Member IMC Group

Ingersoll Cutting Tools

DEKA™ FAMILY

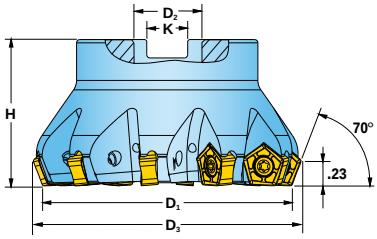
2 SIDE Tech

Part of the Ingersoll CHASE line

HIPOSDEKA™ 20° LEAD FACE MILL SERIES DM6G, DM5G

Diameters	Cutting Edge Length	Insert Corner
1.500" to 8.000"	.230"	.030"R

Facing | Lead Angle | Coolant Thru



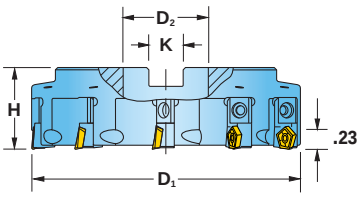
D_1 Effective Diameter	Cutter Number	Number of Inserts	H Height	D_2 Bore Diameter	D_3 Overall Diameter	Retention Bolt	Coolant Thru Retention Bolt*	K Keyway
Medium Density								
1.500	**DM6G-15R01**	4	1.570	.500	1.71	SD-04-86	-	.25
2.000	**DM6G-20R01**	4	1.570	.750	2.21	SD-06-46	SD-06-89	.31
2.500	**DM6G-25R01**	6	1.570	.750	2.71	SD-06-46	SD-06-89	.31
3.000	**DM6G-30R01**	7	1.750	1.000	3.21	SD-08-46	SD-08-92	.38
4.000	**DM6G-40R01**	8	2.375	1.500	4.21	SD-12-82	SD-12-99	.62
5.000	**DM6G-50R01**	10	2.375	1.500	5.21	SD-12-82	SD-12-99	.62
6.000	**DM6G-60R01**	12	2.375	1.500	6.21	SD-12-82	SD-12-99	.62
8.000	**DM6G-80R10**	16	2.375	2.500	8.21	4.00 B.C.	-	1.00
High Density								
2.000	**DM5G-20R01**	6	1.570	.750	2.21	SD-06-46	SD-06-89	.31
2.500	**DM5G-25R01**	8	1.570	.750	2.71	SD-06-46	SD-06-89	.31
3.000	**DM5G-30R01**	10	1.750	1.000	3.21	SD-08-46	SD-08-92	.38
4.000	**DM5G-40R01**	12	2.375	1.500	4.21	SD-12-82	SD-12-99	.62
5.000	**DM5G-50R01**	16	2.375	1.500	5.25	-	-	.62
6.000	**DM5G-60R01**	20	2.375	1.500	6.26	-	-	.62

*Order Seperately

HIPOSDEKA™ MULTIPLE GEOMETRY CARTRIDGE FACE MILL SERIES 4W2A

Diameters	Cutting Edge Length	Insert Corner
4.000" to 12.000"	.230"	.030"R

Facing | Lead Angle

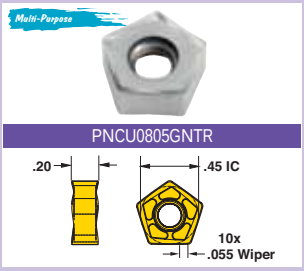


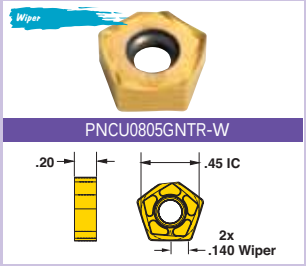
Insert Style	D_1 Nominal Dia.	Cartridge** Number	Cutter Number	Number of Inserts	H Height	D_2 Bore Diameter	Bolt Circle	Weight with Cartridges	K Keyway
DEKA	4.000	**55H-11R07**	**4W2A-04R01**	6	2.375	1.500	-	4.11 lbs.	.63
	6.000	**55H-11R07**	**4W2A-06R01**	8	2.375	1.500	-	10.13 lbs.	.63
	8.000	**55H-11R07**	**4W2A-08R01**	10	2.375	2.500	4.00	17.11 lbs.	1.00
	10.000	**55H-11R07**	**4W2A-10R01**	12	2.375	2.500	4.00	28.8 lbs.	1.00
	12.000	**55H-11R07**	**4W2A-12R01**	14	2.375	2.500	4.00, 7.00	39.15 lbs.	1.00

