



**Cutter Series (Depth of Cut):**  
1DJ1E / DJ5E / DJ6E (.19)  
DJ5G / DJ6G (.33)

**Insert Series:**  
SQU07  
SQU12 / SQXU12

**Diameter Range:**  
.625" - 6.000"

**Lead Angles:**  
90°

**Corner Radius:**  
.031"

**Materials:**  
Cast Iron, Steel, Hard Steel



## True 90° Shoulder Mills with 8-Edge Economy

Ingersoll's new DiPosQuad line utilizes 2-Side-Technology to offer economical 8-Corner inserts that generate true 90° shoulders and smooth surface finishes. Medium and fine pitch cutter offerings compliment the geometry for premium performance on small and medium platforms & workpieces.

### **Features & Benefits:**

- High axial rake reduces cutting loads and promotes smooth machining
- 07 Insert generates true 90° and is optimized to step down axially with minimal mismatch
- 12 Insert generates true 90° up to .33 depth of cut
- Unequally spaced insert placement aids to diffuse vibration
- Integrated wiper flats produce 32-63 Ra surface finishes

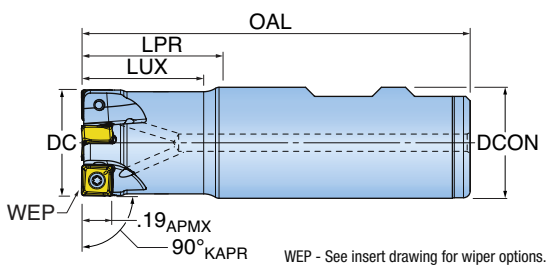
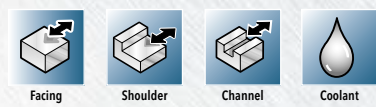






**DIPOSQUAD™ 07 SERIES 1DJ1E**

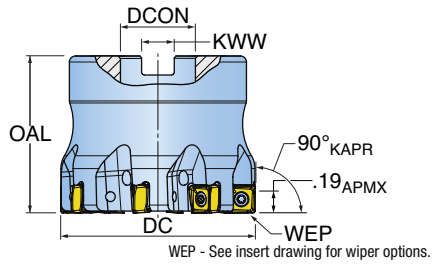
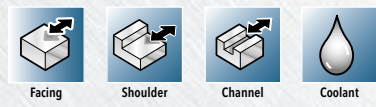
90° ROUGH & FINISH END MILL (7MM INSERT)



Part Number	DC Cutting Dia.	LUX Usable Length Max.	LPR Protruding Length	OAL Overall Length	ZEFF Eff. Teeth	DCON Shank Dia.
1DJ1E-0600779R01	0.625	0.70	0.75	2.66	2	0.625
1DJ1E-0701084R01	0.750	0.95	1.00	3.00	3	0.750
1DJ1E-1001280R01	1.000	1.20	1.25	3.50	4	1.000
1DJ1E-1201581R01	1.250	1.45	1.50	3.75	4	1.250
1DJ1E-1201581R02	1.250	1.45	1.50	3.75	6	1.250
1DJ1E-1501786R01	1.500	1.70	1.75	4.41	5	1.500
1DJ1E-1501786R02	1.500	1.70	1.75	4.41	8	1.500

**DIPOSQUAD™ 07 SERIES DJ5E, DJ6E**

90° ROUGH & FINISH FACE MILL (7MM INSERT)



Part Number	DC Cutting Dia.	OAL Overall Length	ZEFF Eff. Teeth	DCON Bore Dia.	KWW Keyway
DJ5E-15R01	1.500	1.57	6	0.500	0.250
DJ5E-20R01	2.000	1.57	8	0.750	0.312
DJ6E-20R01	2.000	1.57	6	0.750	0.312
DJ5E-25R01	2.500	1.57	10	1.000	0.375
DJ6E-25R01	2.500	1.57	7	1.000	0.375
DJ5E-30R01	3.000	1.75	12	1.000	0.375
DJ6E-30R01	3.000	1.75	8	1.000	0.375

