

DIPOSOTETRA™ 06



Cutter Series:
1TJ1D, TJ1D, 1TV1D

Diameters:
.625" - 3.000"

Insert Series:
MNHU06, MNCU06

Materials:
Cast Iron, Steel, Stainless Steel,
Aluminum, High-Temp Alloys,
Hard Steel

Depth of Cut:
.24"



**PRODUCT
ANNOUNCEMENT
• UPDATE •
2019**

Member IMC Group
Ingersoll
Cutting Tools



Multi-Purpose



R.015, .031, .047, .062 & .079



SS/Hi-Temp/Ti



R.015, .031, .047, .062 & .079

Face Wiper

Backdraft - Side Wiper



R.1.0- 2.0mm

Polished for Alum



R.015- R.031

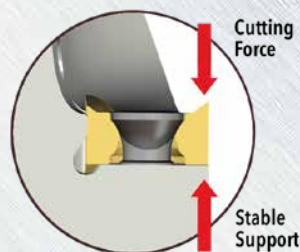
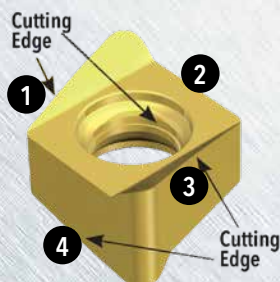
Face Wiper



90° Milling with 4 Cutting Edges; High Ramping Capability

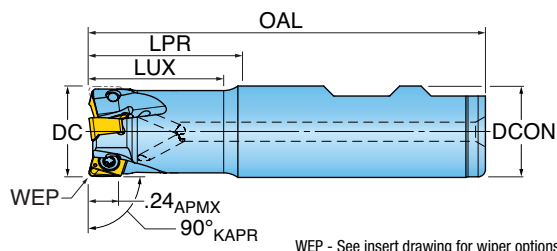
Features & Benefits:

- Pockets designed with wide mounting area and strong M3.0 crew for utmost durability
- Fine pitch densities allow high productivity in Iron and Hi-Temperature alloys
- Coarse Pitch density and high positive rake angles provide low cutting forces on small machines
- Concave face design accommodates aggressive ramp, corkscrew and drill milling functions
- Diverse adaption selection designed to accommodate any machine set up... including knee mills.
- All cutters ported with coolant through



DIPOS[®]TETRA[™] 06 SERIES 1TJ1D (WELDON SHANK STYLE) (6MM)

90° END MILL WITH 4 INDEXES



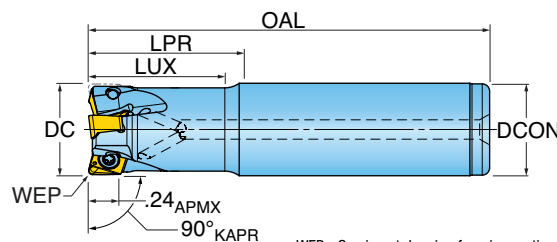
WEP - See insert drawing for wiper options.

Part Number	DC Cutting Dia.	LPR Protruding Length	LUX Usable Length Max.	OAL Overall Length	ZEFF Eff. Teeth	DCON Shank Dia.	RMPX Ramp Angle Max.
1TJ1D-0600779R01	0.625	0.75	0.72	2.66	2	0.625	3.1
1TJ1D-0701284R01	0.750	1.25	1.20	3.25	3	0.750	4.1
1TJ1D-0801284R01	0.875	1.25	1.25	3.25	3	0.750	5.0
1TJ1D-1001780R01	1.000	1.75	1.72	4.00	4	1.000	4.8
1TJ1D-1001784R01	1.000	1.75	1.72	3.75	4	0.750	4.8
1TJ1D-1201781R01	1.250	1.75	1.72	4.00	5	1.250	3.6
1TJ1D-1201784R01	1.250	1.75	1.75	3.75	5	0.750	3.6
1TJ1D-1501784R01	1.500	1.75	1.75	3.75	6	0.750	2.8
1TJ1D-1502281R01	1.500	2.25	2.25	4.50	6	1.250	2.8