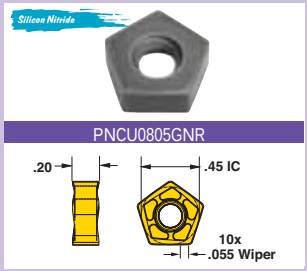
**Order Seperately

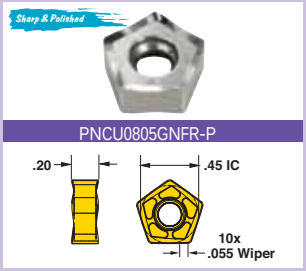
CHASEline

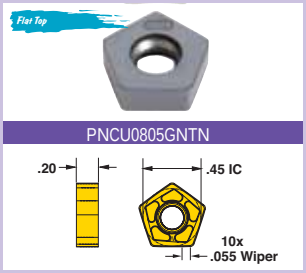
INSERTS

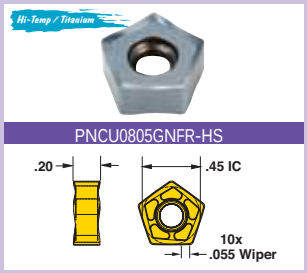






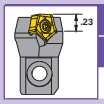






Insert Number	Application	Corner	Grades								
			IN	05S	1030	2005	2015	2030	2505	DD15	70N
PNCU0805GNTR	Multi-Purpose	.030R			■	■	■	■		■	
PNCU0805GNTR-W	Wiper	.030R				■		■	■	■	
PNCU0805GNR	Silicon Nitride	.030R									■
PNCU0805GNFR-P	Sharp/Polished (Aluminum)	.030R		■							
PNCQ0804GNTN	Flat Top (Heavy Duty)	.030R				■		■			
NEW INSERT **PNCU0805GNFR-HS**	Hi-Temp/Titanium	.030R						■	■		

HARDWARE



Cartridge	Cartridge Screw		Driver
Part No.	Part No.	Torque	Part No.
55H-11R07	SD03-89	150-180 in. lbs.	DS-H05T (5mm hex)

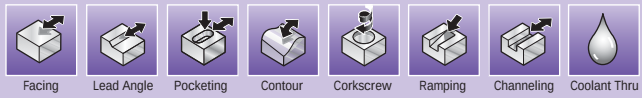
Axial Adjusting Screw	Driver
Part No.	Part No.
SA04-42	DS-H03T (3mm hex)

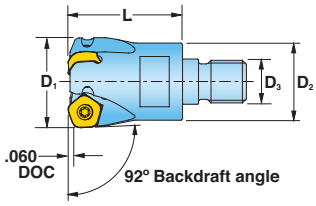
Insert Screw		Driver
Part No.	Torque	Part No.
SM40-100-10	40 in. lbs.	DS-T15T (Tx-15)

OPTIONAL TORQUE DRIVER	BIT - for Optional Torque Driver
Part No.	Part No.
DT-40-01	DS-T15B1

HI•FEEDDEKA™ TOP•ON END MILL SERIES 1DP1G

Diameters	Insert Corner
1.250" to 1.500"	.18

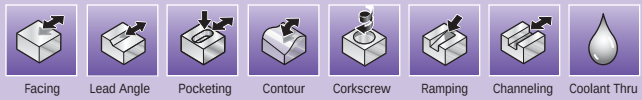


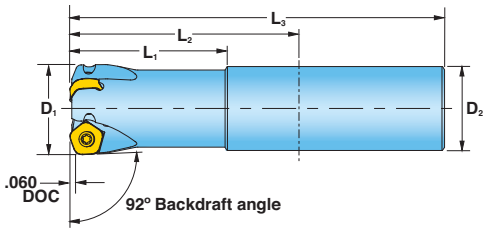


D_1 Effective Diameter	Cutter Number	D_2 Neck Diameter	D_3 Adaption	L OAL Length	Number of Inserts	Ramp Angle
1.250	**1DP1G-12015X8R01**	1.14	M16	1.500	2	0.15
1.500	**1DP1G-15017X8R01**	1.14	M16	1.750	3	0.19

