

AMAZINGLY FAST... ONLY SMALLER!!



POWER FEED+ MINI™

**HIGH FEED
PERFORMANCE
MILLING**

Series 1TG1F



**GENERAL MACHINING, DIE & MOLD,
AEROSPACE**

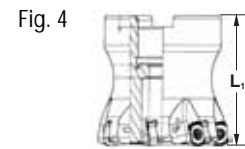
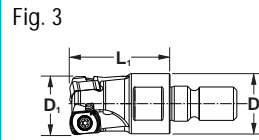
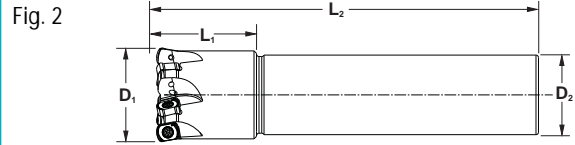
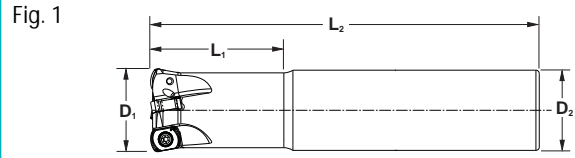
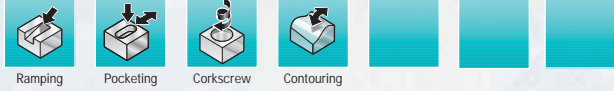
- Insert Technology provides 4 cutting edges per insert.
- Robustly designed insert with exceptionally strong cutting edge.
- Premium Alloy cutter bodies, with through coolant standard.
- Ingersoll technology, designed to deliver economy, strength and performance.
- Depth of cut up to .040" (1mm).

APPLICATION: High Feed Roughing

POWERFEED+MINI™ CUTTER BODIES SERIES 1TG1F & TG1F

Diameters
.625" - 1.500"

Max. Depth of Cut
1mm (See Fig. A)



D ₁ Nominal Diameter	Cutter Number	L ₁ Extension Length	L ₂ Overall Length	D ₂ Shank Size/Style	Number of Inserts	T ₁ Thread Size	Coolant Thru	Figure #
0.625	1TG1F-06015ULR01	1.250	4.000	15.5mm (.6102)	2	-	Yes	1
0.750	1TG1F-07017UMR01	1.500	5.000	18.5mm (.7283)	3	-	Yes	1
0.750	1TG1F-07022S7R01	2.000	5.000	0.75	3	-	Yes	1
0.750	1TG1F-07017UMR02	1.500	6.250	18.5mm (.7283)	3	-	Yes	1
0.750	1TG1F-07032S7R01	3.000	6.250	0.75	3	-	Yes	1
0.750	1TG1F-07011X6R01	1.180	-	18mm (.7086)	3	M10	Yes	3
0.875	1TG1F-08019UNR01	1.750	7.750	21.5mm (.8464)	3	-	Yes	1
1.000	1TG1F-10022T5R01	2.000	7.000	25mm (.9842)	4	-	Yes	1
1.000	1TG1F-10032S1R01	3.000	7.000	1.00	4	-	Yes	1
1.000	1TG1F-10022T5R02	2.000	10.000	25mm (.9842)	4	-	Yes	1
1.000	1TG1F-10022S1R01	2.000	10.000	1.00	4	-	Yes	1
1.000	1TG1F-10013X7R01	1.370	-	21mm (.8267)	4	M12	Yes	3
1.250	1TG1F-1203281R01	3.000	5.500	1.25 Std. Weldon	5	-	Yes	1
1.250	1TG1F-12050E2R01	4.750	8.000	1.25 Ext. Weldon	5	-	Yes	1
1.250	1TG1F-12015X8R01	1.570	-	29mm (1.1417)	5	M16	Yes	3
1.500	1TG1F-15015E2R01	1.570	6.000	1.25 Ext. Weldon	6	-	Yes	2
2.000	TG1F-20R01*	1.968	1.968	Facemill	7	-	Yes	4