*Cutter Body must be relieved for use with insert corner radii larger than R.031"; (Body R = Insert R -.02")

DIPOS[®]TETRA[™] 06 SERIES 1TJ1D (CYLINDRICAL SHANK STYLE) (6MM)

90° END MILL WITH 4 INDEXES



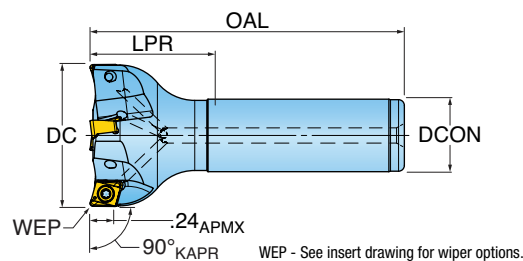
WEP - See insert drawing for wiper options.

Part Number	DC Cutting Dia.	LPR Protruding Length	LUX Usable Length Max.	OAL Overall Length	ZEFF Eff. Teeth	DCON Shank Dia.	RMPX Ramp Angle Max.
1TJ1D-0602056R01	0.625	2.09	1.25	4.00	2	0.625	3.1
1TJ1D-0703057R01	0.750	3.00	1.25	5.00	3	0.750	4.1
1TJ1D-1003751R01	1.000	3.75	1.25	6.00	4	1.000	4.8
1TJ1D-1204259R01	1.250	4.25	1.25	6.50	5	1.250	3.6
1TJ1D-1504755R01	1.500	4.75	1.25	7.00	6	1.500	2.8

*Cutter Body must be relieved for use with insert corner radii larger than R.031"; (Body R = Insert R -.02")

DIPOS•TETRA™ 06 SERIES 1TJ1D (KNEE MILL CYLINDRICAL STYLE) (6MM)

90° END MILL WITH 4 INDEXES



Part Number	DC Cutting Dia.	LPR Protruding Length	OAL Overall Length	ZEFF Eff. Teeth	DCON Shank Dia.	RMPX Ramp Angle Max.
1TJ1D-10012S7R01	1.000	1.25	3.25	3	0.750	4.8
1TJ1D-15012S7R01	1.500	1.25	3.25	4	0.750	2.8
1TJ1D-20012S7R01	2.000	1.25	3.25	5	0.750	2.0

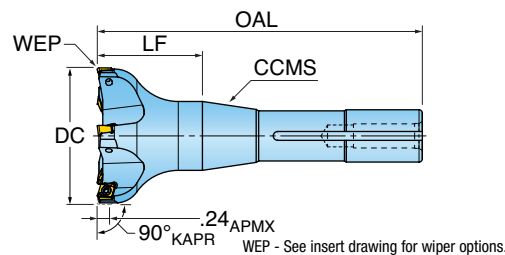
*Cutter Body must be relieved for use with insert corner radii larger than R.031"; (Body R = Insert R -.02")

Ideal on Knee mills when coupled with toolholder series R8ER.



DIPOS•TETRA™ 06 SERIES 1TJ1D (KNEE MILL R8 STYLE) (6MM)

90° END MILL WITH 4 INDEXES

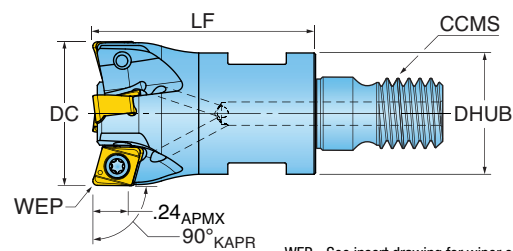


Part Number	DC Cutting Dia.	LF Functional Length	OAL Overall Length	ZEFF Eff. Teeth	CCMS Connection Code Machine Side	RMPX Ramp Angle Max.
NEW 1TJ1D-2501940R01	2.500	1.90	5.90	5	Bridgeport R8	1.6
NEW 1TJ1D-3001940R01	3.000	1.90	5.90	5	Bridgeport R8	1.3

