



EMUGE

*Innovative
Thread Mill
Solutions*



NEW THREADS-ALL™
Solid Carbide Thread Mills

EXPANDED
PROGRAM

THREADS-ALL.™ Quality, Security, Versatility and Economy

Emuge is proud to introduce Threads-All, a new expanded line of solid carbide thread mills. In the dynamic world of metal cutting, Emuge recognizes the need to continually deliver the latest technology to help manufacturers reduce costs, improve delivery times, and produce world-class products.

This new series of thread mills will set the standard for versatility, performance, process security, and value. The Emuge Threads-All program is specially designed for a wide range of threading applications and requires minimal tooling.

Threads-All is ideal for demanding industries using difficult materials such as stainless steels, titanium, and inconel. For manufacturers, tool crib stock and carrying costs are minimized, delivery times are improved, finished threads will pass all QC requirements, and profitability is maximized.



Defense



Medical



Aerospace

THREADS-ALL™ *Miniature* Solid Carbide Thread Mills

As the demand in today's market increases for smaller parts and more efficient machining solutions, so do the threading solutions from Emuge. Miniature size thread mills provide a high-quality and dependable threading solution for a variety of difficult materials.

Precision ground rake and relief angles allow Threads-All tools to be used in all material groups up to 58 Rc with a simple modification of the operating parameters based on the metals' chemical properties and hardness range.

#1 Miniature tool size compared to a pencil tip

- ▶ Easy machining of difficult materials
- ▶ One tool for through and blind holes
- ▶ Pitch diameter can be easily controlled
- ▶ Full bottom threading to within 1 pitch
- ▶ Precise thread depth control
- ▶ Thread depths up to 2xD

- ▶ STI threads can be easily produced
- ▶ Produces excellent thread finish & gaging
- ▶ Eliminates the possibility and consequences of tap breakage
- ▶ Eliminates the need for hand tapping
- ▶ Eliminates the need for thread cutting oil

Z-GF MINIATURE - THREAD MILLS without internal coolant (All sizes TiCN coated)

EDP No.	Tool Size	Thread Size										Cutter Dia.	Cut Length	No. Flutes	Overall Length	Shank Dia.	Shank Type
		UNC	UNF	STI UNC	STI UNF	UNEF	UNJC	UNJF	M	MJ							
GFS137065033	0	-	0-80	-	-	-	-	0-80	1.6 x .35	1.6 x .35	0.045	0.125	1	1 5/8"	1/8"	HA	
GFS237065000	1	1-64	1-72	-	-	-	-	1-64	1-72	2 x .4	2 x .4	0.056	0.146	3	1 5/8"	1/8"	HA
GFS237065001	2	2-56	2-64	1-64	-	-	-	2-56	2-64	2.5 x .45	2.5 x .45	0.064	0.172	3	1 5/8"	1/8"	HA
GFS237065003	4	4-40	4-48	2-56	-	-	-	4-40	4-48	-	-	0.081	0.224	3	1 5/8"	1/8"	HA
GFS237065611	STI 4	-	-	4-40	4-48	-	-	-	-	-	-	0.117	0.295	3	1 5/8"	1/8"	HA
GFS237065004	5	5-40	5-44	-	-	-	-	5-40	5-44	3 x .5	3 x .5	0.095	0.250	3	1 5/8"	1/8"	HA
GFS237065005	6	6-32	6-40	-	-	-	-	6-32	6-40	-	-	0.100	0.276	3	1 5/8"	1/8"	HA
GFS231065613	STI 6	-	-	6-32	6-40	-	-	-	5 x .8	5 x .8	0.143	0.364	3	2 1/2"	1/4"	HB	
GFS237065006	8	8-32	8-36	-	-	-	-	8-32	8-36	4 x .7	4 x .7	0.124	0.328	3	1 5/8"	1/8"	HA
GFS231065614	STI 8	-	-	8-32	8-36	1/4-32	-	-	-	-	-	0.167	0.415	3	2 1/2"	1/4"	HB

THREADS-ALLTM Expanded Sizes

Solid Carbide Thread Mills

The new Expanded Program gives manufacturers a ready tooling solution which allows for quick adaptation to a variety of threading requirements, in a wide range of materials.

