INDUSTRY 4.0

Member IMC Group

Ingersoll Cutting Tools

NEW PRODUCTS 2020/2021



INDUSTRY 4.0

SFEEDUP™

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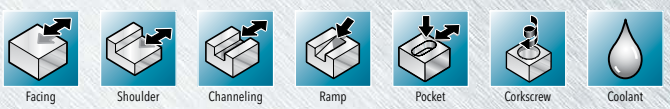
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INNOVATIVE COMBINATIONS - UNPRECEDENTED VERSATILITY

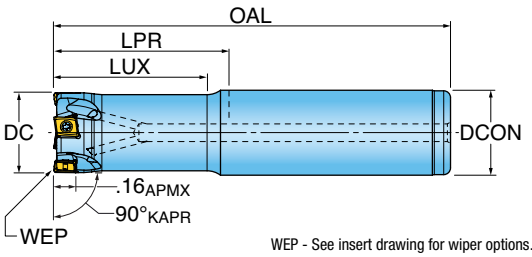
- Insert sizes of 5, 11 and 13mm offer new combinations of diameters, densities and lengths-of-cut.
- Starting in diameters as small as .500"!
- Dovetailed insert mounting for increased edge-life and improved cutter reliability
- High performance, ground-profile inserts are shaped to minimize lap-lines when shouldering, available in both heavy and light geometries
- Economical utility inserts for situations not requiring the performance benefits of ground-profile inserts
- MaxSFeed is capable of ramping and spiral interpolation!

MAXSFEED™ 05 SERIES 1EJ5A (CYLINDRICAL SHANK)

90° END MILL (5MM INSERT)





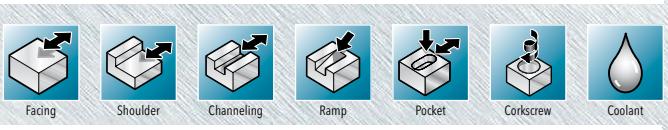


WEP - See insert drawing for wiper options.

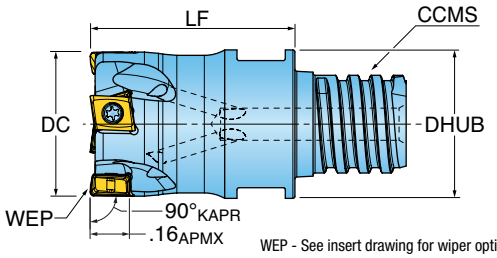
Part Number	DC Cutting Dia.	LUX Usable Length Max.	LPR Protruding Length	OAL Overall Length	ZEFF Effective Teeth	DCON Shank Dia.	RMPX Ramp Angle Max.
1EJ5A-05009S4R01	0.500	0.800	1.000	2.780	2	0.500	1.60
1EJ5A-05009S4R02	0.500	0.800	1.000	2.780	3	0.500	1.60
1EJ5A-07015S7R01	0.750	1.300	1.500	3.500	3	0.750	0.97
1EJ5A-07015S7R02	0.750	1.300	1.500	3.500	4	0.750	0.97
1EJ5A-10015S1R01	1.000	1.300	1.500	3.750	5	1.000	0.69
1EJ5A-10015S1R02	1.000	1.300	1.500	3.750	6	1.000	0.69

MAXSFEED™ 05 SERIES 1EJ5A (CHIP•SURFER STYLE)

90° END MILL (5MM INSERT)







WEP - See insert drawing for wiper options.

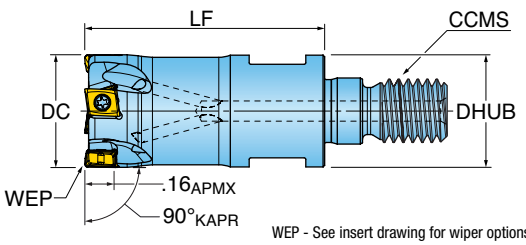
Part Number	DC Cutting Dia.	LF Functional Length	ZEFF Effective Teeth	CCMS Connection Code Machine Side	DHUB Hub Dia.	RMPX Ramp Angle Max.
1EJ5A-05006T8R01	0.500	0.65	2	ChipSurfer T08	0.485	1.60
1EJ5A-05006T8R02	0.500	0.65	3	ChipSurfer T08	0.485	1.60
1EJ5A-07010TSR01	0.750	1.00	3	ChipSurfer T12	0.725	0.97
1EJ5A-07010TSR02	0.750	1.00	4	ChipSurfer T12	0.725	0.97

MAXSFEED™ 05 SERIES 1EJ5A (TOP•ON STYLE)

90° END MILL (5MM INSERT)







WEP - See insert drawing for wiper options.

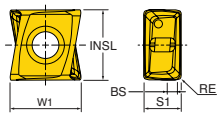
Part Number	DC Cutting Dia.	LF Functional Length	ZEFF Effective Teeth	CCMS Connection Code Machine Side	DHUB Hub Dia.	RMPX Ramp Angle Max.
1EJ5A-05010X4R01	0.500	1.00	2	TopOn 6mm	0.465	1.60
1EJ5A-05010X4R02	0.500	1.00	3	TopOn 6mm	0.465	1.60
1EJ5A-07015X6R01	0.750	1.50	3	TopOn 10mm	0.700	0.97
1EJ5A-07015X6R02	0.750	1.50	4	TopOn 10mm	0.700	0.97
1EJ5A-10015X7R01	1.000	1.50	5	TopOn 12mm	0.820	0.70
1EJ5A-10015X7R02	1.000	1.50	6	TopOn 12mm	0.820	0.70

MAXSFEED™ 05 INSERTS



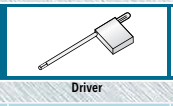
CGM101R001-ML





Part Number	Application	RE Corner Radius	BS Wiper Length	INSL Insert Length	W1 Insert Width	S1 Thickness	Grade	IN2510	IN2530
CGM101R001-ML	General Purpose	0.015	0.030	0.240	0.200	0.200		•	•
CGX101R001-ML	Utility	0.015	0.030	0.240	0.200	0.200		•	•

MAXSFEED™ 05 HARDWARE

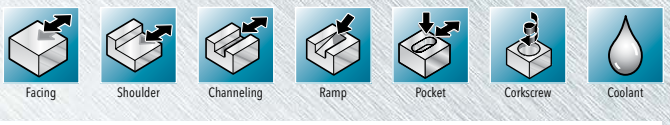

Driver


Screw

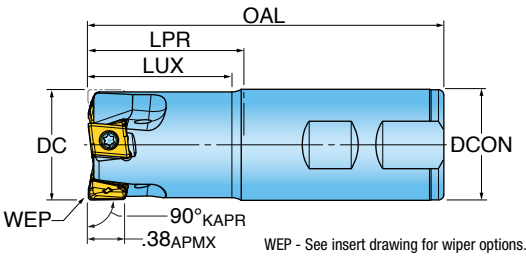
05 Cutters	DS-TP06S-NEU	SM18-041-00

MAXSFEED™ 11 SERIES 1EJ5C (WELDON SHANK)

90° END MILL (11MM INSERT)







WEP - See insert drawing for wiper options.

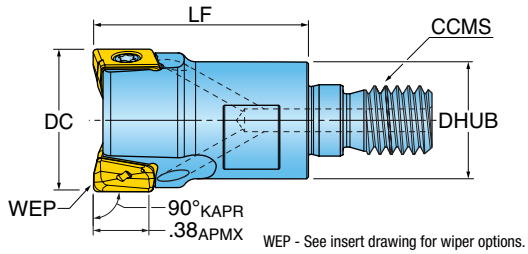
Part Number	DC Cutting Dia.	LUX Usable Length Max.	LPR Protruding Length	OAL Overall Length	ZEFF Effective Teeth	DCON Shank Dia.	RMPX Ramp Angle Max.
1EJ5C-1001780R01	1.000	1.550	1.750	4.000	2	1.000	1.99
1EJ5C-1001784R01	1.000	1.750	1.750	3.750	2	0.750	1.99
1EJ5C-1003780R01	1.000	3.550	3.750	6.000	2	1.000	1.99
1EJ5C-1201780R01	1.250	1.750	1.750	4.000	3	1.000	1.41
1EJ5C-1201781R01	1.250	1.550	1.750	4.000	3	1.250	1.41
1EJ5C-1204281R01	1.250	4.050	4.250	6.500	3	1.250	1.41
1EJ5C-1501781R01	1.500	1.550	1.750	4.000	4	1.250	1.08
1EJ5C-1501781R02	1.500	1.550	1.750	4.000	3	1.250	1.08
1EJ5C-1504281R02	1.500	4.050	4.250	6.500	3	1.250	1.08

MAXSFEED™ 11 SERIES 1EJ5C (TOP•ON STYLE)

90° END MILL (11MM INSERT)





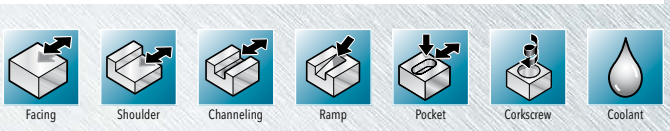


WEP - See insert drawing for wiper options.

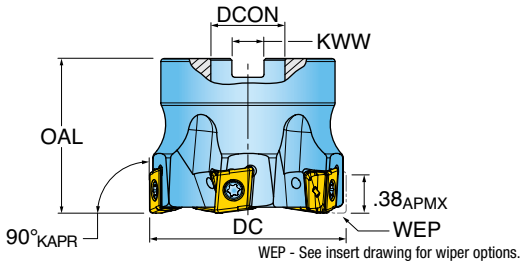
Part Number	DC Cutting Dia.	LF Functional Length	ZEFF Effective Teeth	CCMS Connection Code Machine Side	DHUB Hub Dia.	RMPX Ramp Angle Max.
1EJ5C-10015X7R01	1.000	1.500	2	TopOn 12mm	0.820	1.99
1EJ5C-12017X8R01	1.250	1.750	3	TopOn 16mm	1.135	1.41

MAXSFEED™ 11 SERIES EJ5C, EJ6C

90° FACE MILL (11MM INSERT)



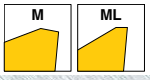




WEP - See insert drawing for wiper options.

