



NUMAX HFA™

MILLING PRODUCTS

Cutter Series:
EG5J/EG6J

Diameters:
2.000"-8.000"

Insert Series:
DPM324L3A1-MM

Materials:
Steel, Stainless Steel, Hi-Temps,
Titanium

Grades:
IN4005/IN2505/IN4030
IN2530/IN4035/IN2535

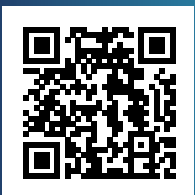
Max. Depth of Cut:
.09"



Ingersoll is Pleased to Announce the Next Generation in Hi-Feed Milling with Tangentially Mounted Inserts

Features & Benefits:

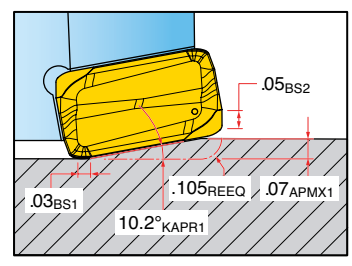
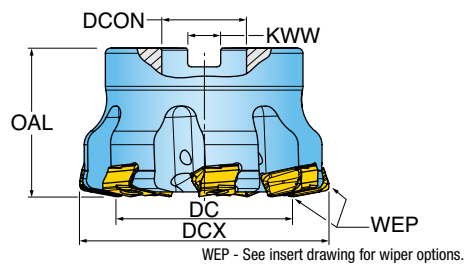
- New double dovetailed seating design improves edge life and insert stability in the most aggressive cutting conditions
- Improved surface finishes with integrated wipers both radially and axially that can eliminate secondary passes
- Insert features a 10° lead angle to produce 6x the feedrates improving overall productivity
- Cutter bodies are designed with through coolant/air to improve chip evacuation in tough applications
- Cutter diameters available from 2.000" to 8.000"





NUMAX HFA™ SERIES EG5J, EG6J

HIGH FEED FACE MILL



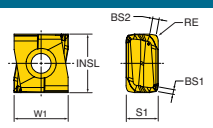
Part Number	DC Cutting Dia.	DCX Cutting Dia. Max.	OAL Overall Length	ZEFF Effective Teeth	REEQ Program Radius Equivalent	DCON Bore Dia.	KWW Keyway	RMPX Ramp Angle Max.	CSP Coolant
EG5J-02R01	1.170	2.00	1.750	5	0.105	0.750	0.312	0.5	Yes
EG6J-02R01	1.170	2.00	1.750	4	0.105	0.750	0.312	0.5	Yes
EG5J-03R01	2.161	3.00	1.750	7	0.105	1.000	0.375	0.2	Yes
EG5J-04R01	3.159	4.00	2.500	9	0.105	1.500	0.625	0.2	Yes
EG6J-04R01	3.159	4.00	2.500	7	0.105	1.500	0.625	0.2	Yes
EG6J-06R01	5.159	6.00	2.500	9	0.105	1.500	0.625	0.1	Yes
EG6J-08R01	7.159	8.00	2.500	10	0.105	2.500	1.000	0.1	No

Insert screw tightening torque: 30-35 in*lb.

NUMAX HFA™ INSERT










DPM324L3A1-MM



Part Number	Application	RE Corner Radius	BS Wiper Length	INSL Insert Length	W1 Insert Width	S1 Thickness	NOI Number of Indexes	IH Insert Hand	Grade	IN4005	IN2505	IN4030	IN2530	IN4035	IN2535
DPM324L3A1-MM	Hi-Feed, Heavy-Duty	0.078	0.03	0.512	0.472	0.281	4	Right		•	•	•	•	•	•

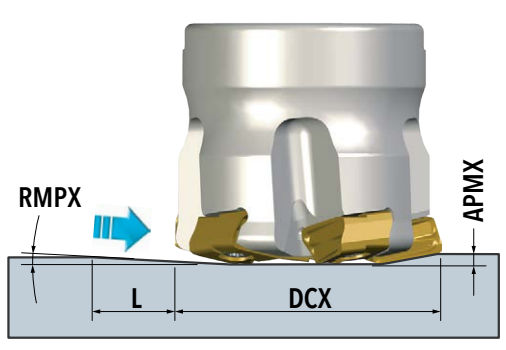


NUMAX HFA™ HARDWARE

							
	Screw	Driver Handle	Driver Bit	Retention Bolt	Torque Driver Handle	Preset Torque Bit	Torque Driver Bit
EG5J-02R01	SM40-123-H0	DS-A00T	DS-T156B	SD06-47	DS-A00-.25T	DT-35-.25	DS-T15B
EG6J-02R01	SM40-123-H0	DS-A00T	DS-T156B	SD06-47	DS-A00-.25T	DT-35-.25	DS-T15B
EG5J-03R01	SM40-123-H0	DS-A00T	DS-T156B	SD08-47	DS-A00-.25T	DT-35-.25	DS-T15B
EG5J-04R01	SM40-123-H0	DS-A00T	DS-T156B	SD12-82	DS-A00-.25T	DT-35-.25	DS-T15B
EG6J-04R01	SM40-123-H0	DS-A00T	DS-T156B	SD12-82	DS-A00-.25T	DT-35-.25	DS-T15B
EG6J-06R01	SM40-123-H0	DS-A00T	DS-T156B	SD12-82	DS-A00-.25T	DT-35-.25	DS-T15B
EG6J-08R01	SM40-123-H0	DS-A00T	DS-T156B	-	DS-A00-.25T	DT-35-.25	DS-T15B

Insert screw tightening torque: 30-35 in*lb.

