

70° LEAD FACE MILL WITH 10 CUTTING EDGES

Diameter Range:
1.50-12.00

Depth of Cut:
Deka 08 - .23
Deka 17 - .47

Lead Angle:
70°

Cutter Series:
DM5G / DM6G / DM2Q /
DM6Q / 4W2A

Insert Series:
PNCQ & PNCU

Materials:
Aluminum, Iron, Steel, Stainless
Steel, Hi-Temps & Titanium



Fixed
Pocket



Seat Pocket
Protection



Cartridge Pocket
Protection w/Axial
Adjustment



Multi-Purpose



Flat Top



SiN



SS/Hi Temp/Ti



Non-Ferrous

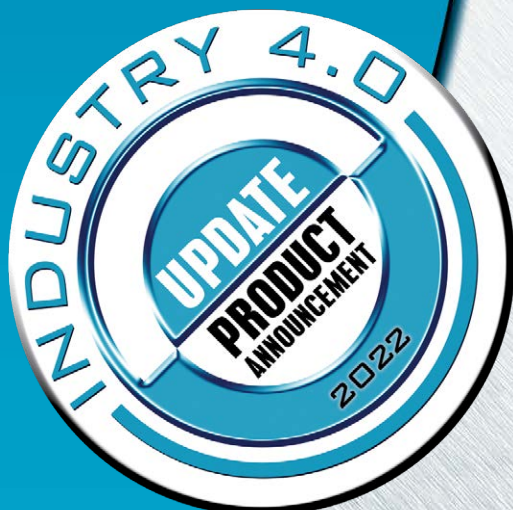


Wiper



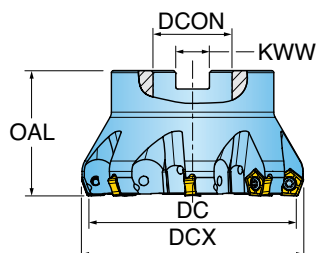
Features and Benefits

- 2-Side-Technology applied to penta shaped inserts for a cost-per-edge economy benefit
- Cutters offered with and without pocket protection
- Carbide and SiN insert grade options for iron applications
- 32-63 Ra surface finishes when using integrated wiper of multi-purpose inserts
- 20-40 Ra surface finishes when using wiper insert in one or two pockets
- Cutter bodies ported with coolant

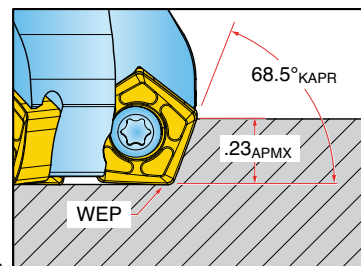


SERIES DM5G, DM6G

70° FACE MILL
.23 DEPTH OF CUT



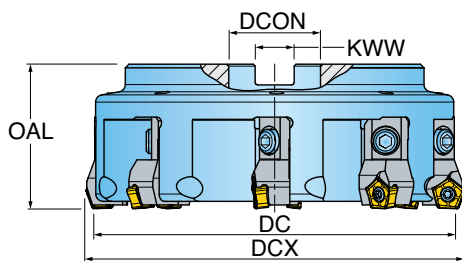
WEP - See insert drawing for wiper options.



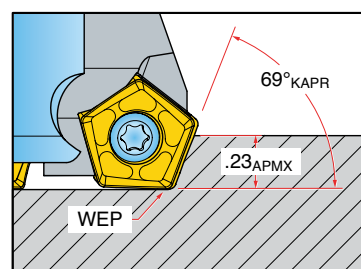
Part Number	DC Cutting Dia.	DCX Cutting Dia. Max.	OAL Overall Length	ZEFF Effective Teeth	DCON Bore Diameter	KWW Keyway	DBC Bolt Circle	CSP Coolant
DM6G-15R01	1.500	1.71	1.570	4	0.500	0.250	NA	Yes
DM5G-20R01	2.000	2.21	1.570	6	0.750	0.312	NA	Yes
DM6G-20R01	2.000	2.21	1.570	4	0.750	0.312	NA	Yes
DM5G-25R01	2.500	2.71	1.570	8	0.750	0.312	NA	Yes
DM6G-25R01	2.500	2.71	1.570	6	0.750	0.312	NA	Yes
DM5G-30R01	3.000	3.21	1.750	10	1.000	0.375	NA	Yes
DM6G-30R01	3.000	3.21	1.750	7	1.000	0.375	NA	Yes
DM5G-40R01	4.000	4.21	2.375	12	1.500	0.625	NA	Yes
DM6G-40R01	4.000	4.21	2.375	8	1.500	0.625	NA	Yes
DM6G-50R01	5.000	5.21	2.375	10	1.500	0.625	NA	Yes
DM6G-60R01	6.000	6.21	2.375	12	1.500	0.625	NA	Yes
DM6G-80R10	8.000	8.21	2.375	16	2.500	1.000	4.00	No