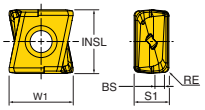
Part Number	DC Cutting Dia.	OAL Overall Length	ZEFF Effective Teeth	DCON Bore Dia.	KWW Keyway	RMPX Ramp Angle Max.
EJ5C-01R01	1.500	1.570	5	0.500	0.250	1.08
EJ6C-01R01	1.500	1.570	4	0.500	0.250	1.08
EJ5C-02R01	2.000	1.570	6	0.750	0.312	0.76
EJ6C-02R01	2.000	1.570	5	0.750	0.312	0.76
EJ5C-02R02	2.500	1.570	7	0.750	0.312	0.58
EJ6C-02R02	2.500	1.570	6	0.750	0.312	0.58
EJ5C-03R01	3.000	2.375	9	1.000	0.375	0.47
EJ6C-03R01	3.000	2.375	7	1.000	0.375	0.47
EJ5C-04R01	4.000	2.375	13	1.500	0.625	0.34
EJ6C-04R01	4.000	2.375	9	1.500	0.625	0.34

MAXSFEED™ 11 INSERTS



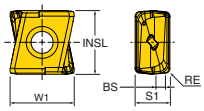
CGM313R00_-ML





CGM313R00_-M





Part Number	Application	RE Corner Radius	BS Wiper Length	INSL Insert Length	W1 Insert Width	S1 Thickness	Grade	IN4015	IN2515	IN4005	IN2505	IN4030	IN2530	IN15K
CGM313R001-M	General Purpose	0.031	0.093	0.433	0.436	0.236		•	•	•	•	•	•	
CGM313R001-ML	General Purpose	0.031	0.093	0.433	0.436	0.236		•	•	•	•	•	•	
CGM313R001-MLP	Grd/Pol for Alumimum	0.031	0.093	0.433	0.436	0.236								•
CGM313R002-M	General Purpose	0.062	0.062	0.433	0.436	0.236		•	•	•	•	•	•	
CGM313R002-ML	General Purpose	0.062	0.062	0.433	0.436	0.236		•	•	•	•	•	•	
CGX313R001-M	Utility	0.031	0.093	0.433	0.436	0.236		•	•	•	•	•	•	
CGX312R002-M	Utility	0.062	0.062	0.433	0.436	0.236		•	•	•	•	•	•	

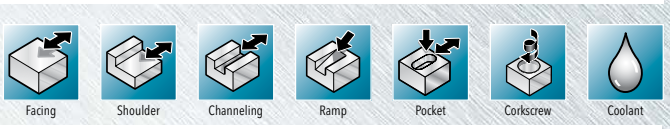
MAXSFEED™ 11 HARDWARE

					 **OPTIONAL**	 **OPTIONAL**	 **OPTIONAL**
	Driver Handle	Driver Bit	Insert Screw	Retention Bolt	Torque Driver Handle	Preset Torque Bit	Torque Driver Bit
1EJ5C-1001780R01	DS-A00T	DS-T156B	SM35-095-H0	-	DS-A00-.25-T	DT-35-.25	DS-T15B
1EJ5C-1001784R01	DS-A00T	DS-T156B	SM35-095-H0	-	DS-A00-.25-T	DT-35-.25	DS-T15B
1EJ5C-1003780R01	DS-A00T	DS-T156B	SM35-095-H0	-	DS-A00-.25-T	DT-35-.25	DS-T15B
1EJ5C-1201780R01	DS-A00T	DS-T156B	SM35-107-H0	-	DS-A00-.25-T	DT-35-.25	DS-T15B
1EJ5C-1201781R01	DS-A00T	DS-T156B	SM35-107-H0	-	DS-A00-.25-T	DT-35-.25	DS-T15B
1EJ5C-1204281R01	DS-A00T	DS-T156B	SM35-107-H0	-	DS-A00-.25-T	DT-35-.25	DS-T15B
1EJ5C-1501781R01	DS-A00T	DS-T156B	SM35-107-H0	-	DS-A00-.25-T	DT-35-.25	DS-T15B
1EJ5C-1501781R02	DS-A00T	DS-T156B	SM35-107-H0	-	DS-A00-.25-T	DT-35-.25	DS-T15B
1EJ5C-1504281R02	DS-A00T	DS-T156B	SM35-107-H0	-	DS-A00-.25-T	DT-35-.25	DS-T15B
1EJ5C-10015X7R01	DS-A00T	DS-T156B	SM35-095-H0	-	DS-A00-.25-T	DT-35-.25	DS-T15B
1EJ5C-12017X8R01	DS-A00T	DS-T156B	SM35-107-H0	-	DS-A00-.25-T	DT-35-.25	DS-T15B
EJ5C-01R01	DS-A00T	DS-T156B	SM35-107-H0	SD04-47	DS-A00-.25-T	DT-35-.25	DS-T15B
EJ6C-01R01	DS-A00T	DS-T156B	SM35-107-H0	SD04-47	DS-A00-.25-T	DT-35-.25	DS-T15B
EJ5C-02R01	DS-A00T	DS-T156B	SM35-107-H0	SD06-47	DS-A00-.25-T	DT-35-.25	DS-T15B
EJ6C-02R01	DS-A00T	DS-T156B	SM35-107-H0	SD06-47	DS-A00-.25-T	DT-35-.25	DS-T15B
EJ5C-02R02	DS-A00T	DS-T156B	SM35-107-H0	SD06-47	DS-A00-.25-T	DT-35-.25	DS-T15B
EJ6C-02R02	DS-A00T	DS-T156B	SM35-107-H0	SD06-47	DS-A00-.25-T	DT-35-.25	DS-T15B
EJ5C-03R01	DS-A00T	DS-T156B	SM35-107-H0	SD08-43	DS-A00-.25-T	DT-35-.25	DS-T15B
EJ6C-03R01	DS-A00T	DS-T156B	SM35-107-H0	SD08-43	DS-A00-.25-T	DT-35-.25	DS-T15B
EJ5C-04R01	DS-A00T	DS-T156B	SM35-107-H0	SD12-89	DS-A00-.25-T	DT-35-.25	DS-T15B
EJ6C-04R01	DS-A00T	DS-T156B	SM35-107-H0	SD12-89	DS-A00-.25-T	DT-35-.25	DS-T15B

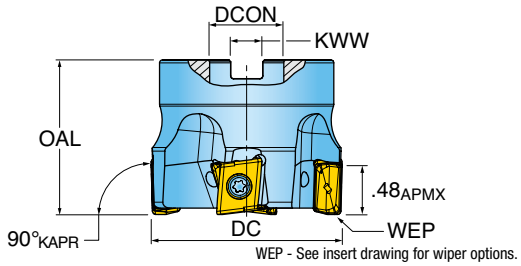
Insert screw tightening torque: 35 in*lb.

MAXSFEED™ 13 SERIES EJ5D, EJ6D

90° FACE MILL (13MM INSERT)



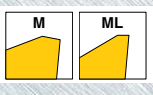




WEP - See insert drawing for wiper options.

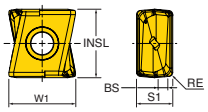
Part Number	DC Cutting Dia.	OAL Overall Length	ZEFF Effective Teeth	DCON Bore Dia.	KWW Keyway	RMPX Ramp Angle Max.
EJ5D-02R01	2.000	1.570	5	0.750	0.312	0.98
EJ6D-02R01	2.000	1.570	4	0.750	0.312	0.98
EJ5D-02R02	2.500	1.570	6	0.750	0.312	0.75
EJ5D-02R03	2.500	1.570	6	1.000	0.375	0.75
EJ6D-02R02	2.500	1.570	5	0.750	0.312	0.75
EJ5D-03R01	3.000	2.000	7	1.000	0.375	0.60
EJ6D-03R01	3.000	2.000	5	1.000	0.375	0.60
EJ5D-04R01	4.000	2.375	9	1.500	0.625	0.44
EJ6D-04R01	4.000	2.375	7	1.250	0.500	0.44
EJ6D-04R02	4.000	2.375	7	1.500	0.625	0.44
EJ6D-05R01	5.000	2.500	11	1.500	0.625	0.34
EJ6D-06R01	6.000	2.500	13	1.500	0.625	0.28

MAXSFEED™ 13 INSERTS



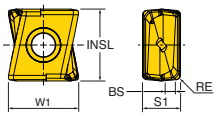
CGM324R00_-ML





CGM324R00_-M





Part Number	Application	RE Corner Radius	BS Wiper Length	INSL Insert Length	W1 Insert Width	S1 Thickness	Grade	IN4015	IN2515	IN4005	IN2505	IN4030	IN2530	IN4035	IN2535
CGM324R001-M	General Purpose	0.031	0.093	0.531	0.518	0.281		•	•	•	•	•	•		
CGM324R001-ML	General Purpose	0.031	0.093	0.531	0.518	0.281		•	•	•	•	•	•	•	•
CGM324R002-M	General Purpose	0.062	0.069	0.531	0.518	0.281		•	•	•	•	•	•		
CGM324R002-ML	General Purpose	0.062	0.069	0.531	0.518	0.281		•	•	•	•	•	•	•	•
CGM324R004-M	General Purpose	0.125	0.016	0.531	0.518	0.281		•	•	•	•	•	•		
CGM324R004-ML	General Purpose	0.125	0.016	0.531	0.518	0.281		•	•	•	•	•	•	•	•
CGX324R001-M	Utility	0.031	0.093	0.531	0.518	0.281		•	•	•	•	•	•		
CGX324R002-M	Utility	0.062	0.069	0.531	0.518	0.281		•	•	•	•	•	•		
CGX324R004-M	Utility	0.125	0.016	0.531	0.518	0.281		•	•	•	•	•	•		

MAXSFEED™ 13 HARDWARE

					 **OPTIONAL**	 **OPTIONAL**	 **OPTIONAL**
	Driver Handle	Driver Bit	Insert Screw	Retention Bolt	Torque Driver Handle	Preset Torque Bit	Torque Driver Bit
EJ5D-02R01	DS-A00T	DS-T156B	SM40-123-H0	SD06-47	DS-A00-.25-T	DT-35-.25	DS-T15B
EJ6D-02R01	DS-A00T	DS-T156B	SM40-123-H0	SD06-47	DS-A00-.25-T	DT-35-.25	DS-T15B
EJ5D-02R02	DS-A00T	DS-T156B	SM40-123-H0	SD06-47	DS-A00-.25-T	DT-35-.25	DS-T15B
EJ5D-02R03	DS-A00T	DS-T156B	SM40-123-H0	SD08-46	DS-A00-.25-T	DT-35-.25	DS-T15B
EJ6D-02R02	DS-A00T	DS-T156B	SM40-123-H0	SD06-47	DS-A00-.25-T	DT-35-.25	DS-T15B
EJ5D-03R01	DS-A00T	DS-T156B	SM40-123-H0	SD08-46	DS-A00-.25-T	DT-35-.25	DS-T15B
EJ6D-03R01	DS-A00T	DS-T156B	SM40-123-H0	SD08-46	DS-A00-.25-T	DT-35-.25	DS-T15B
EJ5D-04R01	DS-A00T	DS-T156B	SM40-123-H0	SD12-89	DS-A00-.25-T	DT-35-.25	DS-T15B
EJ6D-04R01	DS-A00T	DS-T156B	SM40-123-H0	SD10-49	DS-A00-.25-T	DT-35-.25	DS-T15B
EJ6D-04R02	DS-A00T	DS-T156B	SM40-123-H0	SD12-89	DS-A00-.25-T	DT-35-.25	DS-T15B
EJ6D-05R01	DS-A00T	DS-T156B	SM40-123-H0	SD12-89	DS-A00-.25-T	DT-35-.25	DS-T15B
EJ6D-06R01	DS-A00T	DS-T156B	SM40-123-H0	SD12-89	DS-A00-.25-T	DT-35-.25	DS-T15B

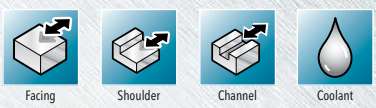
Insert screw tightening torque: 35 in*lb.