*Cutter Body must be relieved for use with insert corner radii larger than R.031"; (Body R = Insert R -.02")

DIPOS•TETRA™ 06 SERIES 1TJ1D (TOP•ON STYLE) (6MM)

90° MODULAR END MILL WITH 4 INDEXES



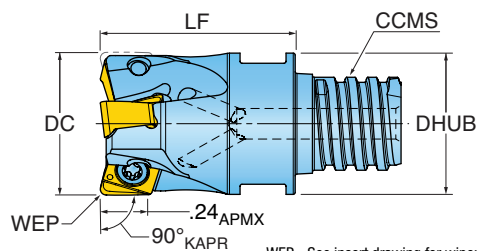
WEP - See insert drawing for wiper options.

Part Number	DC Cutting Dia.	LF Functional Length	ZEFF Eff. Teeth	CCMS Connection Code	DHUB Hub Dia.	RMPX Ramp Angle Max.
1TJ1D-07015X6R01	0.750	1.50	3	M10	0.69	4.1
1TJ1D-10015X7R01	1.000	1.50	4	M12	0.81	4.8
1TJ1D-12017X8R01	1.250	1.75	5	M16	1.13	3.6
1TJ1D-15017X8R01	1.500	1.75	6	M16	1.13	2.8

*Cutter Body must be relieved for use with insert corner radii larger than R.031"; (Body R = Insert R -.02")

DIPOS•TETRA™ 06 SERIES 1TJ1D (CHIP•SURFER STYLE) (6MM)

90° MODULAR END MILL WITH 4 INDEXES



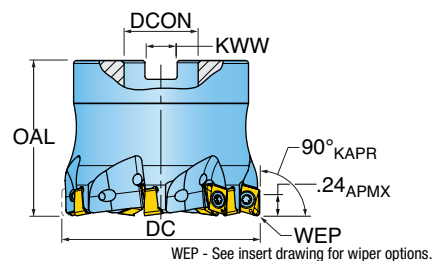
WEP - See insert drawing for wiper options.

Part Number	DC Cutting Dia.	LF Protruding Length	ZEFF Eff. Teeth	CCMS Connection Code	DHUB Hub Dia.	RMPX Ramp Angle Max.
1TJ1D-06008TRR01	0.625	0.80	2	T10	0.61	3.1
1TJ1D-07010TSR01	0.750	1.00	3	T12	0.73	4.1
1TJ1D-10012TUR01	1.000	1.25	4	T15	0.95	4.8

*Cutter Body must be relieved for use with insert corner radii larger than R.031"; (Body R = Insert R -.02")

DIPOS[®]TETRA™ 06 SERIES TJ1D (6MM)

90° FACE MILL WITH 4 INDEXES

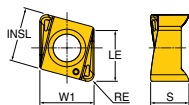


Part Number	DC Cutting Dia.	OAL Overall Length	ZEFF Eff. Teeth	DCON Bore Dia.	KWW Keyway	RMPX Ramp Angle Max.
TJ1D-15R01	1.500	1.57	6	0.500	0.250	2.8
TJ1D-20R01	2.000	1.57	7	0.750	0.312	2.0
NEW TJ1D-25R01	2.500	1.57	8	0.750	0.312	1.6
NEW TJ1D-30R01	3.000	1.75	9	1.000	0.375	1.3

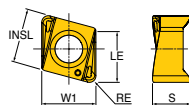
*Cutter Body must be relieved for use with insert corner radii larger than R.031"; (Body R = Insert R -.02")

DIPOS[®]TETRA™ 06 INSERTS (6MM)