SERIES 4W2A

70° MULTI-CARTRIDGE FACE MILL
.23 DEPTH OF CUT



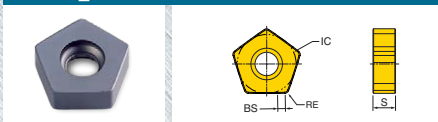
WEP - See insert drawing for wiper options.

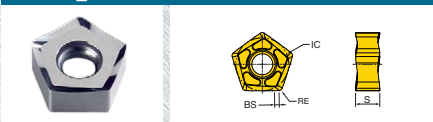
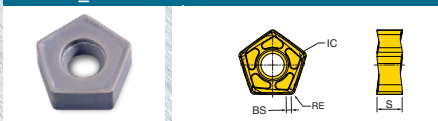
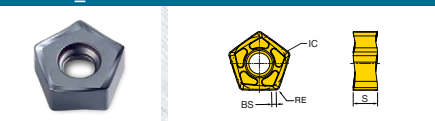
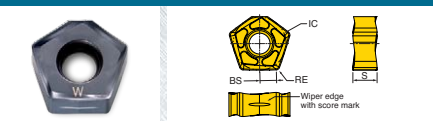


** SERIES 4W2A ACCEPTS DIFFERENT CARTRIDGE AND INSERT STYLES. 55H-11R07 DEKA CARTRIDGES SOLD SEPARATELY.

Part Number	DC Cutting Dia.	DCX Cutting Dia. Max.	OAL Overall Length	ZEFF Effective Teeth	DCON Bore Diameter	KWW Keyway	DBC Bolt Circle
4W2A-06R01	6.030	6.25	2.370	8	1.500	0.625	NA
4W2A-08R01	8.030	8.25	2.370	10	2.500	1.000	4.00
4W2A-10R01	10.030	10.25	2.370	12	2.500	1.000	4.00
4W2A-12R01	12.030	12.25	2.370	14	2.500	1.000	4.00, 7.00

8MM INSERTS

PNCQ08_GNTN

PNCU08_HS

PNCU08_P

PNCU08_GNR

PNCU08_GNTR

PNCU08-W


Part Number	Application	RE/BCH Corner Radius/ Chamfer	BS Wiper Length	IC Inscribed Circle Dia.	S Thickness (To Cutting Edge)	NOI Number of Indexes	IH Insert Hand	Grade	IN05S	IN2505	IN4005	IN4015	IN4030	IN4035	IN6515	IN70N
PNCQ0804GNTN	Flat Top	0.031 R	0.076	0.450	0.165	10	Right				•					
PNCU0805GNFR-HS	SS/Hi-Temp/Ti	0.030 R	0.062	0.450	0.217	10	Right			•				•		
PNCU0805GNFR-P	Sharp & Polished	0.030 R	0.062	0.450	0.217	10	Right	•								
PNCU0805GNR	SiN for Iron	0.031 R	0.076	0.450	0.190	10	Right									•
PNCU0805GNTR	Multi-Purpose	0.031 R	0.076	0.450	0.206	10	Right				•	•	•		•	
PNCU0805GNTR-W	Wiper	0.030 R	0.162	0.450	0.190	2	Right			•		•			•	