END MILLS & SHELL MILLS WITH INTERLOCKING INSERTS FOR SMOOTH AND RELIABLE OPERATION

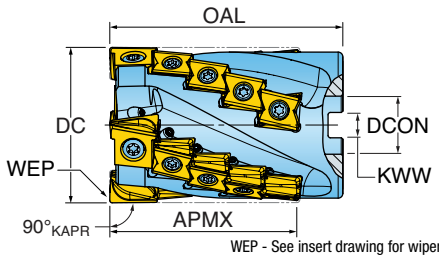
- Overlapping "V-Notch" inserts that allow for smooth chip formation at high feed-rates
- The patented end-station fully supports the insert for reliable operation and unobstructed chip evacuation
- Tangentially mounted inserts with dovetailed seating for greater cutter reliability and insert stability
- End-station inserts with corner radii from .031" to .250" and that fit the same cutter body, no cutter modifications needed
- High axial shear for smooth chip formation in both keen and landed insert geometries

NUMAX ILOCK™ SERIES 2XJ3J

90° SHELL MILL







WEP - See insert drawing for wiper options.

Part Number	DC Cutting Dia.	APMX Depth of Cut Max.	OAL Overall Length	ZEFF Effective Teeth	ZEFP Eff. Teeth Periphery	ZNF Face Insert Count	ZNP Peripheral Insert Count	NOF Flute Count	DCON Bore Dia.	KWW Keyway
2XJ3J-20023D1R01	2.000	1.512	2.35	4	4	4	8	4	0.750	0.312
2XJ3J-20027D1R01	2.000	1.971	2.75	4	4	4	12	4	0.750	0.312
2XJ3J-20027D1R02	2.000	1.971	2.75	4	4	4	12	4	0.750	0.312
2XJ3J-20030D1R01	2.000	2.430	3.00	4	4	4	16	4	0.750	0.312
2XJ3J-20035D1R01	2.000	2.889	3.50	4	4	4	20	4	0.750	0.312
2XJ3J-25030D3R01	2.500	2.431	3.00	5	5	5	20	5	1.000	0.375
2XJ3J-25035D3R01	2.500	2.886	3.50	5	5	5	25	5	1.000	0.375
2XJ3J-25040D3R01	2.500	3.348	4.00	5	5	5	30	5	1.000	0.375
2XJ3J-25045D3R01	2.500	3.806	4.50	5	5	5	35	5	1.000	0.375
2XJ3J-30037D4R01	3.000	2.890	3.75	5	5	5	25	5	1.250	0.500
2XJ3J-30037D4R02	3.000	2.890	3.75	6	6	6	30	6	1.250	0.500
2XJ3J-30042D4R01	3.000	3.348	4.25	5	5	5	30	5	1.250	0.500
2XJ3J-30042D4R02	3.000	3.348	4.25	6	6	6	36	6	1.250	0.500
2XJ3J-30050D4R01	3.000	3.807	5.00	5	5	5	35	5	1.250	0.500
2XJ3J-30050D4R02	3.000	3.807	5.00	6	6	6	42	6	1.250	0.500

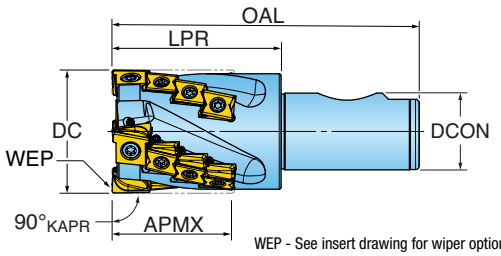
End station insert screw tightening torque: 40-45 in*lb. Side station insert screw tightening torque: 30-35 in*lb.
Total number of inserts = ZNF + ZNP.

NUMAX ILOCK™ SERIES 2XJ3J (DIMPLE STYLE WELDON SHANK)

90° END MILL

Facing | Shoulder | Channel | Coolant





WEP - See insert drawing for wiper options.

Part Number	DC Cutting Dia.	APMX Depth of Cut Max.	LUX Usable Length Max.	LPR Protruding Length	LF Functional Length	OAL Overall Length	ZEFF Effective Teeth	ZEFP Eff. Teeth Periphery	ZNF Face Insert Count	ZNP Peripheral Insert Count	NOF Flute Count	DCON Shank Dia.
2XJ3J-2002281R01	2.000	1.510	2.250	2.250	2.250	4.500	4	4	4	8	4	1.250
2XJ3J-2002781R01	2.000	1.971	2.750	2.750	2.750	5.000	4	4	4	12	4	1.250
2XJ3J-2003081R01	2.000	2.430	3.000	3.000	3.000	5.250	4	4	4	16	4	1.250

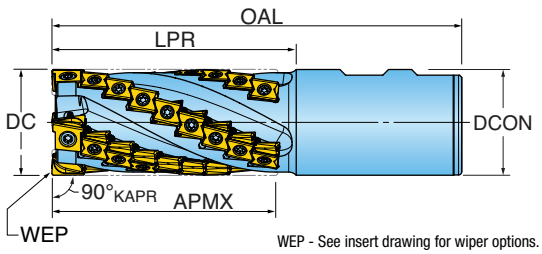
End station insert screw tightening torque: 40-45 in*lb. Side station insert screw tightening torque: 30-35 in*lb.
Total number of inserts = ZNF + ZNP.

NUMAX ILOCK™ SERIES 2XJ3J (WELDON SHANK)

90° END MILL

Facing | Shoulder | Channel | Coolant





WEP - See insert drawing for wiper options.

Part Number	DC Cutting Dia.	APMX Depth of Cut Max.	LUX Usable Length Max.	LPR Protruding Length	LF Functional Length	OAL Overall Length	ZEFF Effective Teeth	ZEFP Eff. Teeth Periphery	ZNF Face Insert Count	ZNP Peripheral Insert Count	NOF Flute Count	DCON Shank Dia.
2XJ3J-2004082R01	2.000	4.262	4.650	4.650	4.650	7.750	4	4	4	32	4	2.000

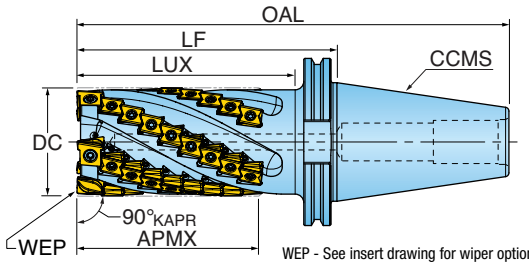
End station insert screw tightening torque: 40-45 in*lb. Side station insert screw tightening torque: 30-35 in*lb.
Total number of inserts = ZNF + ZNP.

NUMAX ILOCK™ SERIES 2XJ3J (V-FLANGE STYLE)

90° END MILL

Facing | Shoulder | Channel | Coolant





WEP - See insert drawing for wiper options.

Part Number	DC Cutting Dia.	APMX Depth of Cut Max.	LUX Usable Length Max.	LF Functional Length	OAL Overall Length	ZEFF Effective Teeth	ZEFP Eff. Teeth Periphery	ZNF Face Insert Count	ZNP Peripheral Insert Count	NOF Flute Count	CCMS Connection Code Machine Side
2XJ3J-2006048R01	2.00	4.262	4.625	6	10	4	4	4	32	4	ICTC #50 .125 Draw
2XJ3J-2006048R02	2.00	4.262	4.625	6	10	3	3	3	24	3	ICTC #50 .125 Draw
2XJ3J-2506048R01	2.50	4.262	4.625	6	10	5	5	5	40	5	ICTC #50 .125 Draw
2XJ3J-2508048R01	2.50	6.099	6.625	8	12	5	5	5	60	5	ICTC #50 .125 Draw

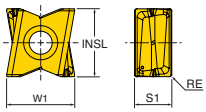
End station insert screw tightening torque: 40-45 in*lb. Side station insert screw tightening torque: 30-35 in*lb.
Total number of inserts = ZNF + ZNP.