HI•FEEDDEKA™ END MILL SERIES 1DP1G

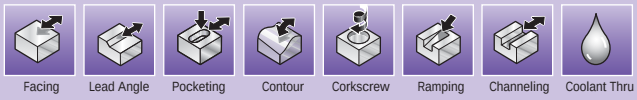
Diameters	Insert Corner
1.250" to 1.500"	.18

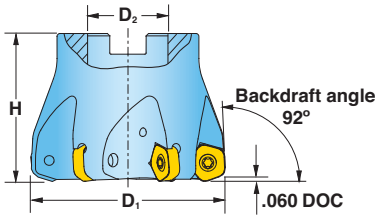




D_1 Effective Diameter	Cutter Number	D_2 Adaption	L_1 Projection Length	L_2 Extension Length	L_3 OAL Length	Number of Inserts	Ramp Angle
1.250	**1DP1G-1202781R01**	1.250 Weldon	2.72	2.75	5.000	2	0.15
1.250	**1DP1G-12057S9R01**	1.250 cyl	3.50	5.75	8.000	2	0.15
1.500	**1DP1G-1503386R01**	1.500 Weldon	3.30	3.34	6.000	3	0.19
1.500	**1DP1G-15073S5R01**	1.500 cyl	4.00	7.34	10.000	3	0.19

Diameters	Insert Corner
2.000" to 6.000"	.18



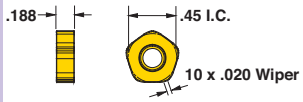


D_1 Effective Diameter	Cutter Number	D_2 Bore Diameter	H Height	Number Effective Inserts	Keyway	Ramp Angle	SHCS	SHCS w/* Coolant Thru
2.000	**DP5G-20R01**	0.75	1.625	5	0.31	0.64	SD06-46	SD06-89
2.000	**DP5G-20R02**	0.75	1.625	3	0.31	0.64	SD06-46	SD06-89
2.500	**DP5G-25R01**	0.75	1.625	4	0.31	0.74	SD06-46	SD06-89
3.000	**DP5G-30R01**	1.00	2.000	5	0.38	0.80	SD08-46	SD08-92
4.000	**DP5G-40R01**	1.50	2.375	6	0.62	1.16	SD12-82	SD12-99
6.000	**DP5G-60R01**	1.50	2.375	8	0.62	0.72	SD12-82	SD12-99

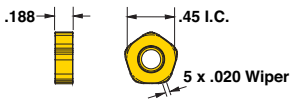
*Order Seperately

INSERTS

PNCQ0804ZNTN



PNCT0804ZNN-HR



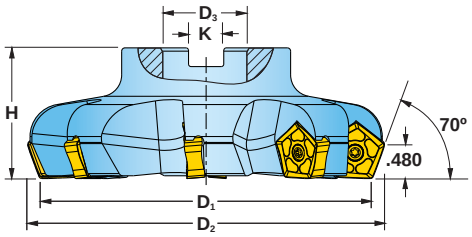
Insert Number	Application	Cutting Edge Configuration	Indexes per Insert	*Corner Radius	Grades			
					IN	2030	2005	2505
PNCQ0804ZNTN	Hi Feed	Neutral	10	.18		■	■	
PNCT0804ZNN-HR	Hi Feed	Positive	5	.18		■		■

HARDWARE

Insert Screw		Standard Driver
Part No.	Torque	Part No.
SM40-093-20	40 in. lbs.	DS-T15T (TX-15)

OPTIONAL TORQUE DRIVER	BIT - for Optional Torque Driver
Part No.	Part No.
DT-40-01	DS-T15B1

