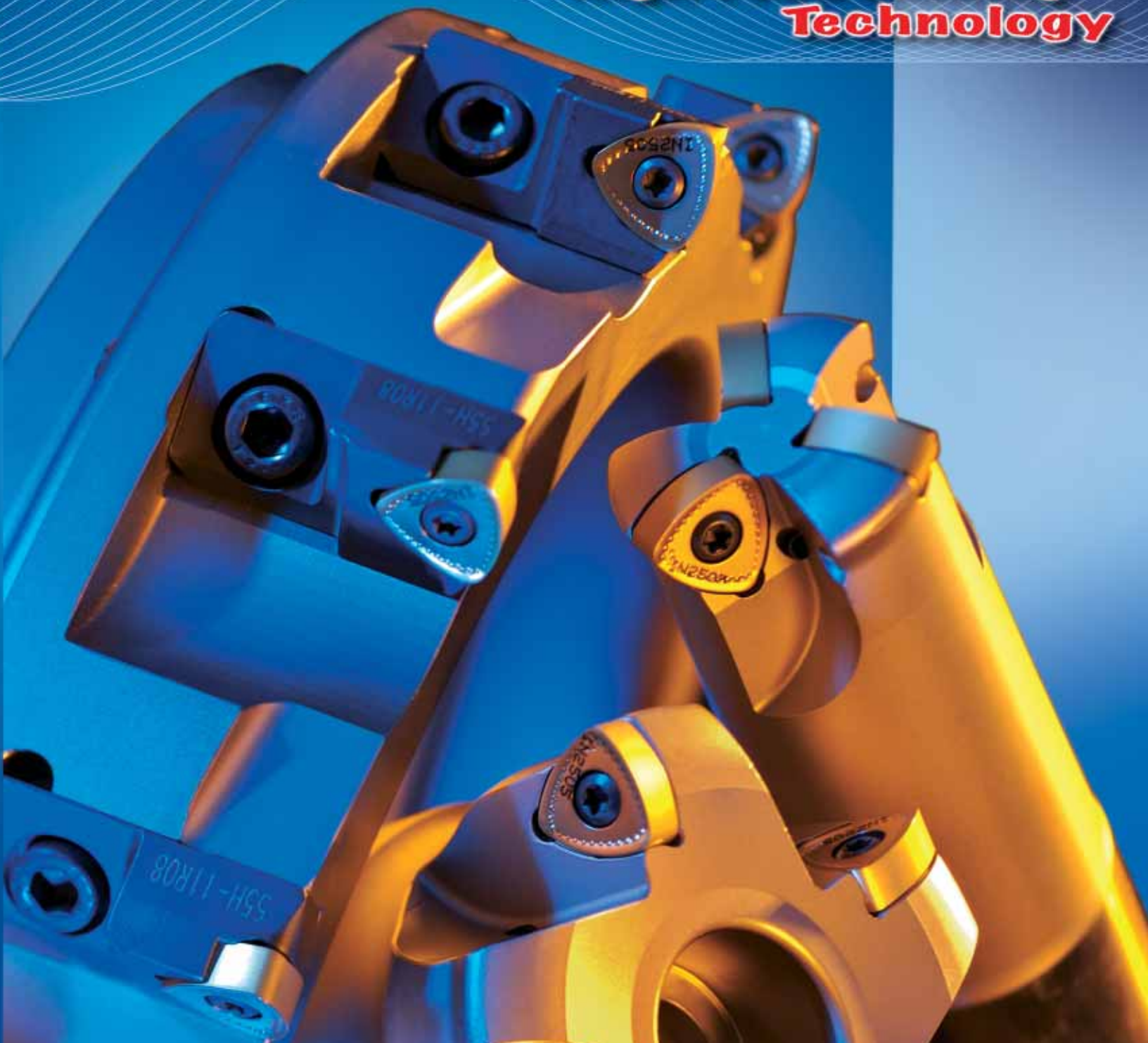
Member IMC Group

Ingersoll Cutting Tools

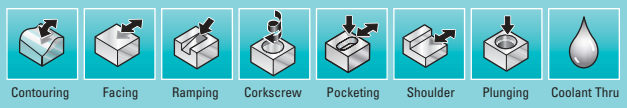
POWER·FEED+™

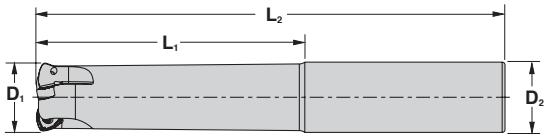
High Feed Milling Technology



POWERFEED+ END MILL SERIES 1DG1H

Diameters	Max. Depth of Cut
1.250" to 1.500"	.078" (2mm)