8MM HARDWARE

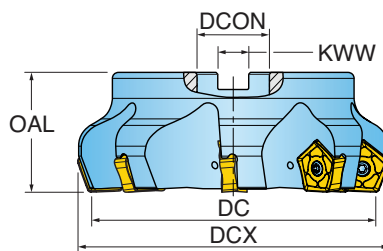
					
	Insert Screw	Driver Handle	Torx Driver Blade	Retention Bolt	Optional Coolant Bolt
DM6G-15R01	SM40-100-10	DS-A00T	DS-T156B	SD-04-86	
DM5G-20R01	SM40-100-10	DS-A00T	DS-T156B	SD-06-46	SD-06-89
DM6G-20R01	SM40-100-10	DS-A00T	DS-T156B	SD-06-46	SD-06-89
DM5G-25R01	SM40-100-10	DS-A00T	DS-T156B	SD-06-46	SD-06-89
DM6G-25R01	SM40-100-10	DS-A00T	DS-T156B	SD-06-46	SD-06-89
DM5G-30R01	SM40-100-10	DS-A00T	DS-T156B	SD-08-46	SD-08-92
DM6G-30R01	SM40-100-10	DS-A00T	DS-T156B	SD-08-46	SD-08-92
DM5G-40R01	SM40-100-10	DS-A00T	DS-T156B	SD-12-82	SD-12-99
DM6G-40R01	SM40-100-10	DS-A00T	DS-T156B	SD-12-82	SD-12-99
DM6G-50R01	SM40-100-10	DS-A00T	DS-T156B	SD-12-82	SD-12-99
DM6G-60R01	SM40-100-10	DS-A00T	DS-T156B	SD-12-82	SD-12-99
DM6G-80R10	SM40-100-10	DS-A00T	DS-T156B	-	-

								
	Face Mill Cartridge	Insert Screw	Driver Handle	Torx Driver Blade	Set Screw	3mm Hex Screw Driver	SHCS	5mm Hex Screw Driver
4W2A-06R01	55H-11R07*	SM40-100-10	DS-A00T	DS-T156B	SA060-01	DS-H03T	SD060-16	DS-H05T
4W2A-08R01	55H-11R07*	SM40-100-10	DS-A00T	DS-T156B	SA060-01	DS-H03T	SD060-16	DS-H05T
4W2A-10R01	55H-11R07*	SM40-100-10	DS-A00T	DS-T156B	SA060-01	DS-H03T	SD060-16	DS-H05T
4W2A-12R01	55H-11R07*	SM40-100-10	DS-A00T	DS-T156B	SA060-01	DS-H03T	SD060-16	DS-H05T

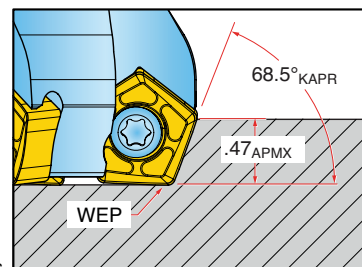
*55H-11R07 DEKA CARTRIDGES SOLD SEPARATELY.

SERIES DM6Q

70° HEAVY DUTY FACE MILL
.47 DEPTH OF CUT



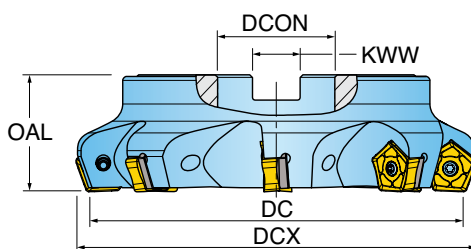
WEP - See insert drawing for wiper options.



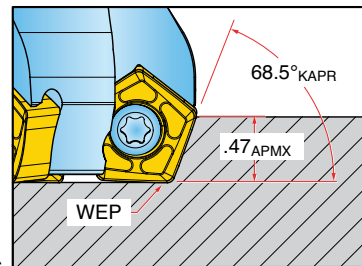
Part Number	DC Cutting Dia.	DCX Cutting Dia. Max.	OAL Overall Length	ZEFF Effective Teeth	DCON Bore Diameter	KWW Keyway	DBC Bolt Circle	CSP Coolant
DM6Q-03R01	3.000	3.44	2.375	4	1.000	0.375	NA	Yes
DM6Q-04R01	4.000	4.44	2.375	5	1.500	0.625	NA	Yes
DM6Q-05R01	5.000	5.44	2.375	6	1.500	0.625	NA	Yes
DM6Q-06R01	6.000	6.44	2.375	8	1.500	0.625	NA	Yes
DM6Q-08R01	8.000	8.44	2.375	10	2.500	1.000	4.00	No

SERIES DM2Q

70° HEAVY DUTY FACE MILL W/POCKET PROTECTION
.47 DEPTH OF CUT



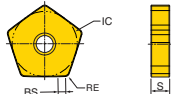
WEP - See insert drawing for wiper options.