Threads-All tools easily and safely machine with unsurpassed thread quality and tool life, while eliminating the possibility and consequences of tap breakage.

- ▶ Requiring only 8 stock standard tool sizes, #10 • 1/4 • 5/16 • 3/8 • 7/16 • 1/2 • 5/8 • 3/4, it is now possible to produce 100+ commonly produced screw thread designations:

UNC • UNF • STI UNC • STI UNF • UNEF • UNS • UNJC • UNJF • M • MJ

- ▶ In addition, Threads-All tools provide total control over pitch diameter limits including 2B • 3B • 3BG • and all oversize variants.

NEW
Sizes #10 - 3/4"



Z-GF EXPANDED SIZES - THREAD MILLS (All sizes TiCN coated)

EDP No. <i>ALL NEW</i>	Tool Size	Thread Size										Cutter Dia.	Cut Length	No. Flutes	Overall Length	Shank Dia.	Shank Type
		UNC	UNF	STI UNC	STI UNF	UNEF	UNJC	UNJF	M	MJ							
GFS237065007*	10	10-24	10-32	10-24	10-32	-	10-24	10-32	-	-	0.136	0.380	3	2 1/2"	1/4"	HB	
GFS231065009*	1/4	1/4-20	1/4-28	1/4-20	1/4-28	5/16-32	1/4-20	1/4-28	6 x 1	6 x 1	0.185	0.500	3	2 1/2"	1/4"	HB	
GFS331065010**	5/16	5/16-18	5/16-24	5/16-18	5/16-24	3/8-32	5/16-18	5/16-24	8 x 1.25	8 x 1.25	0.242	0.625	4	2 1/2"	1/4"	HB	
GFS331065011**	3/8	3/8-16	3/8-24	3/8-16	3/8-24	7/16-28	3/8-16	3/8-24	10 x 1.5	10 x 1.5	0.301	0.750	5	2 1/2"	5/16"	HB	
GFS331065012**	7/16	7/16-14	7/16-20	7/16-14	7/16-20	1/2-28	7/16-14	7/16-20	12 x 1.75	12 x 1.75	0.354	0.875	5	3.00"	3/8"	HB	
GFS331065013**	1/2	1/2-13	1/2-20	1/2-13	1/2-20	5/8-24	1/2-13	1/2-20	14 x 2	14 x 2	0.407	1.00	5	3 3/4"	1/2"	HB	
GFS331065015**	5/8	5/8-11	5/8-18	5/8-11	5/8-18	3/4-20	5/8-11	5/8-18	16 x 2	16 x 2	0.512	1.25	5	3 3/4"	1/2"	HB	
GFS331065016**	3/4	3/4-10	3/4-16	3/4-10	3/4-16	7/8-20	3/4-10	3/4-16	20 x 2.5	20 x 2.5	0.630	1.50	6	4 1/4"	5/8"	HB	

* External flood coolant only ** External flood coolant or axial internal coolant hole

Shank Types: HA-Straight shank without clamping flat, HB-Straight shank with Weldon clamping flat

A close-up photograph showing a thread mill tool cutting a thread into a metal workpiece. The tool is positioned on the right, and the workpiece is on the left. The thread being formed is visible, and the background is a dark blue gradient.

EMUGE

EXTRAORDINARY NEW RANGE OF INNOVATIVE THREAD MILLS

Emuge applies in-depth analysis of thread dimensions and tolerances with advanced profile geometry correction in the finish grind, for true-to-gage threads. Emuge's new thread mill range will meet today's most demanding quality standards.

Emuge – *The Leader in Thread Cutting Technology For More Than 90 Years.*



From unmatched application engineering expertise to the world's most extensive line of high-performance taps, thread mills, tool holders and accessories, only Emuge offers a complete threading program. So you can obtain the best production solution for your application.

Ask for a FREE full line catalog at www.emuge.com where you can also view products online.

Contact Emuge today for a FREE analysis of your application.



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Emuge's state-of-the-art North American headquarters where machining demonstrations, training, manufacturing and applications solutions are managed and over 10,000 types of tools are stocked for prompt shipment.

EMUGE

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