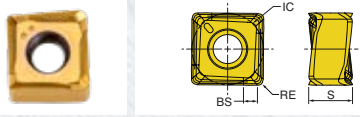




**DIPOSQUAD™ 07 INSERT**



SQGU07\_M



Part Number	Application	RE Corner Radius	BS Wiper Length	IC Inscribed Circle Dia.	S Thickness	NOI Number of Indexes	IH Insert Hand	Grade	IN2505	IN2510	IN2530
SQGU070408TR-M	Multi-Purpose - Integrated Wiper	0.031	0.035	0.275	0.165	8	Right		•	•	•

**DIPOSQUAD™ 07 HARDWARE**

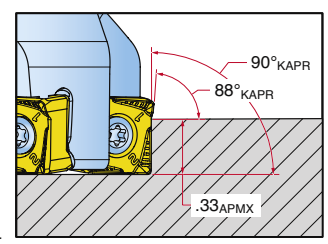
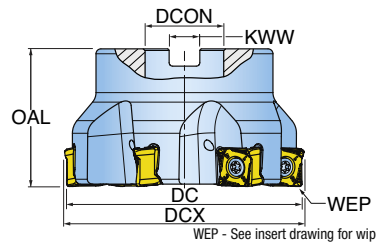
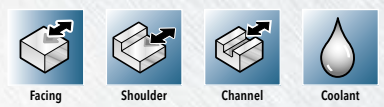
	Screw	Torx Screwdriver	Retention Bolt	Coolant Retention Bolt	Torque Driver Handle	Preset Torque Bit	Torque Driver Bit
1DJ1E-0600779R01	SM25-060-90	DS-TP07S	-	-	DS-A00-.25-S	DT-08-.25	DS-TP07B1
1DJ1E-0701084R01	SM25-060-90	DS-TP07S	-	-	DS-A00-.25-S	DT-08-.25	DS-TP07B1
1DJ1E-1001280R01	SM25-060-90	DS-TP07S	-	-	DS-A00-.25-S	DT-08-.25	DS-TP07B1
1DJ1E-1201581R01	SM25-060-90	DS-TP07S	-	-	DS-A00-.25-S	DT-08-.25	DS-TP07B1
1DJ1E-1201581R02	SM25-060-90	DS-TP07S	-	-	DS-A00-.25-S	DT-08-.25	DS-TP07B1
1DJ1E-1501786R01	SM25-060-90	DS-TP07S	-	-	DS-A00-.25-S	DT-08-.25	DS-TP07B1
1DJ1E-1501786R02	SM25-060-90	DS-TP07S	-	-	DS-A00-.25-S	DT-08-.25	DS-TP07B1
DJ5E-15R01	SM25-060-90	DS-TP07S	SD-04-47	-	DS-A00-.25-S	DT-08-.25	DS-TP07B1
DJ5E-20R01	SM25-060-90	DS-TP07S	SD-06-47	SD-06-A6	DS-A00-.25-S	DT-08-.25	DS-TP07B1
DJ6E-20R01	SM25-060-90	DS-TP07S	SD-06-47	SD-06-A6	DS-A00-.25-S	DT-08-.25	DS-TP07B1
DJ5E-25R01	SM25-060-90	DS-TP07S	SD-08-47	SD08-C9	DS-A00-.25-S	DT-08-.25	DS-TP07B1
DJ6E-25R01	SM25-060-90	DS-TP07S	SD-08-47	SD08-C9	DS-A00-.25-S	DT-08-.25	DS-TP07B1
DJ5E-30R01	SM25-060-90	DS-TP07S	SD-08-47	SD08-C9	DS-A00-.25-S	DT-08-.25	DS-TP07B1
DJ6E-30R01	SM25-060-90	DS-TP07S	SD-08-47	SD08-C9	DS-A00-.25-S	DT-08-.25	DS-TP07B1