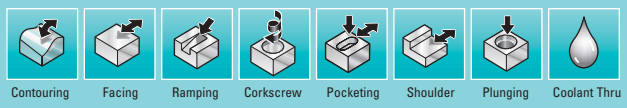


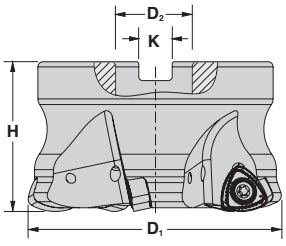


D_1 Nominal Diameter	Cutter Number	L_1 Extension Length	L_2 Overall Length	D_2 Shank/Style	Number of Inserts
1.250	**1DG1H-1202781R01**	2.75	5.00	1.25 Weldon	2
1.250	**1DG1H-12057S9R01**	5.75	8.00	1.25 Straight	2
1.500	**1DG1H-1503386R01**	3.34	6.00	1.50 Weldon	3
1.500	**1DG1H-15073S5R01**	7.34	10.00	1.50 Straight	3

POWERFEED+ FACE MILL SERIES DG6H

Diameters	Max. Depth of Cut
2.000" to 6.000"	.078" (2mm)





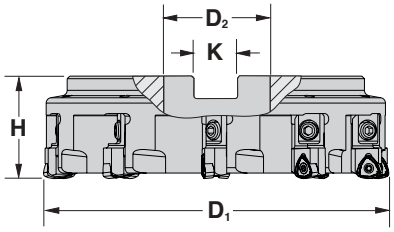
D_1 Nominal Diameter	Cutter Number	Number of Inserts	H Height	D_2 Bore Diameter	Retention Bolt	K Keyway
2.000	**DG6H-20R01**	3	1.570	.750	SD06-46	.32
2.000	**DG6H-20R02**	4	1.570	.750	SD06-46	.32
3.000	**DG6H-30R02**	5	2.000	1.250	SD10-47	.50
4.000	**DG6H-40R01**	6	2.375	1.500	SD12-82	.63
6.000	**DG6H-60R01**	8	2.375	1.500	SD12-82	.63

Note: Ramp Angle, use 2.5 degree ramp angle or less for all cutters.

D&M line

MULTIPLE GEOMETRY CARTRIDGE FACE MILL SERIES 4W2A

Diameters	Max. Depth of Cut
4.261" to 12.266"	.078" (2mm)

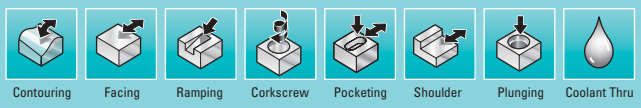


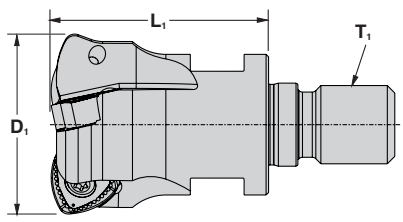
Insert Style	D_1 Nominal Diameter	Cartridge* Number	Cutter* Number	Number of Inserts	H Height	D_2 Bore Diameter	Bolt Circle	K Keyway
PowerFeed + 	4.261	**55H-11R08**	**4W2A-04R01**	6	2.378	1.500	–	.63
	6.261	**55H-11R08**	**4W2A-06R01**	8	2.378	1.500	–	.63
	8.268	**55H-11R08**	**4W2A-08R01**	10	2.378	2.500	4.00	1.00
	10.268	**55H-11R08**	**4W2A-10R01**	12	2.378	2.500	4.00	1.00
	12.266	**55H-11R08**	**4W2A-12R01**	14	2.378	2.500	4.00, 7.00	1.00

*Must Order Cartridges Seperately With Cutter.