Diameters	Max. Depth of Cut	Insert Corner
3.000" to 12.000"	.480"	.060"r

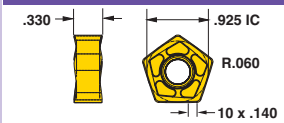


D_1 Effective Diameter	Cutter Number	D_2 Overall Diameter	D_3 Bore Diameter	H Height	Number of Inserts	K Keyway	Bolt Circle	Retention Bolt	Coolant	Coolant Thru Retention Bolt*
Low Density										
3.000	**DM6Q-03R01**	3.44	1.00	1.750	4	0.37	-	SD-08-46	Yes	SD-08-92
4.000	**DM6Q-04R01**	4.44	1.50	2.375	5	0.63	-	SD-12-82	Yes	SD-12-99
5.000	**DM6Q-05R01**	5.44	1.50	2.375	6	0.63	-	SD-12-82	Yes	SD-12-99
6.000	**DM6Q-06R01**	6.44	1.50	2.375	8	0.63	-	SD-12-82	Yes	SD-12-99
8.000	**DM6Q-08R01**	8.44	2.50	2.375	10	1.00	4.00	-	No	-
10.000	**DM6Q-10R01**	10.44	2.50	2.375	12	1.00	4.00, 7.00	-	No	-
12.000	**DM6Q-12R01**	12.44	2.50	2.375	14	1.00	4.00, 7.00	-	No	-
Medium Density										
4.000	**DM5Q-04R01**	4.44	1.50	2.375	7	0.63	-	SD-12-82	Yes	SD-12-99
6.000	**DM5Q-06R01**	6.44	1.50	2.375	10	0.63	-	SD-12-82	Yes	SD-12-99
8.000	**DM5Q-08R01**	8.44	2.50	2.375	13	1.00	4.00	-	No	-

*Order Seperately

INSERTS

PNCU1708GNTR



Insert Number	Hone	Application	Geometry	Corner	Grades				
					IN	2030	2005	2040	DD15
PNCU1708GNTR	* J	MultiPurpose	Positive	.060		■	■	■	■
PNCU1708GNTR	* E	Heavy Duty	Positive	.060		■	■	■	■

*** Please specify hone when ordering.**

HARDWARE

Insert Screw		Wrench
Part No.	Torque	Part No.
SM50-130-R0	55 in. lbs.	DS-T20T (Tx-20)

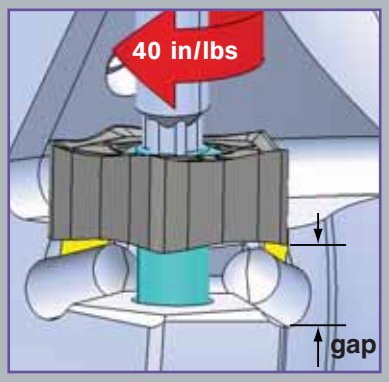
HiPOSDEKA™ OPERATING GUIDELINES:

Series DM6G, DM5G Material		Brinell Hardness	SFM	Feed per Insert	Grades* IN055	IN1030	IN2005/IN2505	IN2015	IN2030	DD15	IN70N	Coolant
Aluminum	7075 - T6, 6061 - T6, 2024	-	1650-2500	.005-.020	1		3	2				Yes
Cast Iron	Gray	150-250	300-1000	.008-.020			3	2		1		No
			1800+	.005-.008							1	
	Nodular	150-250	300-600	.008-.015			3	1		2		
			1500+	.004-.007							1	
Steel	Low Carbon 1018, 8620	150-250	400-1000	.008-.020		1	2		1**			No
	High Carbon F-6180	250-400	350-500	.008-.015								
	Alloyed Steel 4140, 4340	150-300	300-700	.008-.020								
	Tool Steel A-6, D-1, D-2	Up to 300										
Stainless Steel	300 Series, 304, 316	-	300-700	.007-.015		1	2		1**			May not be required at High Speeds
	400 Series, 15-5 PH	Up to 320	400-900									
	13-8 PH	-	200-400									Yes
Nickel Alloys	Inconel, Hastelloy, Waspalloy	-	75-120	.004-.012			2		1			Yes
Titanium	6AL-4V	-	100-150	.005-.014			1		2			Yes