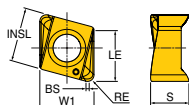
MNHU



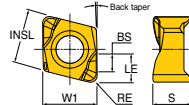
MNHU-PH



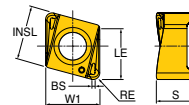
MNHU-HW **NEW**



MNHU-SW **NEW**



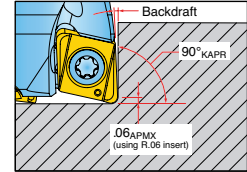
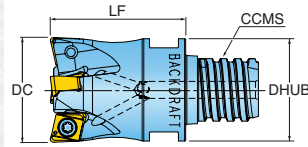
MNCU



Part Number	Application	RE/BCH Corner Radius/ Chamfer	BS Wiper Length	LE Cutting Edge Length	INSL Length	W1 Width	S Thickness	NOI Number of Inserts	IH Insert Hand	Grade	IN10K	IN2035	IN2504	IN2505	IN2510	IN2530	IN6515
MNHU060304R	Multi-Purpose	0.015 R	-	0.240	0.260	0.260	0.184	4	Right					•	•		
MNHU060308R	Multi-Purpose	0.031 R	-	0.230	0.260	0.260	0.184	4	Right					•	•	•	•
NEW MNHU060312R	Multi-Purpose	0.047 R	-	0.220	0.260	0.260	0.177	4	Right					•			
MNHU060316R	Multi-Purpose	0.062 R	-	0.210	0.260	0.260	0.180	4	Right					•	•	•	•
NEW MNHU060320R	Multi-Purpose	0.079 R	-	0.200	0.260	0.260	0.165	4	Right					•			
MNHU060304R-PH	SS/Hi-Temp/Ti	0.015 R	-	0.240	0.260	0.260	0.184	4	Right					•	•		
MNHU060308R-PH	SS/Hi-Temp/Ti	0.031 R	-	0.230	0.260	0.260	0.184	4	Right		•			•	•		
NEW MNHU060312R-PH	SS/Hi-Temp/Ti	0.047 R	-	0.220	0.260	0.260	0.177	4	Right					•		•	
MNHU060316R-PH	SS/Hi-Temp/Ti	0.062 R	-	0.210	0.260	0.260	0.180	4	Right		•			•	•		
NEW MNHU060320R-PH	SS/Hi-Temp/Ti	0.079 R	-	0.200	0.260	0.260	0.165	4	Right					•		•	
NEW MNHU060304R-HW	SS/Hi-Temp/Ti - Face Wiper	0.015 R	0.039	0.240	0.260	0.260	0.184	4	Right					•			
NEW MNHU060308R-HW	SS/Hi-Temp/Ti - Face Wiper	0.031 R	0.023	0.240	0.260	0.260	0.184	4	Right					•	•		
NEW MNHU060310R-SW	Backdraft - Side Wiper	0.039	0.043	0.082	0.260	0.260	0.185	4	Right				•	•			
NEW MNHU060315R-SW	Backdraft - Side Wiper	0.059	0.070	0.130	0.260	0.260	0.177	4	Right				•	•			
NEW MNHU060320R-SW	Backdraft - Side Wiper	0.079	0.039	0.120	0.260	0.260	0.170	4	Right				•	•			
MNCU060304FR-P	Aluminum - Face Wiper	0.015 R	0.039	0.240	0.260	-	0.196	4	Right	•							
MNCU060308FR-P	Aluminum - Face Wiper	0.031 R	0.023	0.230	0.260	0.260	0.190	4	Right	•							

SERIES 1TV1D (CHIP•SURFER STYLE) (6MM)

BACKDRAFT END MILL WITH 4 INDEXES



Part Number	DC Cutting Dia.	LF Protruding Length	ZE Eff. Teeth	CCMS Connection Code	DHUB Hub Dia.	RMPX Ramp Angle Max.	KAPR Cutting Edge Angle
1TV1D-06208TRR10	0.625	0.80	2	T10	0.60	3.0	91
1TV1D-07010TSR02	0.750	1.00	3	T12	0.72	4.7	93
1TV1D-10012TUR02	1.000	1.25	4	T15	0.95	3.9	93

