



EMUGE

*Innovative
Thread Mill
Solutions*

THREADS-ALL™
Solid Carbide Thread Mills

Including
NEW 3XD SIZES

EMUGE 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™ Solid Carbide Thread Mills

A Complete line of Thread Mill Solutions

Miniature size thread mills provide a high-quality and dependable threading solution for a variety of difficult materials.

Standard sizes provide manufacturers a ready tooling solution which allows for quick adaptation to a variety of threading requirements, in a wide range of materials.

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

#1 Miniature tool size compared to a pencil tip

EMUGE ZGF-1 2XD THREAD MILLS IN MINIATURE AND STANDARD SIZES (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
MINIATURE SIZES	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	
STANDARD SIZES	GFS231065007 •	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

• With external flood coolant only ▲ With external flood coolant or axial internal coolant hole (MINIATURE SIZES EXTERNAL COOLANT ONLY)

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

THREADS-ALL™ Solid Carbide Thread Mills

NEW 3XD Sizes for Maximum Reach

Both 2XD and 3XD Threads-ALL tools provide:

- 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
- STI threads can be easily produced
- Produces excellent thread finish and gaging



EMUGE ALL NEW ZGF-I 3XD THREAD MILLS (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							M
MINIATURE SIZES	GFS837065001 •	2	2-56	2-64	2-56	2-64	M 2,2	0.067	0.258	3	1.625	1/8"	HA
	GFS837065003 •	4	4-40	4-48	4-40	4-48	M 3	0.085	0.336	3	1.625	1/8"	HA
	GFS837065005 •	6	6-32	6-40	6-32	6-40	M 3,5	0.106	0.414	3	1.625	1/8"	HA
	GFS837065006 •	8	8-32	8-36	8-32	8-36	-	0.132	0.492	3	1.750	3/16"	HA
STANDARD SIZES	GFS837065007 •	10	10-24	-	10-24	-	M 5	0.146	0.570	3	1.875	3/16"	HA
	GFS837065041 •		-	10-32	-	10-32	-	0.154	0.570	4	1.875	3/16"	HA
	GFS831065009 •	1/4	1/4-20	-	1/4-20	-	M 6	0.195	0.750	4	2.375	1/4"	HB
	GFS831065043 •		-	1/4-28	-	1/4-28	-	0.207	0.750	4	2.375	1/4"	HB
	GFS831065010 ▲	5/16	5/16-18	-	5/16-18	-	M 8	0.248	0.937	4	2.563	5/16"	HB
	GFS831065044 ▲		-	5/16-24	-	5/16-24	-	0.260	0.937	5	2.563	5/16"	HB
	GFS831065011 ▲	3/8	3/8-16	-	3/8-16	-	M 10	0.303	1.125	5	2.750	5/16"	HB
	GFS831065045 ▲		-	3/8-24	-	3/8-24	-	0.323	1.125	5	2.875	3/8"	HB
	GFS831065012 ▲	7/16	7/16-14	-	7/16-14	-	M 12	0.323	1.312	5	3.125	3/8"	HB
	GFS831065046 ▲		-	7/16-20	-	7/16-20	-	0.376	1.312	5	3.060	3/8"	HB
	GFS831065013 ▲	1/2	1/2-13	1/2-20	1/2-13	1/2-20	-	0.409	1.500	5	3.625	1/2"	HB
	GFS831065015 ▲	5/8	5/8-11	5/8-18	5/8-11	5/8-18	M 16	0.514	1.875	5	4.125	5/8"	HB
GFS831065016 ▲	3/4	3/4-10	3/4-16	3/4-10	3/4-16	-	0.630	2.250	6	4.500	5/8"	HB	

• With external flood coolant only ▲ With external flood coolant or axial internal coolant hole (MINIATURE SIZES EXTERNAL COOLANT ONLY)

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

A close-up photograph showing a thread mill cutting a thread into a metal workpiece. The mill is positioned vertically, and the workpiece is being rotated. The thread being formed is clearly visible, and the mill's cutting edges are engaged with the workpiece. 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.



You trust Emuge Taps and Thread Mills for the highest quality threads. Now you can rely on **NEW Emuge EF Drills to make the best holes.**

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A Full Line of High Performance Cutting Tools



Emuge Corp. has been the product technology and performance leader in their field for nearly 100 years. Emuge manufactures an extensive line of taps, thread mills, drills, end mills, toolholders, clamping devices and other rotary cutting tools, over 100,000 items sold through distributors worldwide. Emuge also offers end-user technical support through a network of in-the-field engineers and in-house product specialists, all with extensive tooling and application experience.

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