
			René 41
			Stellite 6

WTS group	Material	Example	
		SIS	Name
8.1	Soft plastics		ABS
			Epoxy
			Nylon
			Plexiglass
			Polypropylen
			PVC
			Polystyren
8.2	Hard platics		
8.3	Reinforced plastics		Glasfiber
			Kevlar

Cutting data, drilling

Recommended cutting speed HSS and HSS-Co -drills			
Surface treatment			
WTS-group	Vc [m/min]	Vc [m/min]	Vc [m/min]
1.1	24 – 32	31 – 37,5	38 – 45
1.2	16 – 24	22,5 – 31	33 – 38
1.3	14 – 20	19 – 25	28 – 36
1.4	7 – 12,5	9 – 16	16 – 23
1.5	3 – 6	5 – 9	7 – 12
2.1	12 – 19	16 – 26	25 – 30
2.2	7 – 12,5	10 – 17,5	16 – 23
2.3	5 – 11	8 – 15	9 – 16
3.1	20 – 30,5	27,5 – 42,5	38 – 43
3.2	14 – 24	20 – 34	32 – 38
3.3	20 – 32	25 – 44	38 – 45
3.4	16 – 24	19 – 31	32 – 42
4.1	49 – 60		
4.2	40 – 48		
4.3	24 – 32	31 – 40	40 – 46
5.1	20 – 36		
5.2	18 – 32	32 – 40	35 – 45
5.4	52 – 76	60 – 90	64 – 96
5.5	24 – 32		
5.7	24 – 32		
5.8	18 – 32	27 – 36	32 – 42
5.9	12 – 19	20 – 29	23 – 34
6.1	3 – 7	6 – 10	8 – 12
7.1	3 – 6	5 – 9	6 – 10
7.2	2,5 – 4,5	3 – 7	4 – 8
7.3			
8.1	20 – 60	27 – 65	35 – 70
8.2	10 – 35	15 – 50	20 – 50
8.3			10 – 32

Recommended cutting speed, X-drills Drill 101, 109, 111, 105, 121, 141, 161 and 165				
Surface treatment				
WTS-grupp	Vc [m/min]	Vc [m/min]	Vc [m/min]	Vc [m/min]
1.1	27 – 36	35 – 40	42 – 48	42 – 50
1.2	18 – 27	25 – 35	35 – 40	35 – 42
1.3	16 – 22	20 – 29	31 – 40	31 – 42
1.4	8 – 14	12 – 18	18 – 25	18 – 26
1.5	4 – 8	6 – 11	8 – 14	8 – 15
2.1	13 – 21	20 – 26	27 – 32	27 – 34
2.2	8 – 14	12 – 18	18 – 25	18 – 27
2.3	6 – 13	9 – 16	11 – 20	11 – 22
3.1	22 – 34	32 – 40	40 – 45	40 – 48
3.2	16 – 27	25 – 34	34 – 40	34 – 42
3.3	22 – 36	35 – 40	42 – 48	42 – 50
3.4	18 – 27	25 – 35	35 – 45	35 – 47
4.1	54 – 67			76 – 86
4.2	45 – 54			60 – 72
4.3	27 – 36	35 – 42	44 – 50	44 – 52
5.1	22 – 40			
5.2	22 – 36	35 – 42	40 – 50	40 – 52
5.4	58 – 85	60 – 90	64 – 96	64 – 100
5.5	27 – 36	35 – 45	44 – 50	44 – 52
5.7	27 – 36	35 – 43	44 – 50	44 – 52
5.8	20 – 35	30 – 40	35 – 45	35 – 48
5.9	14 – 26	22 – 32	26 – 38	
6.1	6 – 10	8 – 12	10 – 14	15 – 24
6.2	4 – 8			10 – 15
7.1	4 – 8	6 – 10	8 – 12	8 – 13
7.2	3 – 6	4 – 8	6 – 10	6 – 11
7.3	2 – 4			
8.1	25 – 65	30 – 70	40 – 80	40 – 80
8.2	14 – 40	20 – 52	25 – 60	25 – 60
8.3			14 – 40	14 – 40

Data should be considered only as guidelines. Under more favourable circumstances data can be increased. Again, under less favourable circumstances data may have to be decreased. For HSS-Co drills the highest values within each range can be used.

Please note: Never increase the cutting speed without increasing the feed simultaneously!

Cutting data, HSS and HSS-Co drills

Recommended feed for extra short drills, [mm/revolution]									
WTS group	Diameter [mm]								
	3	4	6	8	10	12	14	16	20
1.1	0,10	0,13	0,17	0,22	0,26	0,31	0,35	0,38	0,42
1.2	0,10	0,13	0,17	0,22	0,26	0,31	0,35	0,38	0,42
1.3	0,08	0,09	0,13	0,17	0,20	0,23	0,26	0,29	0,31
1.4	0,07	0,08	0,11	0,14	0,17	0,20	0,22	0,25	0,27
1.5	0,06	0,07	0,10	0,12	0,14	0,17	0,19	0,21	0,23
2.1	0,09	0,11	0,15	0,19	0,22	0,26	0,29	0,32	0,35
2.2	0,08	0,09	0,13	0,17	0,20	0,23	0,26	0,29	0,31
2.3	0,06	0,08	0,10	0,13	0,16	0,18	0,21	0,23	0,25
3.1	0,12	0,15	0,21	0,26	0,32	0,37	0,42	0,46	0,50
3.2	0,10	0,13	0,17	0,22	0,26	0,31	0,35	0,38	0,42
3.3	0,13	0,16	0,23	0,29	0,34	0,40	0,45	0,50	0,54
3.4	0,10	0,13	0,17	0,22	0,26	0,31	0,35	0,38	0,42
4.1	0,17	0,21	0,30	0,37	0,45	0,52	0,59	0,65	0,71
4.2	0,14	0,18	0,24	0,31	0,37	0,43	0,48	0,53	0,58
4.3	0,12	0,15	0,21	0,26	0,32	0,37	0,42	0,46	0,50
5.1	0,13	0,16	0,23	0,29	0,34	0,40	0,45	0,50	0,54
5.2	0,15	0,19	0,26	0,33	0,39	0,46	0,52	0,57	0,63
5.4	0,15	0,19	0,26	0,33	0,39	0,46	0,52	0,57	0,63
5.5	0,10	0,13	0,17	0,22	0,26	0,31	0,35	0,38	0,42
5.7	0,10	0,13	0,17	0,22	0,26	0,31	0,35	0,38	0,42
5.8	0,08	0,10	0,14	0,18	0,21	0,24	0,28	0,31	0,33
5.9	0,06	0,08	0,10	0,13	0,16	0,18	0,21	0,23	0,25
6.1	0,06	0,08	0,10	0,13	0,16	0,18	0,21	0,23	0,25
6.2	0,06	0,08	0,10	0,13	0,16	0,18	0,21	0,23	0,25
7.1	0,06	0,08	0,10	0,13	0,16	0,18	0,21	0,23	0,25
7.2	0,05	0,06	0,09	0,11	0,13	0,15	0,17	0,19	0,21
7.3	0,05	0,06	0,09	0,11	0,13	0,15	0,17	0,19	0,21
8.1	0,12	0,15	0,21	0,26	0,32	0,37	0,42	0,46	0,50
8.2	0,08	0,10	0,14	0,18	0,21	0,24	0,28	0,31	0,33

For coated extra short drills: feed should be increased by 20-40% depending on type of coating.

$$\text{Revolutions per minute [r/min]} = \frac{\text{Cutting speed [m/min]} \times 1000}{\pi \times D \text{ [mm]}}$$