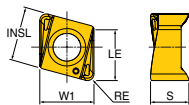
*Cutter Body must be relieved for use with insert corner radii larger than R.031"; (Body R = Insert R -.02")

Notes:

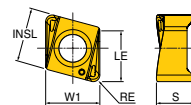
- Recommend .020" maximum axial stepdown on straight wall finish applications.
- Well suited for long reach applications.

SERIES 1TV1D INSERTS (6MM)

MNHU



MNHU-PH



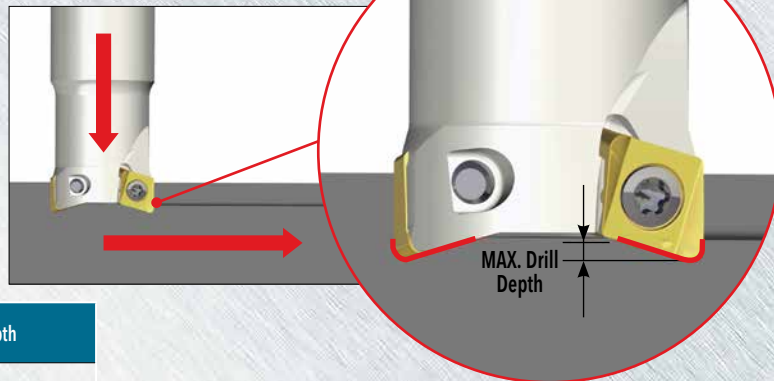
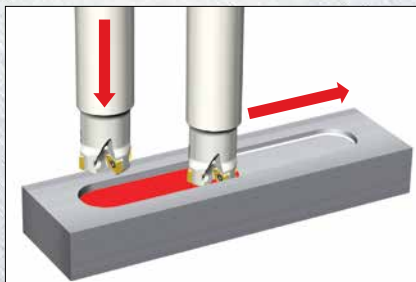
Part Number	Application	RE/BCH Corner Radius/ Chamfer	LE Cutting Edge Length	INSL Length	W1 Width	S Thickness	NOI Number of Inserts	IH Insert Hand	Grade	IN2035	IN2505	IN2510	IN2530	IN6515
MNHU060304R	Multi-Purpose	0.015 R	0.240	0.260	0.260	0.184	4	Right			•		•	
MNHU060308R	Multi-Purpose	0.031 R	0.230	0.260	0.260	0.184	4	Right			•	•	•	•
NEW MNHU060312R	Multi-Purpose	0.047 R	0.220	0.260	0.260	0.177	4	Right			•			
MNHU060316R	Multi-Purpose	0.062 R	0.210	0.260	0.260	0.180	4	Right			•	•	•	•
NEW MNHU060320R	Multi-Purpose	0.079 R	0.200	0.260	0.260	0.165	4	Right			•			
MNHU060304R-PH	SS/Hi-Temp/Ti	0.015 R	0.240	0.260	0.260	0.184	4	Right			•		•	
MNHU060308R-PH	SS/Hi-Temp/Ti	0.031 R	0.230	0.260	0.260	0.184	4	Right		•	•		•	
NEW MNHU060312R-PH	SS/Hi-Temp/Ti	0.047 R	0.220	0.260	0.260	0.177	4	Right					•	
MNHU060316R-PH	SS/Hi-Temp/Ti	0.062 R	0.210	0.260	0.260	0.180	4	Right		•	•		•	
NEW MNHU060320R-PH	SS/Hi-Temp/Ti	0.079 R	0.200	0.260	0.260	0.165	4	Right					•	