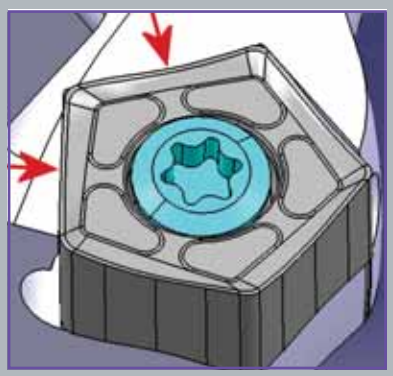
*In order of preference.
**Preferered for higher surface footage.

ASSEMBLY INSTRUCTIONS FOR DM5G

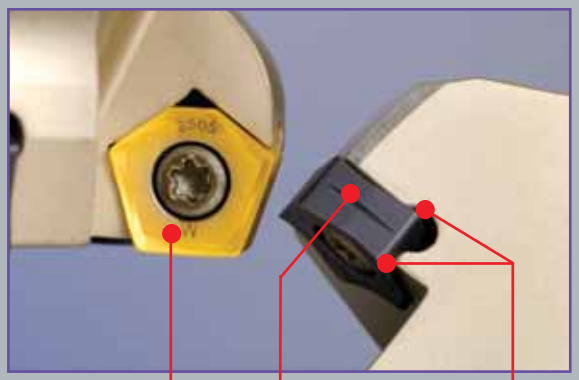
1. Screw down the insert together with the insert screw in the direction of the pocket seating surface (with gap as shown). The insert should be inside the seat roughly located by the yellow marked surfaces.



2. Push the insert slightly against the clamping surfaces before tightening the insert screw (see red arrows). The correct tightening torque is 40 inch pounds.



WIPER EDGE IDENTIFICATION



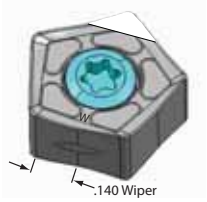
Edge marked with "W" makes contact with workpiece.

2 cutting edges

Indentation on rake face makes contact with workpiece

TIPS FOR FINISHING

During finishing operations the feed rate per revolution should not exceed .055"



During finishing operations the feed rate per revolution should not exceed .140"

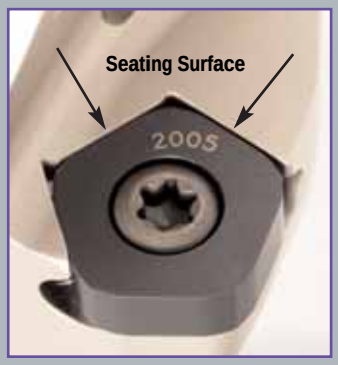
■ HiFeedDeka™ OPERATING GUIDELINES:

Series 1DP1G, DP5G Material		Brinell Hardness	SFM	APT**	Grades* IN2030	Grades* IN2005	Coolant
Cast Iron	Gray	150-250	600-1000	.040-.100		1	No
	Nodular	150-250	500-900	.040-.100		1	No
Steel	Low Carbon 1018, 8620	150-250	400-1000	.040-.100	2	1	No
	High Carbon F-6180	250-400	350-500	.040-.078			
	Alloyed Steel 4140, 4340	150-300	300-700	.040-.060			
	Tool Steel A-6, D-1, D-2	Up to 300					
Stainless Steel	400 Series, 15-5 PH	Up to 320	250-600	.030-.070	2	1	May not be required at High Speeds
	13-8 PH	-					Yes

*Grades in order of preference.
**Chipthinning factor based on extreme lead angle is included.