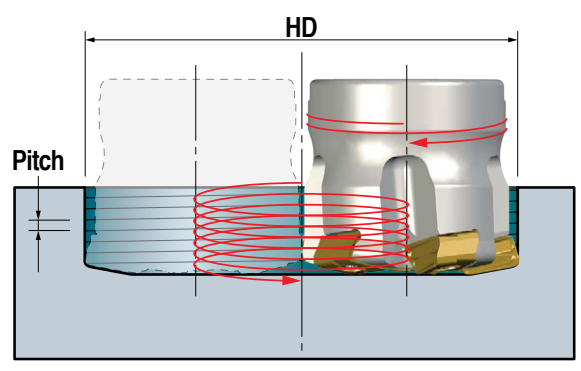
NUMAX HFA™ STRAIGHT RAMPING



DCX Cutter Diameter	RMPX Ramp Angle Max.	L Ramp Length Min.	APMX Depth of Cut Max.
2.000	0.50	10.312	0.090
3.000	0.20	25.782	0.090
4.000	0.20	25.782	0.090
6.000	0.10	51.566	0.090
8.000	0.10	51.566	0.090

L in this table is the length the cutter travels to reach the max. depth of cut (.090") while traveling at the max ramp angle listed for the cutter.

NUMAX HFA™ HELICAL RAMPING

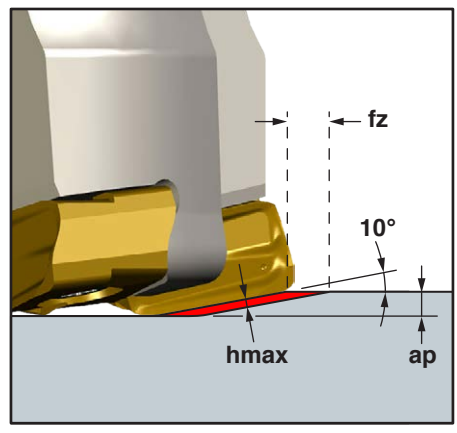


DCX Cutter Diameter	HD Hole Dia. Min.	HD Hole Dia. Max.	HD Hole Dia. Max. w/o Cusp	Max Pitch Per Revolution
2.000	3.040	4.000	3.170	0.090
3.000	5.028	6.000	5.161	0.090
4.000	7.026	8.000	7.159	0.090
6.000	11.024	12.000	11.159	0.090
8.000	15.024	16.000	15.159	0.090

Pitch:
The max. pitch is determined to not exceed the max. depth of cut (APMX) and to not exceed the max. ramp angle (RMPX).

NUMAX^{HFA}™ OPERATING GUIDELINES

Chip Thinning



NOTE:
 The operating guidelines table below includes a column for feed-per-tooth (fz). That column accounts for the axial chip thinning that's generated by the cutting-edge angle (lead angle). All NuMaxHFA high-feed cutters have a 10° cutting edge angle resulting in an fz that is approximately 6x the recommended chip thickness (hex).

ISO	Mat'l Group #VDI 3323	Materials		V _c Cutting Speed SFM	f _z Feed/Tooth (inch)	H _{hex} Max. Chip Thickness (inch)	Harder <-----> Tougher						Coolant	Geometry
		Type	Examples				IN4005	IN2505	IN4030	IN2530	IN4035	IN2535		
P	1 thru 5	Non-alloy Steel	1018, A36, 1045, A572, 1070	400-850	.022-.078	.004-.014	2	1	4	3			NO	1
	6 thru 9	Low-alloy Steel	4140, 4340, P20, 8620, 300M	350-650	.022-.067	.004-.012	2	1	4	3			NO	1
	10, 11	High-alloy Steel	H13, A2, D2, M2, T1	250-500	.022-.062	.004-.011	2	1	4	3			NO	1
M	12 thru 13	"Stainless Steel (Ferritic & Martensitic)"	410, 416, 440	350-550	.017-.062	.003-.011			4	3	2	1	YES	1
	14	Stainless Steel (Austenitic)	"303, 304, 316, 15-5, 17-4"	300-500	.017-.062	.003-.011			4	3	2	1	YES	1
K	15 thru 16	Gray Cast Iron	CLS. 20, 30, 45	500-700	.022-.078	.004-.014	1	2	3	4			NO	1
	17 thru 20	Nodular Cast Iron	"60-40-18, 100-70-03"	400-650	.022-.078	.004-.014	2	1	4	3			NO	1
S	31 thru 35	High-Temp Alloys	Inconel, Hastelloy, Nimonic, Monel	60-130	.017-.034	.003-.006			4	3	2	1	YES	1
	36 thru 37	Titanium Alloys	6AL-4V, 5Al-5Mo-5V-3Cr	65-150	.017-.039	.003-.007			4	3	2	1	YES	1
H	38 thru 39	Hardened Steel >48	A2, 01, D2	150-400	.017-.034	.003-.006	3	1	4	2			NO	1

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.