NUMAX ILOCK™ INSERTS

ML | MM

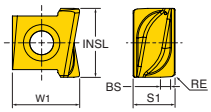
IPM324





IPM426





Part Number	Application	Station	RE Corner Radius	BS Wiper Length	LE Cutting Edge Eff. Length	INSL Insert Length	W1 Insert Width	S Thickness	NOI Number of Indexes	IH Insert Hand	Grade	IN4005	IN2505	IN4030	IN2530	IN4035	IN2535
IPM324R001-ML	Multi-Purpose, Keen Edge	Periphery	0.015	.	0.482	0.512	0.514	0.281	4	Right				•	•	•	•
IPM324R001-MM	Multi-Purpose/Heavy-Duty	Periphery	0.015	.	0.512	0.512	0.512	0.281	4	Right		•	•	•	•		
IPM426R001-ML	Multi-Purpose, Keen Edge	Face	0.030	0.103	0.617	0.617	0.595	0.375	2	Right				•	•	•	•
IPM426R001-MM	Multi-Purpose/Heavy-Duty	Face	0.030	0.103	0.617	0.617	0.595	0.375	2	Right		•	•	•	•		
IPM426R002-ML	Multi-Purpose, Keen Edge	Face	0.060	0.103	0.620	0.620	0.594	0.375	2	Right				•	•	•	•
IPM426R002-MM	Multi-Purpose/Heavy-Duty	Face	0.060	0.103	0.620	0.620	0.594	0.375	2	Right		•	•	•	•		
IPM426R003-ML	Multi-Purpose, Keen Edge	Face	0.090	0.103	0.623	0.623	0.586	0.375	2	Right				•	•	•	•
IPM426R003-MM	Multi-Purpose/Heavy-Duty	Face	0.090	0.103	0.623	0.623	0.586	0.375	2	Right		•	•	•	•		
IPM426R004-ML	Multi-Purpose, Keen Edge	Face	0.125	0.104	0.626	0.626	0.585	0.375	2	Right				•	•	•	•
IPM426R004-MM	Multi-Purpose/Heavy-Duty	Face	0.125	0.104	0.626	0.626	0.585	0.375	2	Right		•	•	•	•		
IPM426R009-ML	Multi-Purpose, Keen Edge	Face	0.250	0.020	0.630	0.630	0.567	0.375	2	Right				•	•	•	•
IPM426R009-MM	Multi-Purpose/Heavy-Duty	Face	0.250	0.020	0.630	0.630	0.567	0.375	2	Right		•	•	•	•		

NUMAX ILOCK™ HARDWARE

	 Face Driver Bit	 Periphery Driver Bit	 Driver Handle	 Face Insert Screw	 Periphery Insert Screw	 Retention Bolt	 Coolant Hole Socket Set Screw	 Alt. Coolant Blocking Socket Set Screw
2XJ3J-20023D1R01	DS-T206B	DS-T156B	DS-A00T	SM50-140-10	SM40-143-H0	SD-06-50	SA030-01	SA030-02
2XJ3J-20027D1R01	DS-T206B	DS-T156B	DS-A00T	SM50-140-10	SM40-143-H0	SD-06-A2	SA030-01	SA030-02
2XJ3J-20027D1R02	DS-T206B	DS-T156B	DS-A00T	SM50-140-10	SM40-143-H0	SD-06-79	SA030-01	SA030-02
2XJ3J-20030D1R01	DS-T206B	DS-T156B	DS-A00T	SM50-140-10	SM40-143-H0	SD-06-79	SA030-01	SA030-02
2XJ3J-20035D1R01	DS-T206B	DS-T156B	DS-A00T	SM50-140-10	SM40-143-H0	SD-06-B2	SA030-01	SA030-02
2XJ3J-25030D3R01	DS-T206B	DS-T156B	DS-A00T	SM50-160-10	SM40-143-H0	SD-08-52	SA030-01	SA030-02
2XJ3J-25035D3R01	DS-T206B	DS-T156B	DS-A00T	SM50-160-10	SM40-143-H0	SD-08-81	SA030-01	SA030-02
2XJ3J-25040D3R01	DS-T206B	DS-T156B	DS-A00T	SM50-160-10	SM40-143-H0	SD-08-D3	SA030-01	SA030-02
2XJ3J-25045D3R01	DS-T206B	DS-T156B	DS-A00T	SM50-160-10	SM40-143-H0	SD-08-97	SA030-01	SA030-02
2XJ3J-30037D4R01	DS-T206B	DS-T156B	DS-A00T	SM50-160-10	SM40-143-H0	SD-10-54	SA030-01	SA030-02
2XJ3J-30037D4R02	DS-T206B	DS-T156B	DS-A00T	SM50-160-10	SM40-143-H0	SD-10-54	SA030-01	SA030-02
2XJ3J-30042D4R01	DS-T206B	DS-T156B	DS-A00T	SM50-160-10	SM40-143-H0	SD-10-73	SA030-01	SA030-02
2XJ3J-30042D4R02	DS-T206B	DS-T156B	DS-A00T	SM50-160-10	SM40-143-H0	SD-10-73	SA030-01	SA030-02
2XJ3J-30050D4R01	DS-T206B	DS-T156B	DS-A00T	SM50-160-10	SM40-143-H0	SD-10-04	SA030-01	SA030-02
2XJ3J-30050D4R02	DS-T206B	DS-T156B	DS-A00T	SM50-160-10	SM40-143-H0	SD-10-04	SA030-01	SA030-02
2XJ3J-2002281R01	DS-T206B	DS-T156B	DS-A00T	SM50-160-10	SM40-143-H0	-	SA030-01	SA030-02
2XJ3J-2002781R01	DS-T206B	DS-T156B	DS-A00T	SM50-160-10	SM40-143-H0	-	SA030-01	SA030-02
2XJ3J-2003081R01	DS-T206B	DS-T156B	DS-A00T	SM50-160-10	SM40-143-H0	-	SA030-01	SA030-02
2XJ3J-2004082R01	DS-T206B	DS-T156B	DS-A00T	SM50-160-10	SM40-143-H0	-	SA030-01	SA030-02
2XJ3J-2006048R01	DS-T206B	DS-T156B	DS-A00T	SM50-160-10	SM40-143-H0	-	SA030-01	SA030-02
2XJ3J-2006048R02	DS-T206B	DS-T156B	DS-A00T	SM50-160-10	SM40-143-H0	-	SA030-01	SA030-02
2XJ3J-2506048R01	DS-T206B	DS-T156B	DS-A00T	SM50-160-10	SM40-143-H0	-	SA030-01	SA030-02
2XJ3J-2508048R01	DS-T206B	DS-T156B	DS-A00T	SM50-160-10	SM40-143-H0	-	SA030-01	SA030-02

QWIK TORQUE optional preset torque components recommended for proper tightening screws. All components are sold separately.

HI-FEED FACEMILL FAMILY WITH STRONG TANGENTIAL INSERTS AND RELIABLE DOVETAILED INSERT SEATING

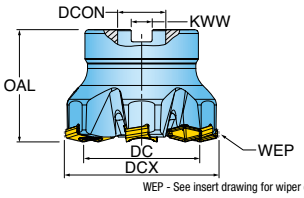
- Unique diamond shaped inserts provide the highest ramping feed-rates at the steepest ramping angles
- Thick tangential inserts give maximum reinforcement to the cutting edge and cutter longevity
- Large insert seating areas are dovetailed to stabilize and support the insert under the most aggressive conditions
- Inserts offered in both pressed and ground profiles for economical performance across all material types

NUMAX HF™ SERIES 8G5A, 8G6A

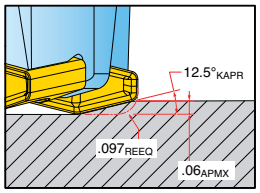
HIGH FEED FACE MILL







WEP - See insert drawing for wiper options.



Part Number	DCX Cutting Dia. Max.	DC Cutting Dia.	OAL Overall Length	ZEFF Effective Teeth	REEQ Program Radius Equivalent	KAPR Cutting Edge Angle	DCON Bore Dia.	KWW Keyway	RMPX Ramp Angle Max.
8G5A-02R01	2.000	1.408	1.750	5	0.097	12.7	0.750	0.31	3.00
8G6A-02R01	2.000	1.408	1.750	4	0.097	12.7	0.750	0.31	3.00
8G6A-02R03	2.500	1.901	1.750	5	0.097	12.6	0.750	0.31	2.10
8G6A-02R02	2.500	1.902	1.750	5	0.097	12.6	1.000	0.38	2.10
8G5A-03R01	3.000	2.399	1.750	7	0.097	12.7	1.000	0.38	1.60
8G5A-03R02	3.000	2.399	1.750	7	0.097	12.5	1.250	0.50	1.60
8G5A-04R01	4.000	3.398	2.500	9	0.097	12.5	1.500	0.63	1.10
8G6A-04R01	4.000	3.398	2.500	7	0.097	12.5	1.500	0.63	1.10

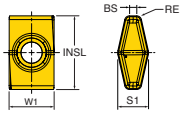
Insert screw tightening torque: 30-35 in*lb.

NUMAX HF™ INSERTS



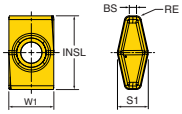
LGX324R001-M





LGM324R001-ML





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
LGX324R001-M	Hi-Feed, Heavy-Duty	0.040	0.060	0.610	0.373	0.256	4	Right		•	•	•	•		
LGM324R001-ML	Hi-Feed, Heavy-Duty Keen Edge	0.040	0.060	0.610	0.373	0.256	4	Right		•	•	•	•	•	•

NUMAX HF™ HARDWARE

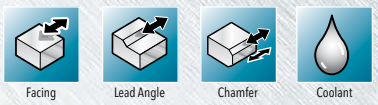
	 Screw	 Driver Handle	 Driver Bit	 Retention Bolt	 **OPTIONAL** Torque Driver Handle	 **OPTIONAL** Preset Torque Bit	 **OPTIONAL** Torque Driver Bit
8G5A-02R01	SM40-123-H0	DS-A00T	DS-T156B	SB-04-15	DS-A00-.25T	DT-35-.25	DS-T15B
8G6A-02R01	SM40-123-H0	DS-A00T	DS-T156B	SB-04-15	DS-A00-.25T	DT-35-.25	DS-T15B
8G6A-02R03	SM40-123-H0	DS-A00T	DS-T156B	SD-06-47	DS-A00-.25T	DT-35-.25	DS-T15B
8G6A-02R02	SM40-123-H0	DS-A00T	DS-T156B	SD-08-47	DS-A00-.25T	DT-35-.25	DS-T15B
8G5A-03R01	SM40-123-H0	DS-A00T	DS-T156B	SD-08-47	DS-A00-.25T	DT-35-.25	DS-T15B
8G5A-03R02	SM40-123-H0	DS-A00T	DS-T156B	SD-10-47	DS-A00-.25T	DT-35-.25	DS-T15B
8G5A-04R01	SM40-123-H0	DS-A00T	DS-T156B	SD-12-82	DS-A00-.25T	DT-35-.25	DS-T15B
8G6A-04R01	SM40-123-H0	DS-A00T	DS-T156B	SD-12-82	DS-A00-.25T	DT-35-.25	DS-T15B

ROBUST 45° FACE MILL WITH 12-EDGE ECONOMY

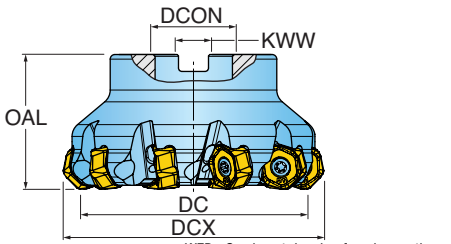
- Reinforced cutting edge boasts high feed rate potential
- High radial pocket incline promotes utmost chip evacuation and fine pitch cutter design for maximized productivity
- Helical cutting edges promote smooth machining
- Unequally spaced insert placement aids to diffuse vibration
- Integrated wiper flats produce 32-63 Ra surface finishes
- Ideal for steels and iron!