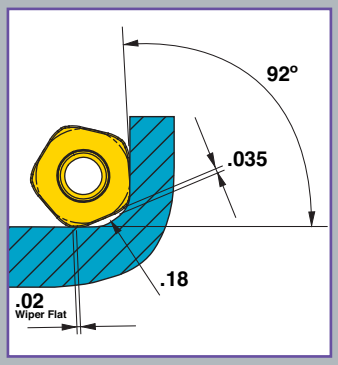
MOUNTING INSTRUCTIONS

For tightening the insert screws, please always use a torque driver (40 in. lbs.). We recommend our driver DT-40-01 with Torque bit DS-T15B1.



PROGRAMMING TIP

Please use a corner radius of .18" in your NC-program when machining 3D-contours. The maximum allowance will then be up to .035".



■ HiPOSDEKA HD™ OPERATING GUIDELINES:

Series DM5Q, DM6Q

Material		Brinell Hardness	SFM	Feed per Insert	Grades IN2005	IN2030	IN2040	DD15	Coolant
Cast Iron	Gray	150-250	300-1000	.007-.025	2			1	No
	Nodular		300-600	.007-.020	2			1	
Steel	Low Carbon 1018-8620	150-250	400-1000	.008-.025	3	2	1		No
	High Carbon F-6180	250-400	350-500	.008-.020					
	Alloyed Steel 4140, 4340	150-300	300-700	.008-.020	3	1	2		
	Tool Steel A-6, D-1, D-2	Up to 300							
Stainless Steel	300 Series, 304, 316	-	250-600	.007-.018	2	1			May not be required at high speeds
	400 Series 15-5 PH	Up to 320	300-600						
	13-8 PH	-	200-550						Yes

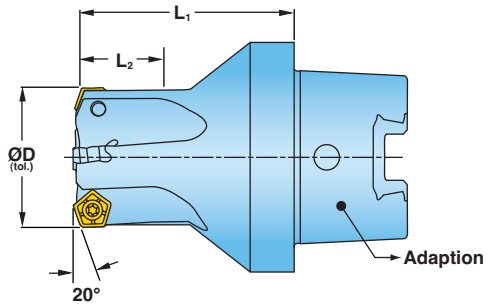
DEKA-BORE™

COPY PAGE AND FILL IN INFORMATION TO COMMUNICATE BASIC DESIGN REQUIREMENTS

product worksheet quote request

SPECIFICATIONS

Adaption:
Diameter (1.00 Min):
Diameter Tolerance:
Extension Length (L1):
Length Tolerance:
Drill Depth (L2):
Effective:

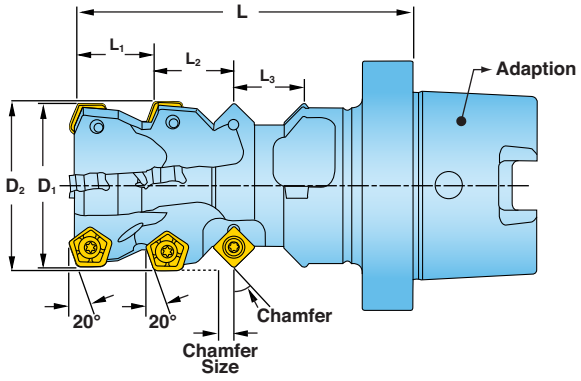


APPLICATION INFORMATION

Application: (circle 2)	Rough or SemiFin / Blind hole / Through hole
Coolant: (circle 1)	Through spindle / Flood / None

SPECIFICATIONS

Adaption:
Diameter 1 (1.75 Min):
Diameter 1 Tolerance:
Extension Length (L):
Step Length L:
L1 Tolerance:
Diameter 2 (.500 Min):
Diameter 2 Tolerance:
Step Length L2:
L2 Tolerance:
Effective:
Chamfer Angle:
L3:
Chamfer Size:



APPLICATION INFORMATION

Station 1: (circle 2)	Rough or SemiFin / Blind hole or Through hole
Station 2: (circle 1)	Rough / SemiFin / Finish
Coolant: (circle 1)	Through spindle / Flood / None

CUSTOMER		CUSTOMER NO.	
STREET	CITY	STATE	ZIP
CONTACT PERSON	PHONE	FAX	
EMAIL			
QUANTITY	ANNUAL QUANTITY		
SALES ENGINEER			

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