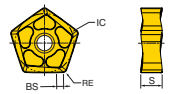
Part Number	DC Cutting Dia.	DCX Cutting Dia. Max.	OAL Overall Length	ZEFF Effective Teeth	DCON Bore Diameter	KWW Keyway	DBC Bolt Circle
DM2Q-06R01	6.000	6.44	2.375	7	1.500	0.625	NA
DM2Q-08R01	8.000	8.44	2.375	8	2.500	1.000	4.00
DM2Q-10R01	10.000	10.44	2.375	10	2.500	1.000	4.00
DM2Q-12R01	12.000	12.44	2.375	12	2.500	1.000	4.00, 7.00

17MM INSERTS

PNCQ17



PNCU17



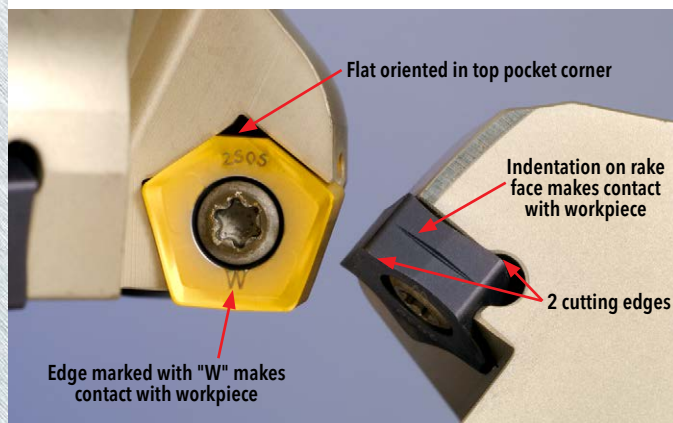
Part Number	Application	RE/BCH Corner Radius/ Chamfer	BS Wiper Length	IC Inscribed Circle Dia.	S Thickness (To Cutting Edge)	NOI Number of Indexes	IH Insert Hand	Grade	IN2005	IN2030	IN2040	IN2505	IN2530	IN4030	IN6515
PNCQ1706GNTN	Flat Top	0.060 R	0.157	0.925	0.256	10	Right					•	•		
PNCU1708GNTR	Multi-Purpose	0.060 R	0.157	0.925	0.328	10	Right	•	•	•				•	•

17MM HARDWARE

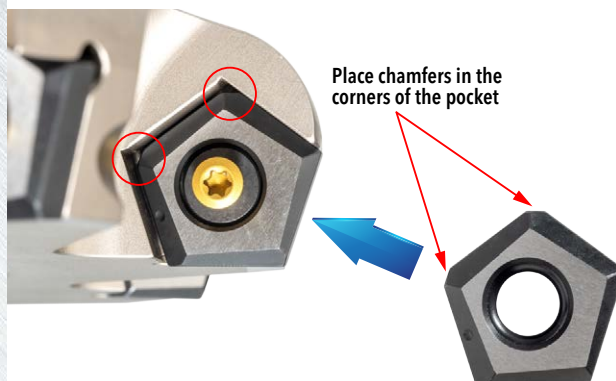
	Insert Screw	Driver Handle	Torx Driver Blade	Seat	Seat Screw	5mm Hex Screw Driver	Retention Bolt	Optional Coolant Bolt
DM6Q-03R01	SM50-130-R0	DS-A00T	DS-T206B	-	-	-	SD-08-48	SD08-C9
DM6Q-04R01	SM50-130-R0	DS-A00T	DS-T206B	-	-	-	SD-12-82	SD-12-99
DM6Q-05R01	SM50-130-R0	DS-A00T	DS-T206B	-	-	-	SD-12-82	SD-12-99
DM6Q-06R01	SM50-130-R0	DS-A00T	DS-T206B	-	-	-	SD-12-82	SD-12-99
DM6Q-08R01	SM50-130-R0	DS-A00T	DS-T206B	-	-	-	-	-
DM2Q-06R01	SM50-170-R0	DS-A00T	DS-T206B	SJ-5061	SF070R01	DS-H05T	SD-12-82	-
DM2Q-08R01	SM50-170-R0	DS-A00T	DS-T206B	SJ-5061	SF070R01	DS-H05T	-	-
DM2Q-10R01	SM50-170-R0	DS-A00T	DS-T206B	SJ-5062	SF070R01	DS-H05T	-	-
DM2Q-12R01	SM50-170-R0	DS-A00T	DS-T206B	SJ-5062	SF070R01	DS-H05T	-	-