Vc [m/min]	Revolutions per minute [r/min]						
	d = 2,5 mm	d = 4 mm	d = 6,3 mm	d = 10 mm	d = 16 mm	d = 25 mm	d = 40 mm
150	20000	12000	8000	5000	3000	2000	1200
125	16000	10000	6300	4000	2500	1600	1000
100	12500	8000	5000	3200	2000	1250	800
80	10000	6300	4000	2500	1600	1000	630
63	8000	5000	3200	2000	1250	800	500
50	6300	4000	2500	1600	1000	630	400
40	5000	3200	2000	1250	800	500	320
32	4000	2500	1600	1000	630	400	250
25	3200	2000	1250	800	500	320	200
20	2500	1600	1000	630	400	250	160
16	2000	1250	800	500	320	200	125
12	1600	1000	630	400	250	160	100
10	1250	800	500	320	200	125	80
8	1000	630	400	250	160	100	63
6	800	500	320	200	125	80	50
5	630	400	250	160	100	63	40
4	500	320	200	125	80	50	32
3	400	250	160	100	63	40	25

Cutting data, HSS and HSS-Co drills

Recommended feed for short drills [mm/revolution]													
WTS group	Diameter [mm]												
	2	4	6	8	10	12	14	16	20	30	40	50	60
1.1	0,06	0,10	0,14	0,18	0,21	0,25	0,28	0,31	0,34	0,40	0,45	0,49	0,58
1.2	0,06	0,10	0,14	0,18	0,21	0,25	0,28	0,31	0,34	0,40	0,45	0,49	0,58
1.3	0,05	0,08	0,11	0,13	0,16	0,19	0,21	0,23	0,25	0,30	0,33	0,36	0,44
1.4	0,04	0,07	0,09	0,12	0,14	0,16	0,18	0,20	0,22	0,26	0,29	0,32	0,38
1.5	0,03	0,06	0,08	0,10	0,12	0,14	0,15	0,17	0,19	0,22	0,24	0,27	0,32
2.1	0,05	0,09	0,12	0,15	0,18	0,21	0,24	0,26	0,29	0,34	0,38	0,41	0,49
2.2	0,05	0,08	0,11	0,13	0,16	0,19	0,21	0,23	0,25	0,30	0,33	0,36	0,44
2.3	0,04	0,06	0,08	0,11	0,13	0,15	0,17	0,19	0,20	0,24	0,27	0,29	0,35
3.1	0,07	0,12	0,17	0,21	0,26	0,30	0,34	0,37	0,41	0,48	0,53	0,58	0,70
3.2	0,06	0,10	0,14	0,18	0,21	0,25	0,28	0,31	0,34	0,40	0,45	0,49	0,58
3.3	0,08	0,13	0,18	0,23	0,28	0,33	0,36	0,40	0,44	0,52	0,58	0,63	0,76
3.4	0,06	0,10	0,14	0,18	0,21	0,25	0,28	0,31	0,34	0,40	0,45	0,49	0,58
4.1	0,10	0,17	0,24	0,30	0,36	0,43	0,48	0,53	0,57	0,67	0,76	0,83	0,99
4.2	0,08	0,14	0,20	0,25	0,30	0,35	0,39	0,43	0,47	0,56	0,62	0,68	0,81
4.3	0,07	0,12	0,17	0,21	0,26	0,30	0,34	0,37	0,41	0,41	0,53	0,58	0,70
5.1	0,08	0,13	0,18	0,23	0,28	0,33	0,36	0,40	0,44	0,52	0,58	0,63	0,76
5.2	0,09	0,15	0,21	0,27	0,32	0,38	0,42	0,46	0,51	0,60	0,67	0,73	0,87
5.4	0,09	0,15	0,21	0,27	0,32	0,38	0,42	0,46	0,51	0,60	0,67	0,73	0,87
5.5	0,06	0,10	0,14	0,18	0,21	0,25	0,28	0,31	0,34	0,40	0,45	0,49	0,58
5.7	0,06	0,10	0,14	0,18	0,21	0,25	0,28	0,31	0,34	0,40	0,45	0,49	0,58
5.8	0,05	0,08	0,11	0,14	0,17	0,20	0,22	0,25	0,27	0,32	0,36	0,39	0,46
5.9	0,04	0,06	0,08	0,11	0,13	0,15	0,17	0,19	0,20	0,24	0,27	0,29	0,35
6.1	0,04	0,06	0,08	0,11	0,13	0,15	0,17	0,19	0,20	0,24	0,27	0,29	0,35
7.1	0,04	0,06	0,08	0,11	0,13	0,15	0,17	0,18	0,20	0,24	0,27	0,29	0,35
7.2	0,03	0,05	0,07	0,09	0,11	0,13	0,14	0,15	0,17	0,20	0,22	0,24	0,29
8.1	0,07	0,12	0,17	0,21	0,26	0,30	0,34	0,37	0,41	0,48	0,53	0,58	0,70
8.2	0,05	0,08	0,11	0,14	0,17	0,20	0,22	0,25	0,27	0,32	0,36	0,39	0,46

WTS group	Emulsion	Cutting oil
1.1	X	
1.2	X	
1.3	X	
1.4	X	
1.5		X
2.1	105-4	X
2.2	105-4	X
2.3	105-4	X
3.1	X	
3.2	X	
3.3	X	
3.4	X	
4.1	X	
4.2	X	
4.3	X	
5.1	X	
5.2	X	

WTS group	Emulsion	Cutting oil
5.4	X	
5.5	X	
5.7	X	
5.8	X	
5.9	X	
6.1	105-4	X
6.2	105-4	X
7.1	105-4	X
7.2	105-4	X
7.3	105 4	X
8.1	X	
8.2	Air	
8.3	Air	

X = recommendation for all drill types. Exceptions are named with drill type no.

Cutting data Solid Carbide Drills WD Series (inch)

WTS group	Diameter						
	WD015						
		1/8 - 3/16	3/16 - 5/16	5/16 - 3/8	3/8 - 1/2	1/2 - 9/16	9/16 - 13/16
1.1, 1.2	SFM (Vc)	257 - 386	241 - 402	291 - 349	275 - 367	302 - 340	263 - 380
	Fz	.005	.007	.009	.010	.013	.015
1.3, 1.4, 1.5	SFM (Vc)	229 - 343	214 - 357	260 - 313	245 - 327	269 - 303	234 - 338
	Fz	.004	.006	.007	.008	.010	.011
3.1, 3.2	SFM (Vc)	429 - 644	402 - 670	488 - 586	460 - 613	505 - 568	438 - 633
	Fz	.004	.006	.007	.008	.010	.011
3.3, 3.4	SFM (Vc)	286 - 429	268 - 447	325 - 390	306 - 408	336 - 378	293 - 423
	Fz	.004	.006	.007	.008	.010	.011

WD015: Feed 100%

WTS group	Diameter						
	WD017, WD018						
		1/8 - 3/16	3/16 - 5/16	5/16 - 3/8	3/8 - 1/2	1/2 - 9/16	9/16 - 13/16
1.1, 1.2	SFM (Vc)	257 - 386	241 - 402	291 - 349	275 - 367	302 - 340	263 - 380
	Fz	.005	.007	.009	.010	.013	.015
1.3, 1.4, 1.5	SFM (Vc)	229 - 343	214 - 357	260 - 313	245 - 327	269 - 303	234 - 338
	Fz	.004	.006	.007	.008	.010	.011
3.1, 3.2	SFM (Vc)	429 - 644	402 - 670	488 - 586	460 - 613	505 - 568	438 - 633
	Fz	.004	.006	.007	.008	.010	.011
3.3, 3.4	SFM (Vc)	286 - 429	268 - 447	325 - 390	306 - 408	336 - 378	293 - 423
	Fz	.004	.006	.007	.008	.010	.011