						
	Screw	Driver	**OPTIONAL** Torque Driver	Retention Bolt	Wrench	**OPTIONAL** Torque Wrench
1TJ1D-06020S6R01	SM30-068-30	DS-T08W	DTQ-11WK	-	-	-
1TJ1D-07030S7R01	SM30-068-30	DS-T08W	DTQ-11WK	-	-	-
1TJ1D-10037S1R01	SM30-068-30	DS-T08W	DTQ-11WK	-	-	-
1TJ1D-12042S9R01	SM30-068-30	DS-T08W	DTQ-11WK	-	-	-
1TJ1D-15047S5R01	SM30-068-30	DS-T08W	DTQ-11WK	-	-	-
1TJ1D-0600779R01	SM30-068-30	DS-T08W	DTQ-11WK	-	-	-
1TJ1D-0701284R01	SM30-068-30	DS-T08W	DTQ-11WK	-	-	-
1TJ1D-0801284R01	SM30-068-30	DS-T08W	DTQ-11WK	-	-	-
1TJ1D-1001780R01	SM30-068-30	DS-T08W	DTQ-11WK	-	-	-
1TJ1D-1001784R01	SM30-068-30	DS-T08W	DTQ-11WK	-	-	-
1TJ1D-1201781R01	SM30-068-30	DS-T08W	DTQ-11WK	-	-	-
1TJ1D-1201784R01	SM30-068-30	DS-T08W	DTQ-11WK	-	-	-
1TJ1D-1501784R01	SM30-068-30	DS-T08W	DTQ-11WK	-	-	-
1TJ1D-1502281R01	SM30-068-30	DS-T08W	DTQ-11WK	-	-	-
1TJ1D-10012S7R01	SM30-068-30	DS-T08W	DTQ-11WK	-	-	-
1TJ1D-15012S7R01	SM30-068-30	DS-T08W	DTQ-11WK	-	-	-
1TJ1D-20012S7R01	SM30-068-30	DS-T08W	DTQ-11WK	-	-	-
1TJ1D-2501940R01	SM30-068-30	DS-T08W	DTQ-11WK	-	-	-
1TJ1D-3001940R01	SM30-068-30	DS-T08W	DTQ-11WK	-	-	-
1TJ1D-07015X6R01	SM30-068-30	DS-T08W	DTQ-11WK	-	615MM	-
1TJ1D-10015X7R01	SM30-068-30	DS-T08W	DTQ-11WK	-	617MM	-
1TJ1D-12017X8R01	SM30-068-30	DS-T08W	DTQ-11WK	-	622MM	-
1TJ1D-15017X8R01	SM30-068-30	DS-T08W	DTQ-11WK	-	622MM	-
1TJ1D-06008TRR01	SM30-068-30	DS-T08W	DTQ-11WK	-	WS-0044	DT-250-13
1TJ1D-07010TSR01	SM30-068-30	DS-T08W	DTQ-11WK	-	WS-0059	DT-250-16
1TJ1D-10012TUR01	SM30-068-30	DS-T08W	DTQ-11WK	-	WS-0061	-
1TV1D-06208TRR10	SM30-068-30	DS-T08W	DTQ-11WK	-	WS-0044	DT-250-13
1TV1D-07010TSR02	SM30-068-30	DS-T08W	DTQ-11WK	-	WS-0059	DT-250-16
1TV1D-10012TUR02	SM30-068-30	DS-T08W	DTQ-11WK	-	WS-0061	-
TJ1D-15R01	SM30-068-30	DS-T08W	DTQ-11WK	SD-04-46	-	-
TJ1D-20R01	SM30-068-30	DS-T08W	DTQ-11WK	SD-06-46	-	-
TJ1D-25R01	SM30-068-30	DS-T08W	DTQ-11WK	SD-06-46	-	-
TJ1D-30R01	SM30-068-30	DS-T08W	DTQ-11WK	SD-08-46	-	-