DIPOSHEXA™ 06 SERIES HN5D, HN6D

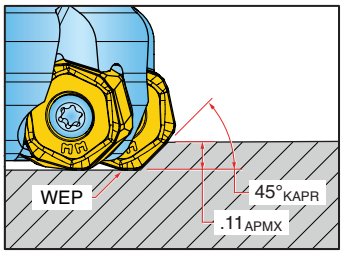
45° FACE MILL (6MM INSERT)







WEP - See insert drawing for wiper options.



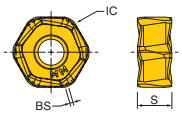
Part Number	DC Cutting Dia.	DCX Cutting Diameter Max.	OAL Overall Length	ZEFF Eff. Teeth	DCON Shank Dia.	KWW Keyway	CSP Coolant
HN6D-15R01	1.500	1.88	1.750	4	0.500	0.250	Yes
HN5D-20R01	2.000	2.38	1.750	6	0.750	0.312	Yes
HN6D-20R01	2.000	2.38	1.750	4	0.750	0.312	Yes
HN5D-25R01	2.500	2.89	1.750	7	1.000	0.375	Yes
HN6D-25R01	2.500	2.89	1.750	5	1.000	0.375	Yes
HN5D-30R01	3.000	3.39	1.750	10	1.000	0.375	Yes
HN6D-30R01	3.000	3.39	1.750	6	1.000	0.375	Yes
HN5D-40R01	4.000	4.39	2.375	12	1.500	0.625	Yes
HN6D-40R01	4.000	4.39	2.375	7	1.500	0.625	Yes
HN5D-50R01	5.000	5.39	2.375	16	1.500	0.625	Yes
HN6D-50R01	5.000	5.39	2.375	10	1.500	0.625	Yes
HN5D-60R01	6.000	6.39	2.375	20	1.500	0.625	No
HN6D-60R01	6.000	6.39	2.375	12	1.500	0.625	No

DIPOSHEXA™ 06 INSERTS



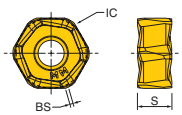
HNGU06_M





HNGU06_MM





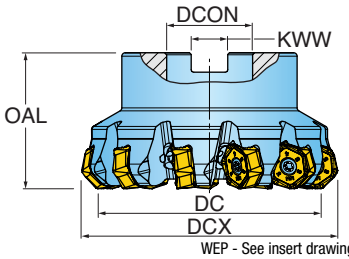
Part Number	Application	BS Wiper Length	IC Inscribed Circle Dia.	S Thickness	NOI Number of Indexes	IH Insert Hand	Grade	IN2505	IN2510	IN6537
HNGU0605ANTR-M	Medium Roughing	0.023	0.551	0.264	12	Right		•		•
HNGU0605ANTR-MM	Medium, Pos. Rake Angle	0.047	0.551	0.264	12	Right		•	•	

DIPOSHEXA™10 SERIES HN5G, HN6G

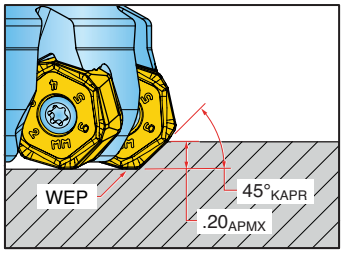
45° FACE MILL (10MM INSERT)

Facing | Lead Angle | Chamfer | Coolant





WEP - See insert drawing for wiper options.

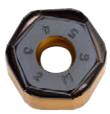


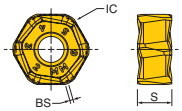
Part Number	DC Cutting Dia.	DCX Cutting Diameter Max.	OAL Overall Length	ZEFF Eff. Teeth	DCON Shank Dia.	KWW Keyway	DBC Bolt Circle	CSP Coolant
HN5G-25R01	2.500	3.03	1.750	7	1.000	0.375	-	Yes
HN6G-25R01	2.500	3.03	1.750	5	1.000	0.375	-	Yes
HN5G-30R01	3.000	3.53	1.750	9	1.000	0.375	-	Yes
HN6G-30R01	3.000	3.53	1.750	6	1.000	0.375	-	Yes
HN5G-40R01	4.000	4.53	2.375	11	1.500	0.625	-	Yes
HN6G-40R01	4.000	4.53	2.375	7	1.500	0.625	-	Yes
HN5G-50R01	5.000	5.52	2.375	14	1.500	0.625	-	Yes
HN6G-50R01	5.000	5.52	2.375	8	1.500	0.625	-	Yes
HN5G-60R01	6.000	6.52	2.375	16	1.500	0.625	-	No
HN6G-60R01	6.000	6.52	2.375	10	1.500	0.625	-	No
HN5G-80R01	8.000	8.52	2.375	21	2.500	1.000	4.00"	No
HN6G-80R01	8.000	8.52	2.375	14	2.500	1.000	4.00"	No
HN5G-10R01	10.000	10.53	2.375	26	2.500	1.000	4.00"	No
HN6G-10R01	10.000	10.53	2.375	16	2.500	1.000	4.00"	No

DIPOSHEXA™10 INSERTS

MM | M | HR

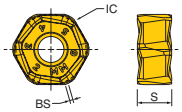
HNGU10_M





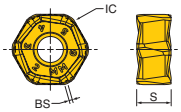
HNGU10_MM





HNGU10_HR





Part Number	Application	BS Wiper Length	IC Inscribed Circle Dia.	S Thickness	NOI Number of Indexes	IH Insert Hand	Grade	IN2505	IN2510	IN6515	IN6537
HNGU1007ANTR-M	Medium Roughing	0.039	0.752	0.327	12	Right		•			•
HNGU1007ANTR-MM	Medium, Pos. Rake Angle	0.063	0.752	0.327	12	Right			•		
HNGU1007ANTR-HR	Heavy-Duty	0.039	0.752	0.327	12	Right				•	•

DIPOSHEXA™ 06/10 HARDWARE

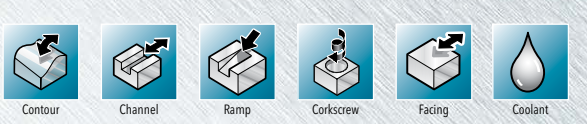
					 **OPTIONAL**	 **OPTIONAL**	 **OPTIONAL**	 **OPTIONAL**
	Screw	Driver Handle	Torx Driver Blade	Retention Bolt	Coolant Retention Bolt	Torque Driver Handle	Torque Driver Bit	Preset Torque Bit
HN6D-15R01	SM40-100-R0	DS-A00T	DS-T156B1	SD-04-48	-	DS-A00-.25-T	DS-T15B1	DT-35-.25
HN5D-20R01	SM40-100-R0	DS-A00T	DS-T156B1	SD-06-47	SD-06-A6	DS-A00-.25-T	DS-T15B1	DT-35-.25
HN6D-20R01	SM40-100-R0	DS-A00T	DS-T156B	SD-06-47	SD-06-A6	DS-A00-.25-T	DS-T15B1	DT-35-.25
HN5D-25R01	SM40-100-R0	DS-A00T	DS-T156B	SD-08-47	SD08-C9	DS-A00-.25-T	DS-T15B1	DT-35-.25
HN6D-25R01	SM40-100-R0	DS-A00T	DS-T156B	SD-08-47	SD08-C9	DS-A00-.25-T	DS-T15B1	DT-35-.25
HN5D-30R01	SM40-100-R0	DS-A00T	DS-T156B	SD-08-47	SD08-C9	DS-A00-.25-T	DS-T15B1	DT-35-.25
HN6D-30R01	SM40-100-R0	DS-A00T	DS-T156B	SD-08-47	SD08-C9	DS-A00-.25-T	DS-T15B1	DT-35-.25
HN5D-40R01	SM40-100-R0	DS-A00T	DS-T156B	SD-12-82	SD-12-99	DS-A00-.25-T	DS-T15B1	DT-35-.25
HN6D-40R01	SM40-100-R0	DS-A00T	DS-T156B	SD-12-82	SD-12-99	DS-A00-.25-T	DS-T15B1	DT-35-.25
HN5D-50R01	SM40-100-R0	DS-A00T	DS-T156B	SD-12-82	SD-12-99	DS-A00-.25-T	DS-T15B1	DT-35-.25
HN6D-50R01	SM40-100-R0	DS-A00T	DS-T156B	SD-12-82	SD-12-99	DS-A00-.25-T	DS-T15B1	DT-35-.25
HN5D-60R01	SM40-100-R0	DS-A00T	DS-T156B	SD-12-82	-	DS-A00-.25-T	DS-T15B1	DT-35-.25
HN6D-60R01	SM40-100-R0	DS-A00T	DS-T156B	SD-12-82	-	DS-A00-.25-T	DS-T15B1	DT-35-.25
HN5G-25R01	SM50-130-R0	DS-A00T	DS-T206B	SD-08-47	SD08-C9	DS-A00-.25-T	DS-T20B1	DT-44-.25
HN6G-25R01	SM50-130-R0	DS-A00T	DS-T206B	SD-08-47	SD08-C9	DS-A00-.25-T	DS-T20B1	DT-44-.25
HN5G-30R01	SM50-130-R0	DS-A00T	DS-T206B	SD-08-47	SD08-C9	DS-A00-.25-T	DS-T20B1	DT-44-.25
HN6G-30R01	SM50-130-R0	DS-A00T	DS-T206B	SD-08-47	SD08-C9	DS-A00-.25-T	DS-T20B1	DT-44-.25
HN5G-40R01	SM50-130-R0	DS-A00T	DS-T206B	SD-12-89	SD-12-99	DS-A00-.25-T	DS-T20B1	DT-44-.25
HN6G-40R01	SM50-130-R0	DS-A00T	DS-T206B	SD-12-89	SD-12-99	DS-A00-.25-T	DS-T20B1	DT-44-.25
HN5G-50R01	SM50-130-R0	DS-A00T	DS-T206B	SD-12-89	SD-12-99	DS-A00-.25-T	DS-T20B1	DT-44-.25
HN6G-50R01	SM50-130-R0	DS-A00T	DS-T206B	SD-12-89	SD-12-99	DS-A00-.25-T	DS-T20B1	DT-44-.25
HN5G-60R01	SM50-130-R0	DS-A00T	DS-T206B	SD-12-89	SD-12-99	DS-A00-.25-T	DS-T20B1	DT-44-.25
HN6G-60R01	SM50-130-R0	DS-A00T	DS-T206B	SD-12-89	SD-12-99	DS-A00-.25-T	DS-T20B1	DT-44-.25
HN5G-80R01	SM50-130-R0	DS-A00T	DS-T206B	-	-	DS-A00-.25-T	DS-T20B1	DT-44-.25
HN6G-80R01	SM50-130-R0	DS-A00T	DS-T206B	-	-	DS-A00-.25-T	DS-T20B1	DT-44-.25
HN5G-10R01	SM50-130-R0	DS-A00T	DS-T206B	-	-	DS-A00-.25-T	DS-T20B1	DT-44-.25
HN6G-10R01	SM50-130-R0	DS-A00T	DS-T206B	-	-	DS-A00-.25-T	DS-T20B1	DT-44-.25

HI-FEED & 65° MILLS WITH 10-EDGE ECONOMY!