WD017: Feed 100%

WD018: Feed 85%

Cutting data Solid Carbide Drills WD Series (metric)

WTS group	Diameter								
	WD025, WD026								
		1	2	3	4	5	6	7	8
1.1, 1.2	Vc (m/min)	41	82	123	119	119	121	121	121
	Fz	0.04	0.06	0.13	0.14	0.15	0.17	0.19	0.21
1.3, 1.4, 1.5	Vc (m/min)	35	71	104	106	105	106	106	106
	Fz	0.04	0.06	0.13	0.14	0.15	0.17	0.19	0.21
3.1, 3.2	Vc (m/min)	67	134	198	201	204	207	200	201
	Fz	0.04	0.06	0.13	0.14	0.15	0.17	0.19	0.21
3.3, 3.4	Vc (m/min)	45	89	132	132	130	130	130	131
	Fz	0.04	0.06	0.13	0.14	0.15	0.17	0.19	0.21

WTS group	Diameter							
	WD025, WD026							
		9	10	12	14	16	18	20
1.1, 1.2	Vc (m/min)	119	119	121	121	121	119	119
	Fz	0.23	0.25	0.27	0.29	0.31	0.33	0.35
1.3, 1.4, 1.5	Vc (m/min)	105	105	106	106	106	105	104
	Fz	0.23	0.25	0.27	0.29	0.31	0.33	0.35
3.1, 3.2	Vc (m/min)	201	201	200	200	201	201	201
	Fz	0.23	0.25	0.27	0.29	0.31	0.33	0.35
3.3, 3.4	Vc (m/min)	130	130	130	132	131	130	132
	Fz	0.23	0.25	0.27	0.29	0.31	0.33	0.35

WD025: Feed 100%, WD026: Feed 85%

WTS group	Diameter								
	WD027, WD028								
		1	2	3	4	5	6	7	8
1.1, 1.2	Vc (m/min)	51	102	151	151	150	151	150	151
	Fz	0.05	0.07	0.16	0.17	0.18	0.20	0.22	0.24
1.3, 1.4, 1.5	Vc (m/min)	46	93	137	138	135	136	134	136
	Fz	0.05	0.07	0.16	0.17	0.18	0.20	0.22	0.24
3.1, 3.2	Vc (m/min)	84	167	245	251	251	245	253	249
	Fz	0.05	0.07	0.16	0.17	0.18	0.20	0.22	0.24
3.3, 3.4	Vc (m/min)	54	109	160	163	157	160	161	161
	Fz	0.05	0.07	0.16	0.17	0.18	0.20	0.22	0.24

WTS group	Diameter							
	WD027, WD028							
		9	10	12	14	16	18	20
1.1, 1.2	Vc (m/min)	150	151	151	150	151	150	151
	Fz	0.27	0.30	0.33	0.36	0.39	0.42	0.45
1.3, 1.4, 1.5	Vc (m/min)	136	135	136	134	136	136	135
	Fz	0.27	0.30	0.33	0.36	0.39	0.42	0.45
3.1, 3.2	Vc (m/min)	136	135	136	134	136	136	135
	Fz	0.27	0.30	0.33	0.36	0.39	0.42	0.45
3.3, 3.4	Vc (m/min)	136	135	136	134	136	136	135
	Fz	0.27	0.30	0.33	0.36	0.39	0.42	0.45

WD027: Feed 100%, WD028: Feed 85%

Cutting data Solid Drills WD Series (metric)

WTS group	Diameter								
	WD029								
		1	2	3	4	5	6	7	8
1.1, 1.2	Vc (m/min)	51	102	151	151	150	151	150	151
	Fz	0.05	0.07	0.16	0.17	0.18	0.20	0.22	0.24
1.3, 1.4, 1.5	Vc (m/min)	46	93	137	138	135	136	134	136
	Fz	0.05	0.07	0.16	0.17	0.18	0.20	0.22	0.24
3.1, 3.2	Vc (m/min)	84	167	245	251	251	245	253	249
	Fz	0.05	0.07	0.16	0.17	0.18	0.20	0.22	0.24
3.3, 3.4	Vc (m/min)	54	109	160	163	157	160	161	161
	Fz	0.05	0.07	0.16	0.17	0.18	0.20	0.22	0.24

WTS group	Diameter							
	WD029							
		9	10	12	14	16	18	20
1.1, 1.2	Vc (m/min)	150	151	151	150	151	150	151
	Fz	0.27	0.30	0.33	0.36	0.39	0.42	0.45
1.3, 1.4, 1.5	Vc (m/min)	136	135	136	134	136	136	135
	Fz	0.27	0.30	0.33	0.36	0.39	0.42	0.45
3.1, 3.2	Vc (m/min)	249	251	249	251	251	249	251
	Fz	0.27	0.30	0.33	0.36	0.39	0.42	0.45
3.3, 3.4	Vc (m/min)	161	160	160	161	161	161	160
	Fz	0.27	0.30	0.33	0.36	0.39	0.42	0.45

WD029: Feed 70%

Cutting data Solid Carbide Drills WD Series (inch)

WTS group	Diameter								
	WD029								
		1	2	3	4	5	6	7	8
1.1, 1.2	SFM (Vc)	167	334	494	494	492	494	490	494
	Fz	.002	.003	.006	.007	.007	.008	.009	.009
1.3, 1.4, 1.5	SFM (Vc)	152	304	448	453	443	445	440	445
	Fz	.002	.003	.006	.007	.007	.008	.009	.009
3.1, 3.2	SFM (Vc)	274	548	803	824	824	803	829	816
	Fz	.002	.003	.006	.007	.007	.008	.009	.009
3.3, 3.4	SFM (Vc)	178	356	525	536	515	525	526	527
	Fz	.002	.003	.006	.007	.007	.008	.009	.009

WTS group	Diameter							
	WD029							
		9	10	12	14	16	18	20
1.1, 1.2	SFM (Vc)	167	334	494	494	492	494	490
	Fz	.002	.003	.006	.007	.007	.008	.009
1.3, 1.4, 1.5	SFM (Vc)	152	304	448	453	443	445	440
	Fz	.002	.003	.006	.007	.007	.008	.009
3.1, 3.2	SFM (Vc)	274	548	803	824	824	803	829
	Fz	.002	.003	.006	.007	.007	.008	.009
3.3, 3.4	SFM (Vc)	178	356	525	536	515	525	526
	Fz	.002	.003	.006	.007	.007	.008	.009