DIPOS TETRA™ 06 OPERATING GUIDELINES

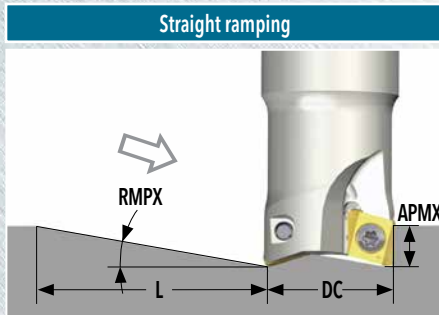
DiPos TETRA - Series 1TJ1D, 1TV1D, TJ1D					Grades										
Material		Brinnell Hardness	SFM	Feed per Insert	IN10K	IN2035	IN2504	IN2505	IN2510	IN2530	IN6515	Coolant			
Aluminum	6061-T6, 7075-T6, 2024	-	1500 - 8000	.003 - .007	1							Yes			
Cast Iron	Gray	150 - 250	300 - 1000	.003-.006				3	1		2	No			
	Nodular		300 - 600					3	2		1				
Steel	Low Carbon 1018, 8620	100 - 250	400 - 1000	.003-.006				2		1		No			
	High Carbon F-6180	250 - 400	350 - 500												
	Alloyed Steel 4140, 4340	150 - 300	300 - 700												
	Tool Steel A-6, D-1, D-2	Up to 300													
Stainless Steel	300 Series, 304, 316	-	300 - 550	.003-.005		1		3		2		May not be required at high speeds			
	400 Series 15-5 PH	Up to 320	350 - 600										2		1
	13-8 PH	-	200 - 400									Yes			
Nickel Alloys	Inconel, Hastelloy, Waspalloy	-	75-120	.003-.005		1		2		3		Yes			
Titanium	6AL-4V	-	100 - 150	.003-.005		1		3		2		Yes			
Hardened Steel	All	-	165-360	.002-.004			1	2				No			

DIPOS TETRA™ 06 DRILL MILL POCKETING



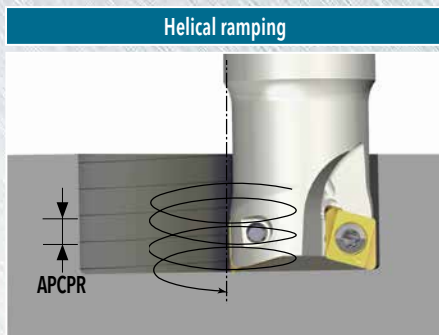
Cutter Dia.	MAX. Drill Depth
0.62	0.025"
0.75	0.039"
1.00	0.060"
1.25	0.060"
1.50	0.060"
2.00	0.060"
2.50	0.060"
3.00	0.060"

DIPOS•TETRA™ 06 STRAIGHT RAMPING DATA



DC Cutter Diameter	RMPX Ramping Angle Max.	L	APMX Max. DOC
0.62	3.1	3.7	0.20
0.75	4.1	2.8	0.20
1.00	4.8	2.4	0.20
1.25	3.6	3.2	0.20
1.50	2.8	4.1	0.20
2.00	2.0	5.7	0.20
2.50	1.6	7.1	0.20
3.00	1.3	8.8	0.20

DIPOS•TETRA™ 06 HELICAL RAMPING DATA



DC Cutter Dia. Using R.031 Insert	DMIN MIN. Dia. Milled Hole	APCPRN MIN. Advance Per Cutter Path Rev.	DMAX MAX. Dia. Milled Hole	APCPRX MAX. Advance Per Cutter Path Rev.
0.62	1.01	0.065	1.25	0.106
0.75	1.16	0.092	1.50	0.168
1.00	1.51	0.135	2.00	0.200
1.25	2.01	0.150	2.50	0.200
1.50	2.51	0.155	3.00	0.200
2.00	3.51	0.165	4.00	0.200
2.50	4.51	0.175	5.00	0.200
3.00	5.51	0.180	6.00	0.200