*.750 Pilot, .312 Keyway

POWERFEED+MINI™ INSERT SERIES SERIES UNLU



Insert Number	Application	Grades		
		IN	6530	2030
UNLU0603M0TR	High-Feed	■	■	■
Insert Screw		Driver		
Part No.	Torque	Part No.		
SM25-064-00	10-15 in. lbs.	TD8		

POWERFEED+MINI™

SHANK O.D. COLLET COMPATIBILITY



D ₁ Nominal Diameter	Cutter Number	Metric Shank Diameter	ER25	ER32	ER40	ER50 (metric)	TG100 (metric)	Milling Chuck
0.625	1TG1F-06015ULR01	15.5mm (.6102)	YES	YES	YES	YES	N/A	N/A
0.750	1TG1F-07017UMR01	18.5mm (.7283)	N/A	YES	YES	YES	N/A	N/A
0.750	1TG1F-07017UMR02	18.5mm (.7283)	N/A	YES	YES	YES	N/A	N/A
0.875	1TG1F-08019UNR01	21.5mm (.8464)	N/A	N/A	YES	YES	N/A	N/A
1.000	1TG1F-10022T5R01	25mm (.9842)	N/A	N/A	YES	YES	YES	YES
1.000	1TG1F-10022T5R02	25mm (.9842)	N/A	N/A	YES	YES	YES	YES

POWERFEED+MINI™

FEEDS & SPEEDS AND TECHNICAL INFORMATION

Surface footages between 250 SFM and 1200 SFM are achievable, along with chip loads of .003 to .020 IPT. When calculating feedrate, use an initial feedrate multiplier of 3X.

Example Calculation: (600SFM / 1.0 Dia.) X 3.82 = 2292 RPM
 (2292 RPM X .010 IPT) X 4 number effective = 91.68 IPM
 91.68 IPM X 3 feed rate multiplier = 275 IPM

Note: Feed and speed recommendations are starting operating parameters. They are only guidelines from which further optimization should take place. Operating parameters are influenced by many machining variables. These variables may cause for reductions in feeds and speeds or dramatic increases. Additionally, DOC and WOC may need to be revised to optimize the tools performance.

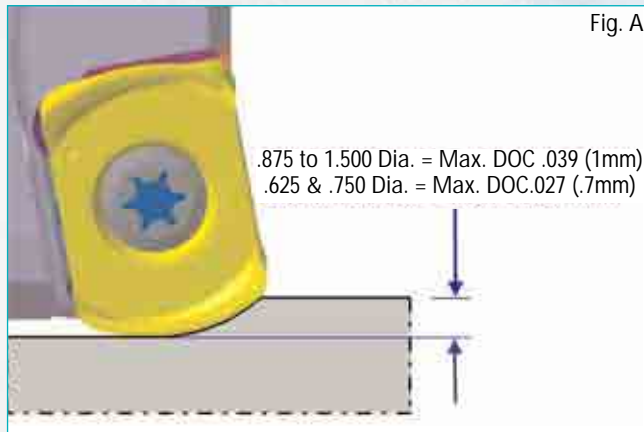


Fig. A

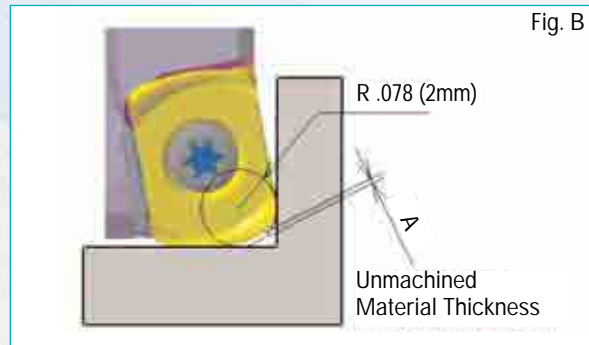


Fig. B

Programming Tip:
 Unmachined material thickness is around .015-.019

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ACTION SHOTS