WD029: Feed 70%

Cutting data solid carbide 512, 513 series

WTS group	512-4			
	Spindle		Feed	
	m/min	SFM	mm/rev	Inch/rev
1.1	70-90	230-295	0,05-0,31	.002-.012
1.2	60-80	197-262	0,05-0,31	.002-.012
1.3	55-75	180-246	0,05-0,23	.002-.009
1.4	40-60	131-197	0,04-0,20	.001-.008
1.5	30-50	98-164	0,03-0,17	.001-.007
1.6	28-32	92-105	0,03-0,17	.001-.007
1.7	24-28	79-92	0,03-0,17	.001-.007
1.8	10-16	33-52	0,03-0,17	.001-.007
2.1	35-45	115-148	0,05-0,26	.002-.010
2.2	30-40	98-131	0,05-0,23	.002-.009
2.3				
3.1	80-100	262-328	0,06-0,37	.002-.014
3.2	70-90	230-295	0,05-0,31	.002-.012
3.3	60-80	197-262	0,07-0,40	.003-.015
3.4	70-90	230-295	0,05-0,31	.002-.012
4.1	210-250	689-820	0,09-0,51	.003-.020
4.2	170-200	558-656	0,07-0,42	.003-.016
4.3	140-170	459-558	0,06-0,37	.002-.014
5.1	100-130	328-427	0,07-0,40	.003-.015
5.2				
5.4	125-135	410-443	0,08-0,46	.003-.018
5.5	155-185	509-607	0,05-0,31	.002-.012
5.7	65-85	213-279	0,05-0,31	.002-.012
5.8	55-75	180-246	0,05-0,24	.001-.009
5.9	40-55	131-180	0,04-0,18	.001-.007
6.1	30-45	98-131	0,04-0,18	.001-.007
6.2	20-30	66-98	0,04-0,18	.001-.007
6.3	18-28	59-92	0,04-0,18	.001-.007
7.1				
7.2				
7.3				
8.1				
8.2				
8.3				

WTS group	513-4			
	Spindle		Feed	
	m/min	SFM	mm/rev	Inch/rev
1.1	90-110	295-361	0,06-0,32	.002-.012
1.2	80-100	262-328	0,06-0,32	.002-.012
1.3	70-90	230-295	0,05-0,24	.001-.009
1.4	55-75	180-246	0,04-0,21	.001-.008
1.5	40-60	131-197	0,03-0,18	.001-.007
1.6	30-40	98-131	0,03-0,18	.001-.007
1.7				
1.8				
2.1	55-65	180-213	0,05-0,28	.001-.011
2.2	40-50	131-164	0,05-0,24	.001-.009
2.3	35-45	115-148	0,04-0,19	.001-.007
3.1	80-100	262-328	0,07-0,39	.002-.015
3.2	70-90	230-295	0,06-0,32	.002-.012
3.3	60-80	197-262	0,08-0,42	.003-.016
3.4	70-90	230-295	0,06-0,32	.002-.012
4.1	270-330	886-1083	0,10-0,54	.004-.021
4.2	180-220	591-722	0,08-0,45	.003-.017
4.3	160-190	525-623	0,07-0,39	.002-.015
5.1	180-220	591-722	0,08-0,42	.003-.016
5.2				
5.4	155-185	509-607	0,09-0,48	.003-.019
5.5	155-185	509-607	0,06-0,32	.002-.012
5.7	135-165	443-541	0,06-0,32	.002-.012
5.8	70-90	230-295	0,05-0,26	.002-.010
5.9	50-70	164-230	0,04-0,19	.001-.007
6.1	45-55	148-180	0,04-0,19	.001-.007
6.2	40-50	131-164	0,04-0,19	.001-.007
6.3	40-50	131-164	0,04-0,19	.001-.007
7.1	27-33	89-108	0,04-0,19	.001-.007
7.2	17-23	56-75	0,03-0,16	.001-.006
7.3	10-14	33-46	0,03-0,16	.001-.006
8.1				
8.2				
8.3				

Cutting data solid carbide 521 series

WTS group	521-4			
	Spindle		Feed	
	m/min	SFM	mm/rev	Inch/rev
1.1	90-110	295-361	0,05-0,31	.002-.012
1.2	80-100	262-328	0,05-0,31	.002-.012
1.3	65-85	213-279	0,05-0,23	.002-.009
1.4	55-75	180-246	0,04-0,20	.001-.008
1.5	40-60	131-197	0,03-0,17	.001-.007
1.6	30-40	98-131	0,03-0,17	.001-.007
1.7				
1.8				
2.1	55-65	180-213	0,05-0,26	.002-.010
2.2	40-50	131-164	0,05-0,23	.002-.009
2.3	35-45	115-148	0,04-0,18	.001-.007
3.1	80-100	262-328	0,06-0,37	.002-.014
3.2	70-90	230-295	0,05-0,31	.002-.012
3.3	60-80	197-262	0,07-0,40	.003-.015
3.4	70-90	230-295	0,05-0,31	.002-.012
4.1	270-330	886-1083	0,09-0,51	.003-.020
4.2	180-220	591-722	0,07-0,42	.003-.016
4.3	160-190	525-623	0,06-0,37	.002-.014
5.1	180-220	591-722	0,07-0,40	.003-.015
5.2				
5.4	155-185	509-607	0,08-0,46	.003-.018
5.5	155-185	509-607	0,05-0,31	.002-.012
5.7	135-165	443-541	0,05-0,31	.002-.012
5.8	70-90	230-295	0,05-0,24	.001-.009
5.9	50-70	164-230	0,04-0,18	.001-.007
6.1	45-55	148-180	0,04-0,18	.001-.007
6.2	40-50	131-164	0,04-0,18	.001-.007
6.3	40-50	131-164	0,04-0,18	.001-.007
7.1	27-33	89-108	0,04-0,18	.001-.007
7.2	17-23	56-75	0,03-0,15	.001-.006
7.3	10-14	33-46	0,03-0,15	.001-.006
8.1				
8.2				
8.3				

Material Group, Milling

WTS group	Material	Example	
		SIS	Name
1.1	Non-Alloy Steel < 550 N/mm ² < 149 HB < 81 HRB	1300	General Structural Steel
		1311	
		1312	
		1330	Boiler Steel
		1350	Machine Steel
		1370-00	Hardened Steel
		1412	General Structural Steel
		1414	
		1430	Boiler Steel
		1450-00	Machine Steel
		1912	Free Cutting Steel
		1914	
		1922	
		1926	
		2101	Boiler Steel
		2103-01	
1.2	Non-Alloy Steel < 700 N/mm ² < 210 HB < 18 HRC < 95 HRB	1432-01	Boiler Steel
		1550	Machine Steel
		1572-00	Hardened Steel
		1590-00	Machine Steel
		1957	Carbon Steel
		2132	Structural Steel
		2134	
		2216-04	Boiler Steel
		2218-04	
			DOMEX 240 P
1.3	Alloy Steel < 800 N/mm ² < 235 HB < 20 HRC < 97 HRB	2172	Structural Steel
		2225-00	Carbon Steel
		1505-02	Cast Steel
		1572-03	Carbon Steel
		1650	Machine Steel
		1655	Carbon Steel
		1672-00	Carbon steel
		2173	General Structural
		2174	
		2511-00	Carbon Steel
		2512-02	
		2514-02	
		2515-02	
			ASP 2023
			DOMEX 450 P
			VANADIS 10
			VANADIS 23
			VANADIS 4
			VANADIS 6
			WELLDX 700

WTS group corresponds to material classifications according to Wedevåg Tools cutting data program WTS 2005. A user-friendly tool for selecting tools and processing conditions. The program deals with drilling and milling separately.

Available via the website at www.wedevag.com

NOTE: Group divisions for drilling is somewhat different from milling. For drilling: Use the corresponding table for material classification.