WIPER EDGE IDENTIFICATION & SEAT ORIENTATION

PNCU08-W Wiper Orientation

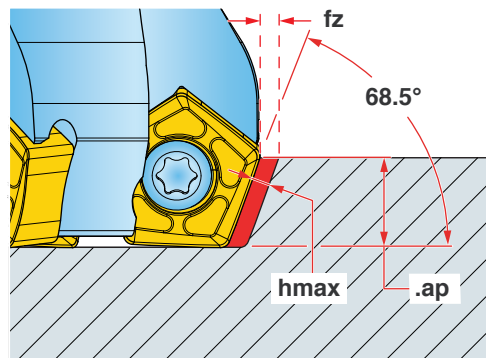


DM2Q Seat Orientation



OPERATING GUIDELINES - 8MM INSERT (DM5G, DM6G, 4W2A)

Chip Thinning



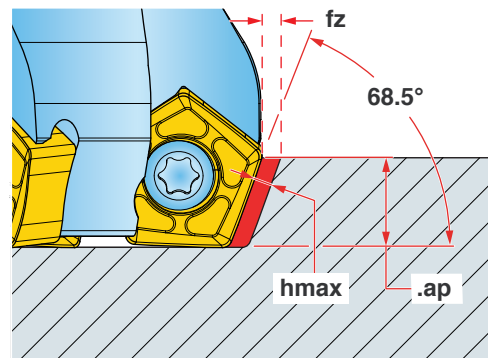
* Chip Thinning Calculator is recommended to ensure h_{max} is greater than .003"

Materials				Vc Cutting Speed SFM	fz Feed/Tooth (inch)	Harder ← → Tougher						Coolant
ISO	Mat'l Group	Type	Examples			IN70N	IN4015 IN6515	IN05S	IN2505 IN4005	IN4030	IN4035	
P	1-5	Non-alloy Steel	1018, A36, 1045, A572, 1070	400-800	.003-.018							No
	6-9	Low-alloy Steel	4140, 4340, P20, 8620, 300M	350-700	.003-.015				2	1		
	10-11	High-alloy Steel	H13, A2, D2, M2, T1	300-600	.003-.015							
M	12-13	Stainless Steel (Ferritic & Martensitic)	410, 416, 440	350-600	.003-.010				2	1		Yes
	14	Stainless Steel (Austenitic)	303, 304, 316, 15-5, 17-4	300-550					3	2	1	May not be required at high speeds
K	15-16	Gray Cast Iron	CLS. 20, 30, 45	500-1000	.003-.018		1		2	3		No
				1800-3000	.003-.008	1						
	17-20	Nodular Cast Iron	60-40-18, 100-70-03	400-800	.003-.015		1		2	3		
				1500-2500	.003-.007	1						
N	21-30	Aluminum	7075, 6061	1000-2500	.003-.015		2	1				Yes
S	31-35	High-Temp Alloys	Inconel, Hastelloy, Nimonic, Monel	65-200	.003-.010				2	3	1	Yes
	36-37	Titanium Alloys	6Al-4V, 5Al-5Mo-5V-3Cr	85-200					3	2	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.

OPERATING GUIDELINES - 17MM INSERT (DM6Q, DM2Q)

Chip Thinning



* Chip Thinning Calculator is recommended to ensure h_{max} is greater than .003"

Materials				Vc Cutting Speed SFM	fz Feed/Tooth (inch)	Harder ← → Tougher				Coolant
ISO	Mat'l Group	Type	Examples			IN2040	IN6515	IN2505 IN2005	IN4030 IN2530 IN2030	
P	1-5	Non-alloy Steel	1018, A36, 1045, A572, 1070	400-800	.004-.025					No
	6-9	Low-alloy Steel	4140, 4340, P20, 8620, 300M	350-700	.004-.020	3		2	1	
	10-11	High-alloy Steel	H13, A2, D2, M2, T1	300-600	.004-.020					
K	15-16	Gray Cast Iron	CLS. 20, 30, 45	500-1000	.004-.025		1	2	3	No
	17-20	Nodular Cast Iron	60-40-18, 100-70-03	400-800	.004-.020		1	2	3	

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.