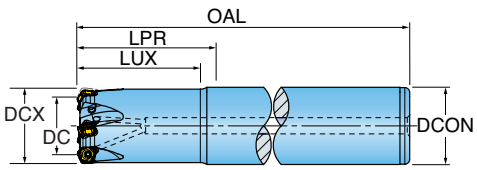
- Same insert fits Hi-Feed & 65° mills
- Reinforced cutting edge boasts high feed rate potential
- Positive geometry promotes smooth machining
- Wide market range including Die/Mold and General Purpose!

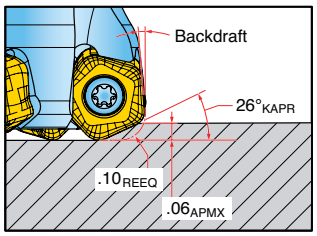
DIPOSPENTA™ 05 SERIES 1DP1C (CYLINDRICAL SHANK)

HI-FEED END MILL (5MM INSERT)







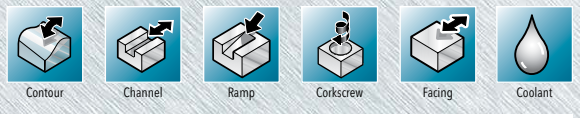


Part Number	DCX Cutting Dia. Max.	DC Cutting Dia.	LUX Usable Length Max.	LPR Protruding Length	OAL Overall Length	ZEFF Eff. Teeth	REEQ Program Radius Equivalent	DCON Shank Dia.	RMPX Ramp Angle Max.
1DP1C-07015S7R01	0.750	0.431	1.50	4.00	6.00	3	0.100	0.750	1.3
1DP1C-10015S1R01	1.000	0.677	1.50	3.75	6.00	4	0.100	1.000	1.1
1DP1C-12020S9R01	1.250	0.927	2.00	5.75	8.00	5	0.100	1.250	1
1DP1C-15020S5R01	1.500	1.177	2.00	5.34	8.00	6	0.100	1.500	0.8

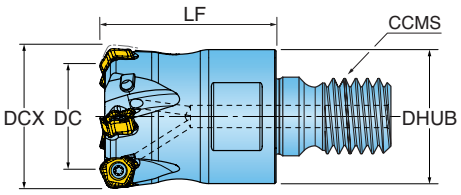
Program like an end mill with .10" Corner Radius.
Designed with modification in mind. Extend usable length by turning back the neck diameter or shorten the overall length by cutting off back end.

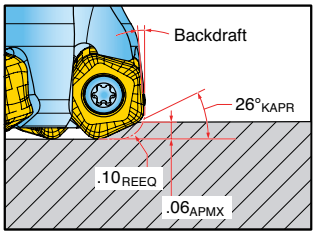
DIPOSPENTA™ 05 SERIES 1DP1C (TOP•ON STYLE)

HI-FEED MODULAR END MILL (5MM INSERT)









Part Number	DCX Cutting Dia. Max.	DC Cutting Diameter	LF Functional Length	ZEFF Effective Teeth	REEQ Program Radius Equivalent	CCMS Connection Code	RMPX Ramp Angle Max.
1DP1C-07015X6R01	0.750	0.431	1.50	3	0.100	TopOn M10	1.3
1DP1C-10015X7R01	1.000	0.677	1.50	4	0.100	TopOn M12	1.1
1DP1C-12015X8R01	1.250	0.927	1.50	5	0.100	TopOn M16	1
1DP1C-15015X8R01	1.500	1.177	1.50	6	0.100	TopOn M16	0.8

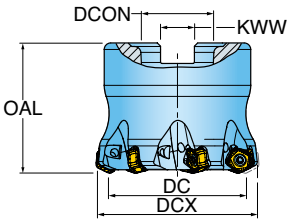
Program like an end mill with .10" Corner Radius.

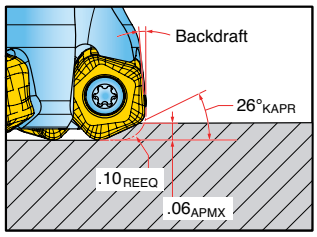
DIPOSPENTA™ 05 SERIES DP6C

HI-FEED FACE MILL (5MM INSERT)

Contour | Channel | Ramp | Corkscrew | Facing | Coolant







Part Number	DCX Cutting Dia. Max.	DC Cutting Diameter	OAL Overall Length	ZEFF Effective Teeth	REEQ Program Radius Equivalent	DCON Bore Dia.	KWW Keyway	RMPX Ramp Angle Max.
DP6C-15R01	1.500	1.177	1.57	6	0.100	0.500	0.25	0.8
DP6C-20R01	2.000	1.677	1.57	7	0.100	0.750	0.31	0.7
DP6C-25R01	2.500	2.177	1.57	8	0.100	0.750	0.31	0.6

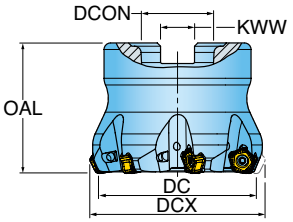
Programing Corner Radius: .10"R.

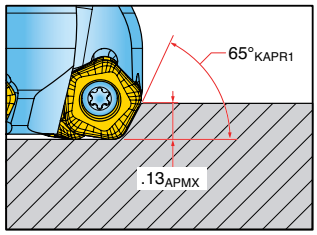
DIPOSPENTA™ 05 SERIES DM6C

65° FACE MILL (5MM INSERT)

Channel | Facing | Coolant







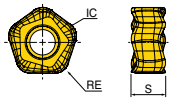
Part Number	DCX Cutting Dia. Max.	DC Cutting Diameter	OAL Overall Length	ZEFF Effective Teeth	DCON Bore Dia.	KWW Keyway
DM6C-15R01	1.500	1.65	1.570	6	0.500	0.250
DM6C-20R01	2.000	2.15	1.570	7	0.750	0.312
DM6C-25R01	2.500	2.65	1.570	8	0.750	0.312
DM6C-30R01	3.000	3.15	1.750	9	1.000	0.375

DIPOSPENTA™ 05 INSERT

M

PNCU05_M





Part Number	Application	RE Corner Radius	IC Inscribed Circle Dia.	S Thickness	NOI Number of Indexes	IH Insert Hand	Grade	IN2505	IN2530
PNCU050315R-M	Multi-Purpose	0.059	0.279	0.149	10	Right		•	•

DIPOSPENTA™ 05 HARDWARE

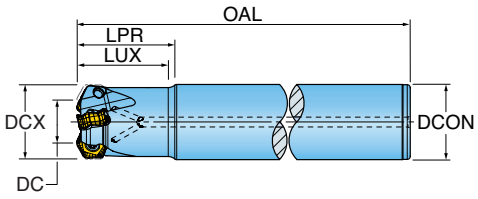
	 Screw	 Torx Driver	 Retention Bolt	 **OPTIONAL** Coolant Retention Bolt	 **OPTIONAL** Torque Driver Handle	 **OPTIONAL** Preset Torque Bit	 **OPTIONAL** Torque Driver Bit	 **OPTIONAL** Wrench
1DP1C-07015S7R01	SM25-060-90	DS-TP07S	-	-	DS-A00-.25-S	DT-08-.25	DS-TP07B1	-
1DP1C-10015S1R01	SM25-060-90	DS-TP07S	-	-	DS-A00-.25-S	DT-08-.25	DS-TP07B1	-
1DP1C-12020S9R01	SM25-060-90	DS-TP07S	-	-	DS-A00-.25-S	DT-08-.25	DS-TP07B1	-
1DP1C-15020S5R01	SM25-060-90	DS-TP07S	-	-	DS-A00-.25-S	DT-08-.25	DS-TP07B1	-
1DP1C-07015X6R01	SM25-060-90	DS-TP07S	-	-	DS-A00-.25-S	DT-08-.25	DS-TP07B1	615MM
1DP1C-10015X7R01	SM25-060-90	DS-TP07S	-	-	DS-A00-.25-S	DT-08-.25	DS-TP07B1	617MM
1DP1C-12015X8R01	SM25-060-90	DS-TP07S	-	-	DS-A00-.25-S	DT-08-.25	DS-TP07B1	622MM
1DP1C-15015X8R01	SM25-060-90	DS-TP07S	-	-	DS-A00-.25-S	DT-08-.25	DS-TP07B1	622MM
DP6C-15R01	SM25-060-90	DS-TP07S	SD-04-46	-	DS-A00-.25-S	DT-08-.25	DS-TP07B1	-
DP6C-20R01	SM25-060-90	DS-TP07S	SD-06-46	SD-06-89	DS-A00-.25-S	DT-08-.25	DS-TP07B1	-
DP6C-25R01	SM25-060-90	DS-TP07S	SD-06-46	SD-06-89	DS-A00-.25-S	DT-08-.25	DS-TP07B1	-
DM6C-15R01	SM25-060-90	DS-TP07S	SD-04-46	-	DS-A00-.25-S	DT-08-.25	DS-TP07B1	-
DM6C-20R01	SM25-060-90	DS-TP07S	SD-06-46	SD-06-89	DS-A00-.25-S	DT-08-.25	DS-TP07B1	-
DM6C-25R01	SM25-060-90	DS-TP07S	SD-06-46	SD-06-89	DS-A00-.25-S	DT-08-.25	DS-TP07B1	-
DM6C-30R01	SM25-060-90	DS-TP07S	SD-08-46	SD08-C9	DS-A00-.25-S	DT-08-.25	DS-TP07B1	-