WTS group	Material	Example	
		SIS	Name
1.4	Alloy Steel < 1100 N/mm ² < 35 HRC < 81 HRB	1572-04	Carbon Steel
		1606-02	Cast Steel
		1672-03	Carbon Steel
		1770	Spring Steel
		1880-02	Tool Steel
		1973	Free Cutting Steel
		2092-02	Tool Steel
		2120-02	Carbon Steel
		2140-02	Tool Steel
		2225-03	Carbon Steel
		2225-04	Carbon Steel
		2230	Spring Steel
		2234-03	Carbon Steel
		2234-04	
		2240-02	
		2242-02	Tool- & Spring Steel
		2244-02	Carbon Steel
		2245-02	Carbon Steel
		2258-02	Structural Steel
		2260-02	Tool Steel
		2534-02	Carbon Steel
		2710-02	Tool Steel
			ASP 2030
			ASP 2060
			CALMAX
			CARMO
			CORRAX
			HARDOX 400
			HOLDAX
			IMPAX SUPREME
			SLEIPNER
			STAVAX ESR
			TOLLOX 33
			VANADIS 30
			VANADIS 4 EXTRA
			VANADIS 60
1.5	Alloy Steel < 1400 N/mm ² < 405 HB < 43 HRC < 1114 HRB	2090	Fjäderstål
		2120-03	Carbon Steel
		2225-05	
		2234-05	
		2244-04	
		2244-05	
		2245-03	
		2245-04	
		2534-03	
		2534-04	
		2541	
		2550-02	Tool Steel
			HARDOX 450
			HARDOX 500
			TOLLOX 44
1.6	Hardened Steel < 50 HRC		
1.7	Hardened Steel < 55 HRC		
1.8	Hardened Steel < 65 HRC		

Material Group, Milling

WTS group	Material	Example	
		SIS	Name
2.1	Stainless Steel, light	2302-02	Stainless Steel
		2302-03	
		2308-02	
		2308-03	Stainless Steel, Easy
		2320-02	
		2322	
		2346-02	
		2383-02	
		2383-03	
2.2	Stainless Steel, Medium	2331	Stainless Steel
		2302-12	
		2302-13	
		2303	
		2304	
		2321	
		2324	
		2325	
		2326	
		2333	
		2337	
		2343	
		2347	
		2352	
		2353	
		2371	
		2375	
2.3	Stainless Steel, Difficult	2328	Stainless Steel
		2333-H	
		2361	
		2368	
		2372	
		2376	
		2377	
		2378	
		2562	
		2564	
3.1	Cast Iron < 10 HRC	0717	Cast Iron
3.2	Cast Iron < 320 HB < 35 HRC < 10 HRB	0115	Malleable Cast Iron
		0727	
		0727-02	
3.3	Cast Steel	0707-00	Heat Resistance Cast Steel
		0737	
4.1	Aluminium < 5% Si	4007	Aluminium Alloys
		4125	
		4212	
4.2	Aluminium 5 – 10% Si	4244	Aluminium
		4245	
		4247	
		4250	
		4252	
4.3	Aluminium >10% Si	4253	Aluminium
		4255	
		4260	
		4261	

WTS group	Material	Example	
		SIS	Name
5.1	Copper	5010	Copper
		5011	
		5030	
5.2	Copper-Nickel		Copper-Nickel
5.7	Bronze, Soft	5112	Brass
		5122	
		5150	
		5165	
		5168	Bronze
		5428	
6.1	Titan		Titanium
6.2	Titanium Alloy < 264HB		Titanium Alloy
6.3	Titanium Alloy < 375HB		
7.1	Ni-Co Alloys < 900 N/mm ² < 264 HB < 28 HRC < 103 HRB	400	Monel 400
		600	Inconel 600
		625	Inconel 625
		75	Nimonic 75
		800	Incoloy
			Hastelloy C
			Hastelloy X
7.2	Ni-Co Alloys < 1200 N/mm ² < 348 HB < 38 HRC < 110 HRB	105	Nimonic
		306	Stellite
		713	Inconel
		90	Nimonic
		x-750	Inconel
8.1	Soft Plastics		Plexiglass

Cutting data HSS End Mills

	620-1		620-41		631-01		631-41		633-01		633-41	
WTS	m/min	SFM	m/min	SFM	m/min	SFM	m/min	SFM	m/min	SFM	m/min	SFM
1.1	40-45	131-148	63-73	207-240	40-45	131-148	63-73	207-240	40-45	131-148	63-73	207-240
1.2	35-38	115-125	53-63	174-207	35-38	115-125	53-63	174-207	35-38	115-125	53-63	174-207
1.3	30-35	98-115	49-59	161-194	30-35	98-115	49-59	161-194	30-35	98-115	49-59	161-194
1.4	18-22	59-72	36-40	118-131	18-22	59-72	36-40	118-131	18-22	59-72	36-40	118-131
1.5	8-12	26-39	18-20	59-66	8-12	26-39	18-20	59-66	8-12	26-39	18-20	59-66
1.6												
1.7												
1.8												
2.1	10-14	33-46	19-22	62-72	10-14	33-46	19-22	62-72	10-14	33-46	19-22	62-72
2.2	8-12	26-39	16-18	52-59	8-12	26-39	16-18	52-59	8-12	26-39	16-18	52-59
2.3	7-9	23-30	14-16	46-52	7-9	23-30	14-16	46-52	7-9	23-30	14-16	46-52
3.1	37-43	121-141	63-68	207-223	37-43	121-141	63-68	207-223	37-43	121-141	63-68	207-223
3.2	23-27	75-89	40-44	131-144	23-27	75-89	40-44	131-144	23-27	75-89	40-44	131-144
3.3	18-22	59-72	32-36	105-118	18-22	59-72	32-36	105-118	18-22	59-72	32-36	105-118
4.1	220-260	722-853			220-260	722-853			220-260	722-853		
4.2	90-110	295-361			90-110	295-361			90-110	295-361		
4.3	60-80	197-262			60-80	197-262			60-80	197-262		
5.1	90-120	295-394			90-120	295-394			90-120	295-394		
5.2	17-19	56-62			17-19	56-62			17-19	56-62		
5.7	65-75	213-246			65-75	213-246			65-75	213-246		
6.1	16-20	52-66	30-33	98-108	16-20	52-66	30-33	98-108	16-20	52-66	30-33	98-108
6.2	11-13	36-43	20-22	66-72	11-13	36-43	20-22	66-72	11-13	36-43	20-22	66-72
6.3												
7.1	7-9	23-30	14-16	46-52	7-9	23-30	14-16	46-52	7-9	23-30	14-16	46-52
7.2												
8.1												

Cutting data HSS End Mills

	642-01		642-41		643-01		643-41		693-01		693-11	
WTS	m/min	SFM	m/min	SFM	m/min	SFM	m/min	SFM	m/min	SFM	m/min	SFM
1.1	40-45	131-148	63-73	207-240	36-40	118-131	57-66	187-217	36-40	118-131	50-55	164-180
1.2	35-38	115-125	53-63	174-207	31-34	102-112	48-57	157-187	32-35	105-115	42-48	138-157
1.3	30-35	98-115	49-59	161-194	27-31	89-102	44-53	144-174	27-32	89-105	38-42	125-138
1.4	18-22	59-72	36-40	118-131	16-20	52-66	32-36	105-118	16-20	52-66	22-27	72-89
1.5	8-12	26-39	18-20	59-66	7-11	23-36	16-18	52-59	7-10	23-33	11-14	36-46
1.6												
1.7												
1.8												
2.1	10-14	33-46	19-22	62-72	9-13	30-43	17-20	56-66	9-12	30-39	12-16	39-52
2.2	8-12	26-39	16-18	52-59	7-10	23-33	15-18	49-59	6-8	20-26	9-11	30-36
2.3	7-9	23-30	14-16	46-52	6-8	20-26	13-15	43-49				
3.1	37-43	121-141	63-68	207-223	33-39	108-128	57-62	187-203	34-39	112-128	48-54	157-177
3.2	23-27	75-89	40-44	131-144	21-24	69-79	36-40	118-131	21-25	69-82	30-34	98-112
3.3	18-22	59-72	32-36	105-118	16-20	52-66	29-32	95-105	16-20	52-66	24-27	79-89
4.1	220-260	722-853			200-230	656-984						
4.2	90-110	295-361			80-100	262-328						
4.3	60-80	197-262			54-72	177-236						
5.1	90-120	295-394			80-110	262-361			80-110	262-361	115-135	377-443
5.2	17-19	56-62			15-17	49-56			15-17	49-56	20-24	66-79
5.7	65-75	213-246			59-67	194-220			60-68	197-223	85-95	279-312
6.1	16-20	52-66	30-33	98-108	14-17	46-56	27-33	89-108	15-18	49-59	19-22	62-72
6.2	11-13	36-43	20-22	66-72	9-11	30-36	18-22	59-72	10-12	33-39	13-15	43-49
6.3												
7.1	7-9	23-30	14-16	46-52	6-8	20-26	13-15	43-49	6-8	20-26	9-11	30-36
7.2												
8.1												