**DIPOSQUAD™ 12 SERIES DJ5G, DJ6G**

**90° FACE MILL (12MM INSERT)**

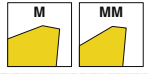


Part Number	DC Cutting Diameter	DCX Cutting Dia. Max.	OAL Overall Length	ZEFF Eff. Teeth	DCON Bore Dia.	KWW Keyway	CSP Coolant
DJ5G-20R01	2.000	2.055	1.570	6	0.750	0.312	Yes
DJ6G-20R01	2.000	2.055	1.570	4	0.750	0.312	Yes
DJ5G-25R01	2.500	2.555	1.570	8	1.000	0.375	Yes
DJ6G-25R01	2.500	2.555	1.570	5	1.000	0.375	Yes
DJ5G-30R01	3.000	3.051	1.750	11	1.000	0.375	Yes
DJ6G-30R01	3.000	3.051	1.750	6	1.000	0.375	Yes
DJ5G-40R01	4.000	4.051	2.375	14	1.500	0.625	Yes
DJ6G-40R01	4.000	4.051	2.375	8	1.500	0.625	Yes
DJ5G-50R01	5.000	5.052	2.375	18	1.500	0.625	Yes
DJ6G-50R01	5.000	5.052	2.375	10	1.500	0.625	Yes
DJ5G-60R01	6.000	6.051	2.000	22	2.000	0.750	No
DJ6G-60R01	6.000	6.051	2.000	12	2.000	0.750	No





**DIPOSQUAD™ 12 INSERTS**



**SQXU12\_M**



**SQGU12\_MM**



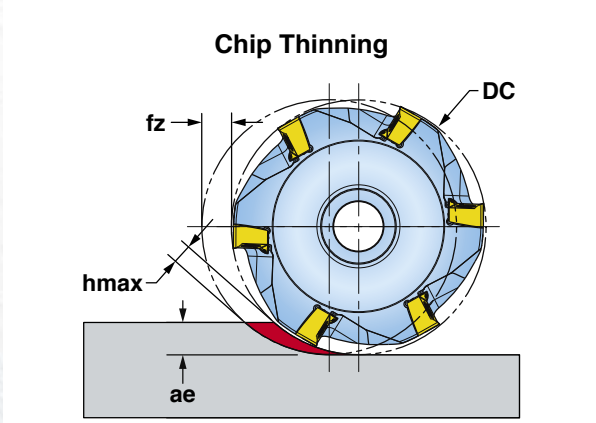
Part Number	Application	RE Corner Radius	BS Wiper Length	LE Cutting Edge Eff. Length	IC Inscribed Circle Dia.	S Thickness	NOI Number of Indexes	IH Insert Hand	Grade	IN6537	IN2505	IN2510	IN2504
SQXU120608R-M	Medium Roughing	0.031	0.043	0.330	0.480	0.319	8	Right		•	•	•	•
SQGU120608R-MM	Medium, pos. rake angle	0.031	0.043	0.330	0.480	0.319	8	Right			•	•	

**DIPOSQUAD™ 12 HARDWARE**

	Screw	Driver Handle	Torx Driver Blade	Retention Bolt	Coolant Retention Bolt	Torque Driver Handle	Preset Torque Bit	Torque Driver Bit
DJ5G-20R01	SM50-130-R0	DS-A00T	DS-T206B	SD-06-48	SD-06-89	DS-A00-.25-T	DT-44-.25	DS-T20B1
DJ6G-20R01	SM50-130-R0	DS-A00T	DS-T206B	SD-06-48	SD-06-89	DS-A00-.25-T	DT-44-.25	DS-T20B1
DJ5G-25R01	SM50-130-R0	DS-A00T	DS-T206B	SD-08-48	SD-08-92	DS-A00-.25-T	DT-44-.25	DS-T20B1
DJ6G-25R01	SM50-130-R0	DS-A00T	DS-T206B	SD-08-48	SD-08-92	DS-A00-.25-T	DT-44-.25	DS-T20B1
DJ5G-30R01	SM50-130-R0	DS-A00T	DS-T206B	SD-08-48	SD-08-92	DS-A00-.25-T	DT-44-.25	DS-T20B1
DJ6G-30R01	SM50-130-R0	DS-A00T	DS-T206B	SD-08-48	SD-08-92	DS-A00-.25-T	DT-44-.25	DS-T20B1
DJ5G-40R01	SM50-130-R0	DS-A00T	DS-T206B	SD-12-82	SD-12-99	DS-A00-.25-T	DT-44-.25	DS-T20B1
DJ6G-40R01	SM50-130-R0	DS-A00T	DS-T206B	SD-12-82	SD-12-99	DS-A00-.25-T	DT-44-.25	DS-T20B1
DJ5G-50R01	SM50-130-R0	DS-A00T	DS-T206B	SD-12-82	SD-12-99	DS-A00-.25-T	DT-44-.25	DS-T20B1
DJ6G-50R01	SM50-130-R0	DS-A00T	DS-T206B	SD-12-82	SD-12-99	DS-A00-.25-T	DT-44-.25	DS-T20B1
DJ5G-60R01	SM50-130-R0	DS-A00T	DS-T206B	SD-12-82	SD-12-99	DS-A00-.25-T	DT-44-.25	DS-T20B1
DJ6G-60R01	SM50-130-R0	DS-A00T	DS-T206B	SD-12-82	SD-12-99	DS-A00-.25-T	DT-44-.25	DS-T20B1