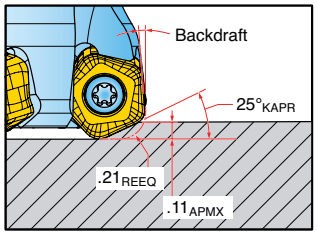
DIPOSPENTA™ 10 SERIES 1DP1P (CYLINDRICAL SHANK)

HI-FEED END MILL (10MM INSERT)

Contour | Channel | Ramp | Corkscrew | Facing | Coolant







Part Number	DCX Cutting Dia. Max.	DC Cutting Dia.	APMX Depth of Cut Max.	LUX Usable Length Max.	LPR Protruding Length	OAL Overall Length	ZEFF Eff. Teeth	REEQ Program Radius Equivalent	DCON Shank Dia.	RMPX Ramp Angle Max.
1DP1P-15020S5R01	1.500	0.850	0.118	2.00	5.34	8.00	3	0.210	1.500	2.2

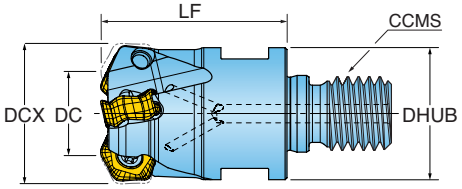
Program like an end mill with .21" Corner Radius.
Designed with modification in mind. Extend usable length by turning back the neck diameter or shorten the overall length by cutting off back end.

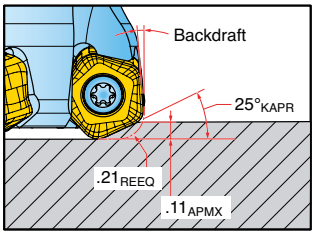
DIPOSPENTA™ 10 SERIES 1DP1P (TOP•ON STYLE)

HI-FEED MODULAR END MILL (10MM INSERT)

Contour | Channel | Ramp | Corkscrew | Facing | Coolant







Part Number	DCX Cutting Dia. Max.	DC Cutting Dia.	APMX Depth of Cut Max.	LF Functional Length	ZEFF Eff. Teeth	REEQ Program Radius Equivalent	DHUB Hub Dia.	CCMS Connection Code	RMPX Ramp Angle Max.
1DP1P-15020X9R01	1.500	0.850	0.118	2.00	3	0.210	1.41	TopOn M20	2.2

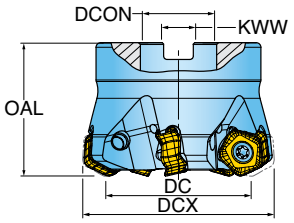
Program like an end mill with .21" Corner Radius.

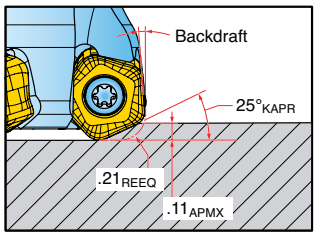
DIPOSPENTA™ 10 SERIES DP6P

HI-FEED FACE MILL (10MM INSERT)

Contour | Channel | Ramp | Corkscrew | Facing | Coolant







Part Number	DCX Cutting Dia. Max.	DC Cutting Diameter	OAL Overall Length	ZEFF Effective Teeth	REEQ Program Radius Equivalent	DCON Bore Dia.	KWW Keyway	RMPX Ramp Angle Max.
DP6P-20R01	2.000	1.350	1.57	4	0.210	0.750	0.31	2.5
DP6P-25R01	2.500	1.850	1.75	5	0.210	1.000	0.38	1.6
DP6P-30R01	3.000	2.350	1.75	6	0.210	1.000	0.38	1.2

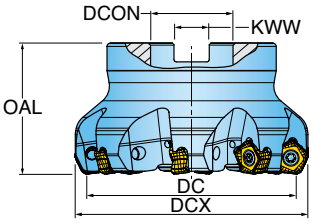
Programing Corner Radius: .21"R.

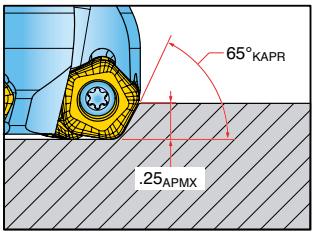
DIPOSPENTA™ 10 SERIES DM6P

65° FACE MILL (10MM INSERT)

Channel | Facing | Coolant







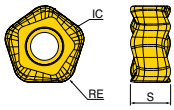
Part Number	DC Cutting Diameter	DCX Cutting Dia. Max.	OAL Overall Length	ZEFF Effective Teeth	DCON Bore Dia.	KWW Keyway
DM6P-20R01	2.000	2.280	1.750	4	1.000	0.375
DM6P-25R01	2.500	2.780	1.750	5	1.000	0.375
DM6P-30R01	3.000	3.280	1.750	6	1.000	0.375
DM6P-40R01	4.000	4.280	2.375	8	1.500	0.625

DIPOSPENTA™ 10 INSERT

M

PNCU10_M





Part Number	Application	RE Corner Radius	IC Inscribed Circle Dia.	S Thickness	NOI Number of Indexes	IH Insert Hand	Grade IN2505	Grade IN2530
PNCU100630R-M	Multi-Purpose	0.118	0.559	0.303	10	Right	•	•

DIPOSPENTA™ 10 HARDWARE

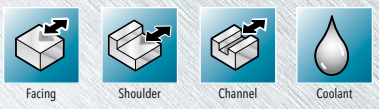
	Screw	Driver Handle	Torx Driver Blade	Retention Bolt	Retention Bolt	Torque Driver Handle	Preset Torque Bit	Torque Driver Bit	Wrench
					OPTIONAL	**OPTIONAL**	**OPTIONAL**	**OPTIONAL**	**OPTIONAL**
1DP1P-15020S5R01	SM50-127-10	DS-A00T	DS-T206B	-	-	DS-A00-.25-T	DT-44-.25	DS-T20B1	-
1DP1P-15020X9R01	SM50-127-10	DS-A00T	DS-T206B	-	-	DS-A00-.25-T	DT-44-.25	DS-T20B1	630MM
DP6P-20R01	SM50-127-10	DS-A00T	DS-T206B	SD-06-46	SD-06-89	DS-A00-.25-T	DT-44-.25	DS-T20B1	-
DP6P-25R01	SM50-127-10	DS-A00T	DS-T206B	SD-08-47	SD08-C9	DS-A00-.25-T	DT-44-.25	DS-T20B1	-
DP6P-30R01	SM50-127-10	DS-A00T	DS-T206B	SD-08-47	SD08-C9	DS-A00-.25-T	DT-44-.25	DS-T20B1	-
DM6P-20R01	SM50-127-10	DS-A00T	DS-T206B	SD-08-47	SD08-C9	DS-A00-.25-T	DT-44-.25	DS-T20B1	-
DM6P-25R01	SM50-127-10	DS-A00T	DS-T206B	SD-08-47	SD08-C9	DS-A00-.25-T	DT-44-.25	DS-T20B1	-
DM6P-30R01	SM50-127-10	DS-A00T	DS-T206B	SD-08-47	SD08-C9	DS-A00-.25-T	DT-44-.25	DS-T20B1	-
DM6P-40R01	SM50-127-10	DS-A00T	DS-T206B	SD-12-82	SD-12-99	DS-A00-.25-T	DT-44-.25	DS-T20B1	-

TRUE 90° SHOULDER MILLS WITH 8-EDGE ECONOMY

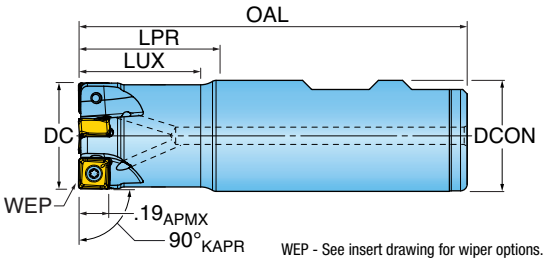
- High axial rake reduces cutting loads and promotes smooth machining
- 07 Insert generates true 90° and is optimized to step down axially with minimal mismatch
- 12 Insert generates true 90° up to .33 depth of cut
- Unequally spaced insert placement aids to diffuse vibration
- Integrated wiper flats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

DIPOSQUAD™ 07 SERIES 1DJ1E (WELDON SHANK)

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







WEP - See insert drawing for wiper options.

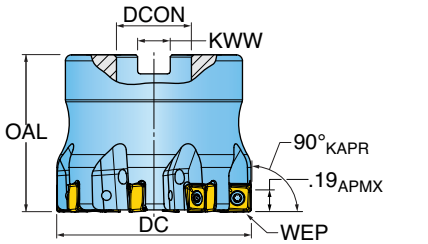
Part Number	DC Cutting Dia.	LUX Usable Length Max.	LPR Protruding Length	OAL Overall Length	ZEFF Eff. Teeth	DCON Shank Dia.
1DJ1E-0600779R01	0.625	0.70	0.75	2.66	2	0.625
1DJ1E-0701084R01	0.750	0.95	1.00	3.00	3	0.750
1DJ1E-1001280R01	1.000	1.20	1.25	3.50	4	1.000
1DJ1E-1201581R01	1.250	1.45	1.50	3.75	4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







WEP - See insert drawing for wiper options.