Cutting data HSS End Mills

	645-01		645-41		646-01		646-41	
WTS	m/min	SFM	m/min	SFM	m/min	SFM	m/min	SFM
1.1	40-45	131-148	63-73	207-240	34-38	112-125	54-62	177-203
1.2	35-38	115-125	53-63	174-207	30-33	98-108	45-54	148-177
1.3	30-35	98-115	49-59	161-194	26-30	85-98	42-50	138-164
1.4	18-22	59-72	36-40	118-131	15-19	49-62	31-34	102-112
1.5	8-12	26-39	18-20	59-66	7-10	23-33	15-17	49-56
1.6								
1.7								
1.8								
2.1	10-14	33-46	19-22	62-72	9-12	30-39	16-19	52-62
2.2	8-12	26-39	16-18	52-59	7-10	23-33	14-16	46-52
2.3	7-9	23-30	14-16	46-52	6-8	20-26	12-14	39-46
3.1	37-43	121-141	63-68	207-223	31-37	102-121	54-58	177-190
3.2	23-27	75-89	40-44	131-144	20-23	66-75	34-37	112-121
3.3	18-22	59-72	32-36	105-118	15-19	49-62	27-31	89-102
4.1	220-260	722-853						
4.2	90-110	295-361						
4.3	60-80	197-262						
5.1	90-120	295-394			77-100	253-328		
5.2	17-19	56-62			14-16	46-52		
5.7	65-75	213-246			55-64	180-210		
6.1	16-20	52-66	30-33	98-108	14-17	46-56	25-29	82-95
6.2	11-13	36-43	20-22	66-72	9-11	30-36	17-19	56-62
6.3	8-10	26-33	11-13	36-43	7-9	23-30	9-11	30-36
7.1	10-13	33-43	14-16	46-52	8-11	26-36	12-14	39-46
7.2	4-6	13-20	9-11	30-36				
8.1								

Feed HSS End Mills

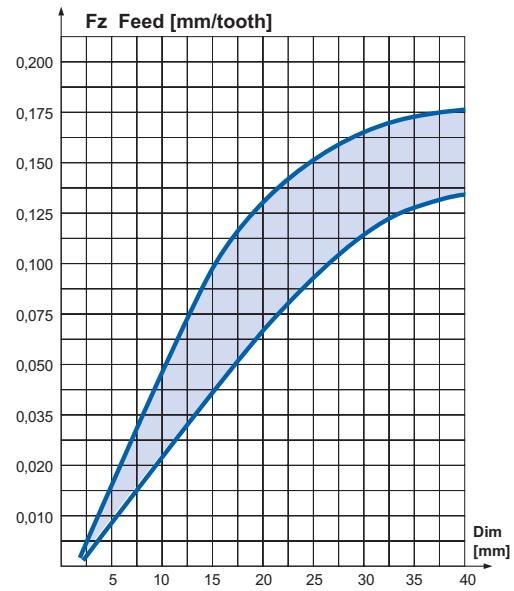
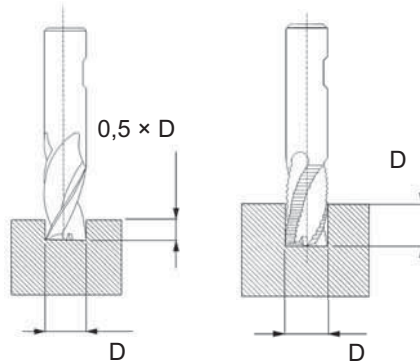
Slotting

$Fz \times z \times n$ = feed in mm/min

Fz = use diagram

z = number of teeth

n = RPM



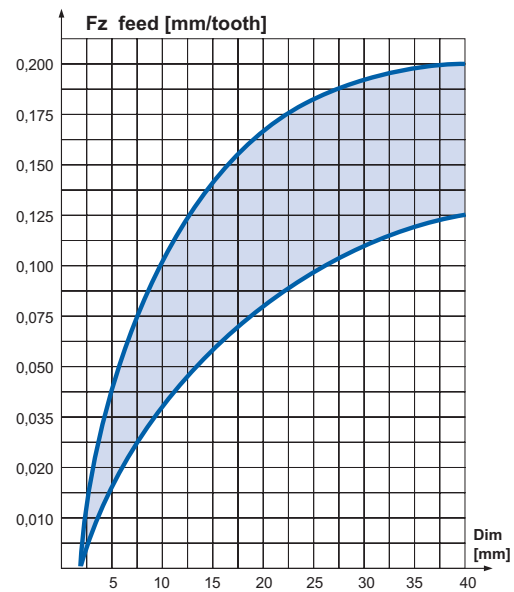
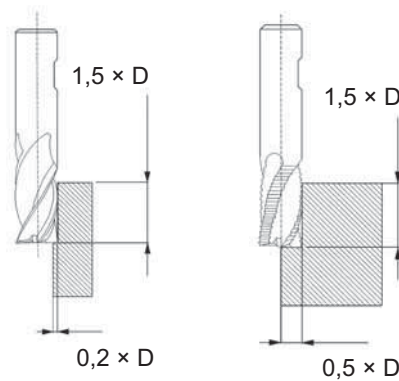
Sidecutting

$Fz \times z \times n$ = feed in mm/min

Fz = use diagram

z = number of teeth tänder

n = RPM



Cutting data Carbide End Mills (inch)

WTS group	Diameter				
	W480-W481				
		1/8	5/32	3/16	7/32
1.1	SFM (Vc)	984(787-1181)			
1.2	Fz	.0002	.0003	.0004	.0005
1.3	FEED	12.01	15.37	17.61	18.53
1.4	SFM (Vc)	210 (168 - 252)			
	Fz	.0001	.0002	.0003	.0004
1.5	FEED	3.03	4.85	5.39	5.49
2.1	SFM (Vc)	528 (423 - 633)			
	Fz	.0002	.0002	.0004	.0004
	FEED	10.16	12.20	15.25	15.97
2.2	SFM (Vc)	377 (302 - 452)			
	Fz	.0002	.0003	.0005	.0006
	FEED	9.07	11.61	15.72	16.07
2.3	SFM (Vc)	341 (273 - 409)			
	Fz	.0002	.0003	.0005	.0006
	FEED	8.21	10.50	14.22	14.54
3.1	SFM (Vc)	367 (294 - 440)			
3.2	Fz	.0002	.0004	.0006	.0007
3.3	FEED	10.60	14.13	16.48	17.16
6.1	SFM (Vc)	266 (213 - 319)			
6.2	Fz	.0002	.0003	.0004	.0005
6.3	FEED	5.12	7.17	9.39	9.88
7.1	SFM (Vc)	102 (82 - 122)			
7.2	Fz	.0002	.0003	.0005	.0006
7.3	FEED	2.45	2.75	3.93	4.21