## DIPOSQUAD™ 07 OPERATING GUIDELINES



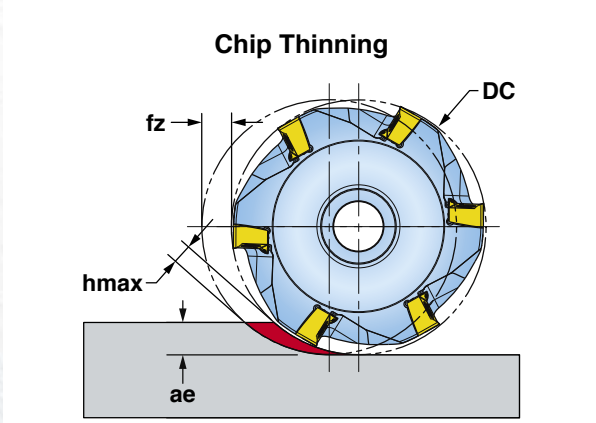
\* When ae is less than 25%, Chip Thinning Calculator is recommended to ensure hmax is within fz range.

ISO	Materials			Vc Cutting Speed SFM	fz* Feed/Tooth (inch)	Harder ..... Tougher			Coolant
	Mat'l Group #VDI 3323	Type	Examples			IN2510	IN2505	IN2530	
P	1 thru 5	Non-alloy Steel	1018, A36, 1045, A572, 1070	400-1000	.003-.008		2	1	No
	6 thru 9	Low-alloy Steel	4140, 4340, P20, 8620, 300M	350-700					
	10, 11	High-alloy Steel	H13, A2, D2, M2, T1	300-600					
K	15 thru 16	Gray Cast Iron	CLS. 20, 30, 45	500-1000	.003-.008	1	2		No
	17 thru 20	Nodular Cast Iron	60-40-18, 100-70-03	400-800					

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.



## DIPOSQUAD™ 12 OPERATING GUIDELINES



\* When ae is less than 25%, Chip Thinning Calculator is recommended to ensure hmax is within fz range.

ISO	Materials			Vc Cutting Speed SFM	fz* Feed/Tooth (inch)	Harder ..... Tougher				Coolant
	Mat'l Group #VDI 3323	Type	Examples			IN2504	IN2510	IN2505	IN6537	
P	1 thru 5	Non-alloy Steel	1018, A36, 1045, A572, 1070	400-1000	.003-.010					No
	6 thru 9	Low-alloy Steel	4140, 4340, P20, 8620, 300M	350-700				2	1	
	10, 11	High-alloy Steel	H13, A2, D2, M2, T1	300-600						
K	15 thru 16	Gray Cast Iron	CLS. 20, 30, 45	500-1000	.003-.010	2	1	3		No
	17 thru 20	Nodular Cast Iron	60-40-18, 100-70-03	400-800						
H	38 thru 39	Hardened Steel >48	A2, O1, D2	130-250	.003-.005	1				No

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.