POWERFEED+ TOP-ON STYLE, MODULAR

Diameters	Max. Depth of Cut
1.250" to 1.500"	.078" (2mm)

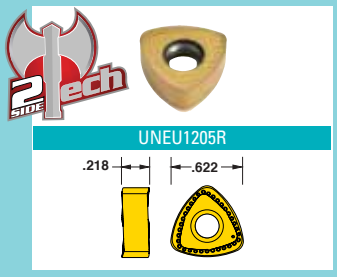




D_1 Nominal Diameter	Cutter Number	Number of Inserts	L_1 Extension From Holder	T_1 Thread Size	Coolant Thru
1.250	**1DG1H-12517X8R01**	2	1.750	M16	Yes
1.500	**1DG1H-15017X8R01**	3	1.750	M16	Yes

See Ingersoll Full Line Catalog for Modular Shanks/Holders.

POWER•FEED+ INSERTS



Insert Number	Application	Programmed Corner	Indexes Per Insert	Grades			
				IN	2505	2030	6530
UNEU1205R	High Feed Milling	.118R	6		■	■	■

POWER•FEED+ HARDWARE

Insert Screw		Driver	Preset Torque Driver	Torx Bit
Part No.	Torque	Part No.	Part No.	Part No.
SM40-120-20	30-35 in. lbs.	DS-T15S (Tx-15)	DT-35-02	DS-T15B1 (Long) DS-T15B (Short)

Cartridge		Cartridge Screw		Driver
Insert Style	Part No.	Part No.	Torque	Part No.
PowerFeed + UNEU	55H-11R08	SD03-89	150-180 in. lbs.	DS-H05T (5mm hex)

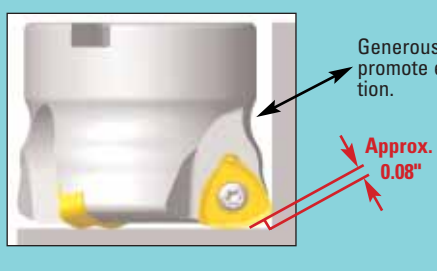
Cartridge Axial Adjusting Screw	Driver
Part No.	Part No.
SA04-42	DS-H03T (3mm hex)

POWER•FEED+ TECHNICAL INFORMATION

Series DG6H, 1DG1H					Grades			
Material		Brinell Hardness	SFM	Feed per Insert	IN2005	IN2030	IN6530	Coolant
Steel	Mild 1018-1045	125-425	300-650	.035-.157	1			No
	Low Alloy 4140, 8620, 4340	150-425			1	3	2	
	Med Alloy P20, S7, H13, O1, A2		300-700					
Stainless Steel	Free Machining 303, 416	150-425	200-550	.030-.100	1	2	3	Yes
	300 Series 304, 310, 316							
	400 Series 410, 420, 15-5PH, 17-4 PH							
	PH Series 13-8							
Hardened Steel	ALL	-	200-400	.030-.075	1	2		No

Feeds & Speed 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 speed or dramatic increases. Additionally, DOC and WOC may need to be revised to optimize the tools performance.

Programming Note:
Program all Power•FeedPlus cutters as though they are Bullnose cutters with .118"/3.0mm corner radii. This method will both ensure and minimize remaining stock for secondary passes.



POWERFEED+™

- High Feed – Double Sided Insert Technology, six edges.
- Robust Design Insert has exceptionally strong cutting edge.
- Smartly Designed Cutter Bodies, with through coolant standard.
- High Feed Technology, designed to deliver economy, strength and performance.

Productivity Tips

- During setup, maximize rigidity of tool assembly and piece part fixturing.
- Minimize length to diameter ratio of the tool when possible.
- Maximum recommended radial WOC when plunge milling .311" *
- Utilize all applicable high speed machining techniques, during NC program development
- Maximize use of all CAM and machine tool control features that promote High Speed Machining efficiencies.
- If available always utilize through spindle air, unless coolant is required.

* Prior to retract at axial DOC it is recommended that the cutter move off the wall radially .020" to .050".

D&M line

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Ingersoll Cutting Tools

Ingersoll Cutting Tools for the Americas

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