WTS group	Diameter							
	W680-W681							
		1/4	5/16	3/8	1/2	5/8	3/4	1
1.1	SFM (Vc)	984(787-1181)						
1.2	Fz	.0027	.0046	.0057	.0068	.0080	.0089	.0091
1.3	FEED	241.52	329.60	340.96	307.22	286.98	266.38	206.00
1.4	SFM (Vc)	328 (262-394)						
	Fz	.0016	.0028	.0035	.0041	.0048	.0054	.0057
1.5	FEED	48.54	67.25	69.46	62.15	58.25	54.06	42.62
2.1	SFM (Vc)	699 (559 - 839)						
	Fz	.0019	.0033	.0041	.0049	.0057	.0064	.0066
	FEED	123.63	169.55	174.93	157.69	147.34	136.24	105.97
2.2	SFM (Vc)	482 (386 - 578)						
	Fz	.0016	.0028	.0035	.0041	.0048	.0054	.0056
	FEED	71.33	98.82	102.07	91.34	85.60	79.45	62.20
2.3	SFM (Vc)	440 (352 - 528)						
	Fz	.0016	.0028	.0035	.0041	.0048	.0054	.0056
	FEED	65.11	90.21	93.17	83.38	78.14	72.53	56.38
6.1	SFM (Vc)	381 (305 - 457)						
6.2	Fz	.0013	.0022	.0028	.0033	.0038	.0044	.0046
6.3	FEED	45.38	60.51	64.18	57.07	53.36	51.80	40.22
7.1	SFM (Vc)	381 (305 - 457)						
7.2	Fz	.0013	.0022	.0028	.0032	.0038	.0044	.0045
7.3	FEED	12.86	17.15	18.19	15.98	15.13	14.55	11.21

Cutting data Carbide End Mills (metric)

WTS group	Diameter												
	W480-W481												
		3	4	5	6	8	10	12	14	16	18	20	25
1.1, 1.2, 1.3	Vc (m/min)	152 (122 - 182)					168 (135 - 201)						
	Fz	0.005	0.008	0.011	0.016	0.027	0.038	0.047	0.049	0.053	0.059	0.065	0.064
1.4, 1.5	Vc (m/min)	64 (52 - 76)					70 (56 - 84)						
	Fz	0.003	0.006	0.008	0.011	0.019	0.027	0.032	0.034	0.037	0.041	0.045	0.045
2.1	Vc (m/min)	115 (92 - 138)											
	Fz	0.005	0.008	0.013	0.018	0.028	0.048	0.056	0.060	0.063	0.070	0.077	0.078
2.2	Vc (m/min)	161 (129 - 193)											
	Fz	0.004	0.006	0.009	0.013	0.022	0.034	0.040	0.043	0.045	0.050	0.055	0.055
2.3	Vc (m/min)	104 (84 - 124)											
	Fz	0.005	0.008	0.013	0.018	0.028	0.048	0.055	0.059	0.062	0.069	0.077	0.078
3.1, 3.2, 3.3	Vc (m/min)	112 (90 - 134)					123 (99 - 147)						
	Fz	0.006	0.010	0.014	0.020	0.034	0.048	0.058	0.061	0.065	0.073	0.081	0.079
6.1, 6.2, 6.3	Vc (m/min)	81 (65 - 97)											
	Fz	0.004	0.007	0.011	0.016	0.025	0.043	0.050	0.053	0.056	0.062	0.069	0.070
7.1, 7.2, 7.3	Vc (m/min)	31 (25 - 37)											
	Fz	0.005	0.007	0.012	0.018	0.031	0.047	0.055	0.061	0.064	0.069	0.077	0.079

WTS group	Diameter							
	W680-W681							
		6	8	10	12	16	20	25
1.1, 1.2, 1.3	Vc (m/min)	300 (240 - 360)						
	Fz	0.068	0.116	0.144	0.173	0.202	0.225	0.232
1.4, 1.5	Vc (m/min)	100 (80 - 120)						
	Fz	0.041	0.071	0.088	0.105	0.123	0.137	0.144
2.1	Vc (m/min)	147 (118 - 176)						
	Fz	0.041	0.071	0.088	0.105	0.123	0.137	0.143
2.2	Vc (m/min)	213 (170 - 256)						
	Fz	0.049	0.084	0.104	0.125	0.146	0.162	0.168
2.3	Vc (m/min)	134 (107 - 161)						
	Fz	0.041	0.071	0.088	0.105	0.123	0.137	0.142
6.1, 6.2, 6.3	Vc (m/min)	213 (170 - 256)						
	Fz	0.033	0.055	0.070	0.083	0.097	0.113	0.117
7.1, 7.2, 7.3	Vc (m/min)	134 (107 - 161)						
	Fz	0.033	0.055	0.070	0.082	0.097	0.112	0.115

Cutting data Solid Carbide Roughing End Mills (inch)

WTS group	Diameter							
	Slotting							
	WS485, WS486, WM485, WM486, WL485, WL486							
		1/4	5/16	3/8	1/2	5/8	3/4	1
1.1, 1.2, 1.3	SFM (Vc)	744 (706-785)						
3.1, 3.2, 3.3	Fz	.005	.007	.009	.010	.013	.015	.016
Figure 1	FEED	61	65	65	60.6	59.1	52.4	46.4
1.4, 1.5	SFM (Vc)	666 (628 - 706)						
Figure 2	Fz	.004	.006	.007	.008	.010	.011	.013
	FEED	43.3	46.5	46.5	44.9	41.3	35.4	32.5

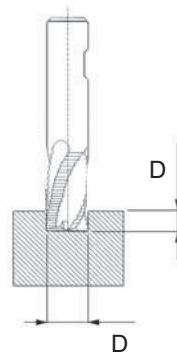


Figure 1

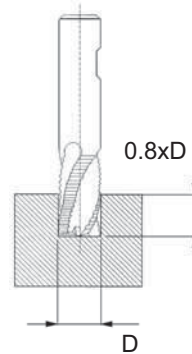


Figure 2

Cutting data Solid Carbide Roughing End Mills (inch)

WTS group	Diameter							
	Sidecutting							
	WS485, WS486, WM485, WM486, WL485, WL486							
		1/4	5/16	3/8	1/2	5/8	3/4	1
1.1, 1.2, 1.3	SFM (Vc)	986 (932 - 1047)						
3.1, 3.2, 3.3	Fz	.006	.009	.011	.013	.016	.018	.020
Figure 3	FEED	101.2	106.3	106.3	101.2	96.5	84.3	75.3
1.4, 1.5	SFM (Vc)	884 (834 - 935)						
Figure 4	Fz	.005	.007	.009	.010	.013	.014	.014
	FEED	72.8	76.8	76.8	72.8	69.9	59.1	49.3

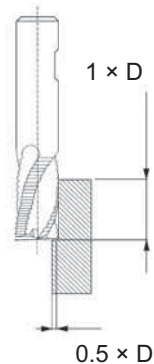


Figure 3

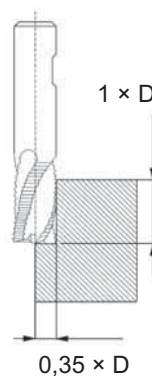


Figure 4

Cutting data Solid Carbide Roughing End Mills (metric)

WTS group	Diameter						
	Slotting						
	WS485, WS486, WM485, WM486, WL485, WL486						
		6	8	10	12	16	20
1.1, 1.2, 1.3 3.1, 3.2, 3.3 Figure 5	Vc (m/min)	226					
	Fz	0.13	0.18	0.22	0.25	0.33	0.38
1.4, 1.5 Figure 6	Vc (m/min)	200					
	Fz	0.10	0.15	0.18	0.20	0.25	0.28

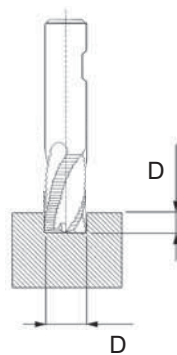


Figure 5

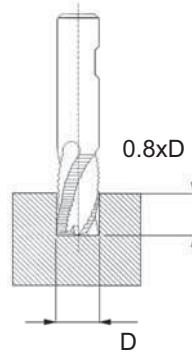


Figure 6

Cutting data Solid Carbide Roughing End Mills (metric)

WTS group	Diameter						
	Sidecutting						
	WS485, WS486, WM485, WM486, WL485, WL486						
		6	8	10	12	16	20
1.1, 1.2, 1.3 3.1, 3.2, 3.3 Figure 7	Vc (m/min)	298					
	Fz	0.15	0.23	0.28	0.33	0.40	0.45
1.4, 1.5 Figure 8	Vc (m/min)	270					
	Fz	0.13	0.18	0.23	0.25	0.33	0.35

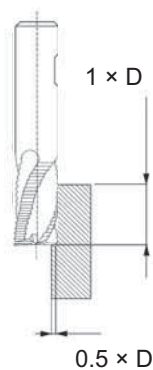


Figure 7

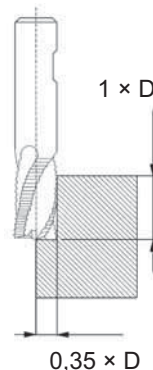


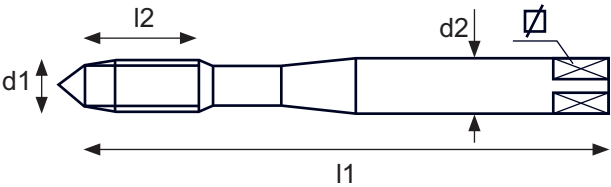
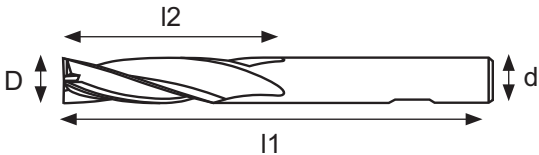
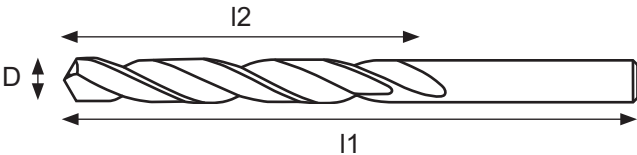
Figure 8

Icon descriptions

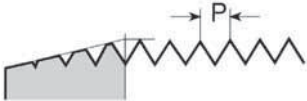
Common icons					
Type		Internal Cooling		Number of teeth	
Standard				Wedevåg standard	
Material		High Speed Steel		High Speed Steel Cobalt	
		High Speed Powder Steel		High Speed Steel/ Carbide	
		Solide micro grain carbide		High Speed Steel Cobalt	
Surface treatment		Bright		Steam tempered	
		Bronze		Titanium Nitride	
		Aluminium Titanium Nitride		Futura	
		Titanium Carbo Nitride		Chromium Nitride	
					Surface preparation
					Edge treatment
Helix angle					
Direction					
Length l1					

Icon descriptions

Drilling icons	
Form	N H VA W DHW Deep hole Wedevåg
Point angle	90
Point geometry	C Helical point (self centering) 60° Centre 60°
	U Point thinned 60° Centre 60° protected
	K Standard Centre radius form
Shank	Straight shank Morse taper shank
Depth	2,5×D



Pitch (P):
mm/rev (metric)
or
TPI (inch)



Icon descriptions

Milling icons			
Type	  		Wedevåg standard
Diameter tolerance	  		
Application			
			Roughing/Finishing
			Corner rounding
Shank			Flatted shank

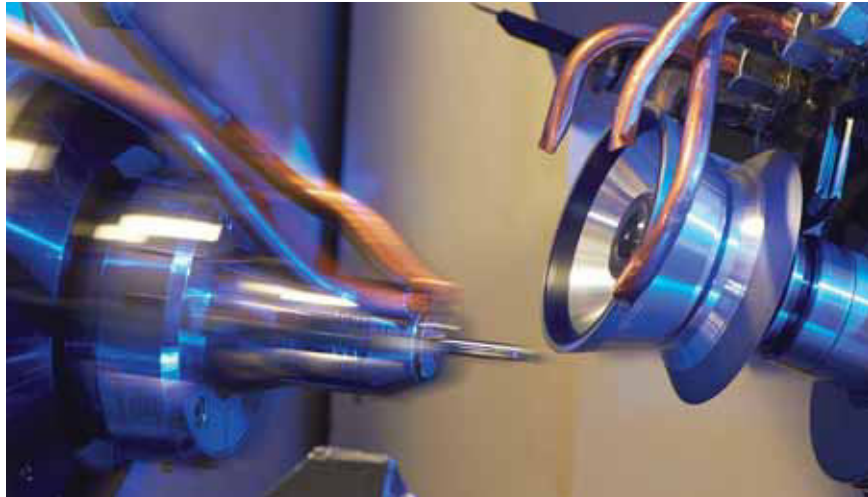
Threading icons					
Type		Straight		Gun nose	
		Helical		Interrupted	
		Forming		Forming with lubricating groove	
		$d1 \leq d2$		$d1 > d2$	
		Form B		Form C	
		High Speed tap			
Diameter tolerance					
Application			Through hole		Blind hole
Type of thread	      				

WEDEVAG I UULS

Why products from Wedevåg?

Custom design and manufacturing, almost 480 years of constant production of metal products, along with collaboration from some of the world's premier manufacturers make Wedevåg your supplier for tools of the highest class.

In much the same way that the whole is greater than the sum of its parts; Wedevåg has opted to partner with various top in class suppliers across the world to offer you, our customers, not only the finest quality product lines to supplement our own High Performance HSS-Co and carbide cutting tools, but to assure that these added offerings meet with the strict standards that you have come to expect from Wedevåg.



This unique idea of bringing together some of the world's finest manufactures is not new to Wedevåg.

We have partnered with Granlund Tools AB, Tivoly, and Universal Drilling and Cutting for almost 2 decades, as well as numerous bandsaw blade manufactures. The addition of Cejn quick connect couplings

and superior quality flow control products shows that Wedevåg will never stop in our commitment to provide innovative, value added complimentary products that bring worth and sustainable return to you, our patrons. For additional information on any of these products, please contact us.



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WEDEVÅG

Wedevåg is one of the oldest yet active companies in Sweden. The king Gustav Vasa that ruled Sweden between 1523-1560 founded the metal working industry at this geographical place north of the city of Örebro during the 16th Century. Through the years the character of the business has of course shifted depending on the demands of the market. However a common denominator has always been metal working.

Wedevåg - yesterday, today and tomorrow.