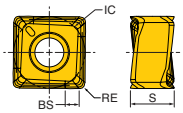
Part Number	DC Cutting Dia.	OAL Overall Length	ZEFF Eff. Teeth	DCON Bore Dia.	KWW Keyway
DJ5E-15R01	1.500	1.57	6	0.500	0.250
DJ5E-20R01	2.000	1.57	8	0.750	0.312
DJ6E-20R01	2.000	1.57	6	0.750	0.312
DJ5E-25R01	2.500	1.57	10	1.000	0.375
DJ6E-25R01	2.500	1.57	7	1.000	0.375
DJ5E-30R01	3.000	1.75	12	1.000	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
SQGU070308TR-M	Multi-Purpose - Integrated Wiper	0.031	0.035	0.275	0.165	8	Right		•	•	•

DIPOSQUAD™ 07 HARDWARE

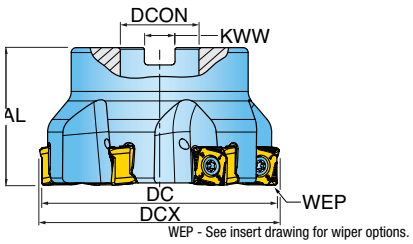
	 Screw	 Torx Screwdriver	 Retention Bolt	 **OPTIONAL** Coolant Retention Bolt	 **OPTIONAL** Torque Driver Handle	 **OPTIONAL** Preset Torque Bit	 **OPTIONAL** Torque Driver Bit
1DJ1E-0600779R01	SM25-060-90	DS-TP07S	-	-	DS-A00-.25-S	DT-08-.25	DS-TP07B1
1DJ1E-0701084R01	SM25-060-90	DS-TP07S	-	-	DS-A00-.25-S	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

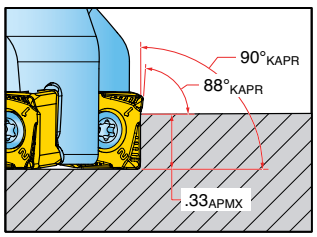
90° FACE MILL (12MM INSERT)

 Facing
 Shoulder
 Channel
 Coolant





WEP - See insert drawing for wiper options.



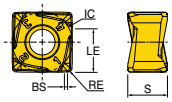
Part Number	DC Cutting Diameter	DCX Cutting Dia. Max.	OAL Overall Length	ZEFF Eff. Teeth	DCON Bore Dia.	KWW Keyway	CSP Coolant
DJ5G-20R01	2.000	2.055	1.570	6	0.750	0.312	Yes
DJ6G-20R01	2.000	2.055	1.570	4	0.750	0.312	Yes
DJ5G-25R01	2.500	2.555	1.570	8	1.000	0.375	Yes
DJ6G-25R01	2.500	2.555	1.570	5	1.000	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



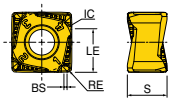
SQXU12_M





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

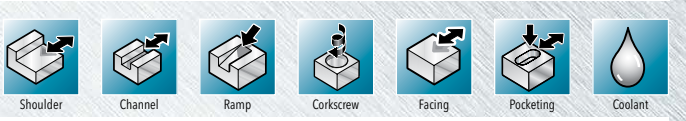
	 Screw	 Driver Handle	 Torx Driver Blade	 Retention Bolt	 **OPTIONAL** Coolant Retention Bolt	 **OPTIONAL** Torque Driver Handle	 **OPTIONAL** Preset Torque Bit	 **OPTIONAL** Torque Driver Bit
DJ5G-20R01	SM50-130-R0	DS-A00T	DS-T206B	SD-06-48	SD-06-89	DS-A00-.25-T	DT-44-.25	DS-T20B1
DJ6G-20R01	SM50-130-R0	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

90°, BACKDRAFT, HI-FEED & HI-RAMP VERSATILITY WITH 4-EDGE ECONOMY!

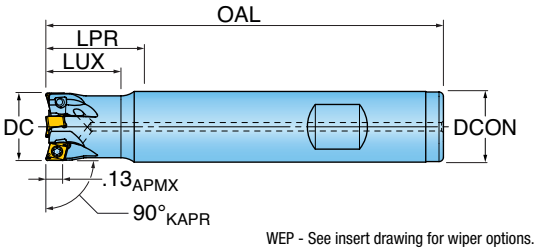
- All inserts feature 4 cutting edges. Integrated wiper flats produce 32-63 Ra surface finishes
- True 90° shoulder milling capability
- Same cutter body utilizes 90°, Backdraft & Hi-Feed inserts
- Concave face design accommodates ramping, interpolation & drill-mill functions
- Pockets designed with wide mounting area for utmost support behind the cutting edge
- Cutters plumbed with coolant through the tool

DIPOSDUO™ 04 SERIES 1TJ1B (WELDON SHANK)

90° END MILLS (4MM INSERT)







WEP - See insert drawing for wiper options.

Part Number	DC Cutting Dia.	LUX Usable Length Max.	LPR Protruding Length	OAL Overall Length	ZEFF Eff. Teeth	DCON Shank Dia.
1TJ1B-0700784R01	0.750	1.00	2.00	4.00	5	0.750
1TJ1B-10017E1R01	1.000	1.25	1.75	4.75	7	1.000
1TJ1B-12020E2R01	1.250	1.50	2.00	5.00	8	1.250
1TJ1B-15025E2R01	1.500	1.75	2.50	5.50	10	1.500

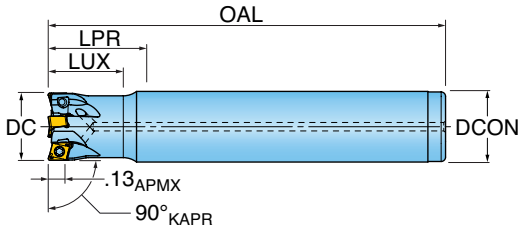
When using Hi-Feed Insert, modify body corner to R.047.
Refer to New Product Announcement for Ramp Angle data (sorted by insert corner radius).

DIPOSDUO™ 04 SERIES 1TJ1B (CYLINDRICAL SHANK)

90° END MILLS (4MM INSERT)







WEP - See insert drawing for wiper options.

Part Number	DC Cutting Dia.	LUX Usable Length Max.	LPR Protruding Length	OAL Overall Length	ZEFF Eff. Teeth	DCON Shank Dia.
1TJ1B-05007S4R01	0.500	0.75	1.72	3.50	3	0.500
1TJ1B-06008S6R01	0.625	0.81	2.09	4.00	4	0.625
1TJ1B-07008S7R01	0.750	0.87	3.00	5.00	5	0.750
1TJ1B-08010S8R01	0.875	1.00	3.25	5.25	6	0.875
1TJ1B-10012S1R01	1.000	1.25	2.25	5.50	7	1.000

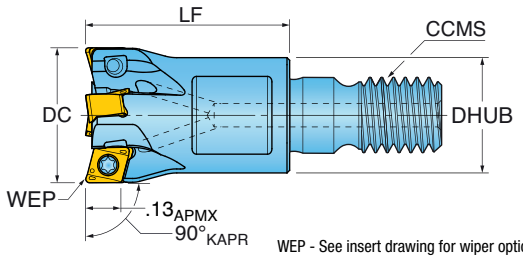
When using Hi-Feed Insert, modify body corner to R.047.
Designed with modification in mind. Extend usable length by turning back the neck diameter or shorten the overall length by cutting off back end.
Refer to New Product Announcement for Ramp Angle data (sorted by insert corner radius).

DIPOSDUO™ 04 SERIES 1TJ1B (TOP•ON STYLE)

90° MODULAR END MILLS (4MM INSERT)







WEP - See insert drawing for wiper options.

Part Number	DC Cutting Diameter	LF Functional Length	ZEFF Effective Teeth	CCMS Connection Code	DHUB Hub Diameter
1TJ1B-05007X4R01	0.500	0.75	3	TopOn M06	0.46
1TJ1B-06008X5R01	0.625	0.88	4	TopOn M08	0.50
1TJ1B-07010X6R01	0.625	1.00	5	TopOn M10	0.69
1TJ1B-10012X7R01	1.000	1.13	7	TopOn M12	0.81

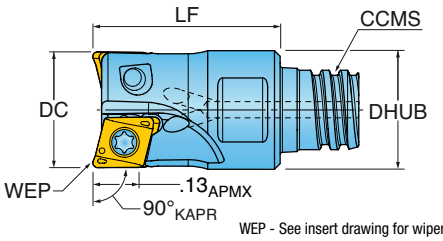
When using Hi-Feed Insert, modify body corner to R.047.
Refer to New Product Announcement for Ramp Angle data (sorted by insert corner radius).

DIPOSDUO™ 04 SERIES 1TJ1B (CHIP•SURFER STYLE)

90° MODULAR END MILLS (4MM INSERT)







WEP - See insert drawing for wiper options.

Part Number	DC Cutting Diameter	LF Functional Length	ZEFF Effective Teeth	CCMS Connection Code	DHUB Hub Diameter
1TJ1B-05006T8R01	0.500	0.65	3	Chip Surfer T08	0.48
1TJ1B-06008TRR01	0.625	0.80	4	Chip Surfer T10	0.60
1TJ1B-07010TSR01	0.750	1.00	5	Chip Surfer T12	0.72
1TJ1B-10012TUR01	1.000	1.25	7	Chip Surfer T15	0.94

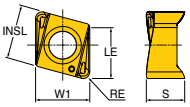
When using Hi-Feed Insert, modify body corner to R.047.
Refer to New Product Announcement for Ramp Angle data (sorted by insert corner radius).

DIPOSDUO™ 04 INSERTS

HF M

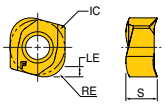
MNHU04_M





UNHU04_HF

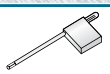




Part Number	Application	RE Corner Radius	LE Cutting Edge Eff. Length	INSL Insert Length	W1 Insert Width	S Thickness	NOI Number of Indexes	IH Insert Hand	Grade	IN2505	IN2530	IN2510
MNHU040202R-M	Multi-Purpose	0.008	0.130	0.157	0.157	0.122	4	Right		•	•	
MNHU040204R-M	Multi-Purpose	0.015	0.130	0.157	0.157	0.122	4	Right		•	•	•
MNHU040208R-M	Multi-Purpose	0.031	0.130	0.157	0.157	0.122	4	Right		•	•	

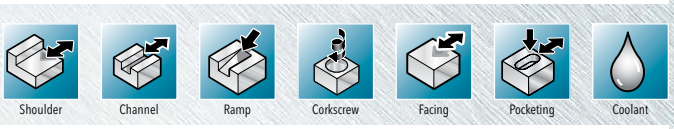
Part Number	Application	REEQ Program Radius Equivalent	LE Cutting Edge Eff. Length	INSL Insert Length	W1 Insert Width	S Thickness	NOI Number of Indexes	IH Insert Hand	Grade	IN2505	IN2504
UNHU040212R-HF	Hi-Feed	0.047	0.019	0.157	0.157	0.104	4	Right		•	•

DIPOSDUO™ 04 HARDWARE

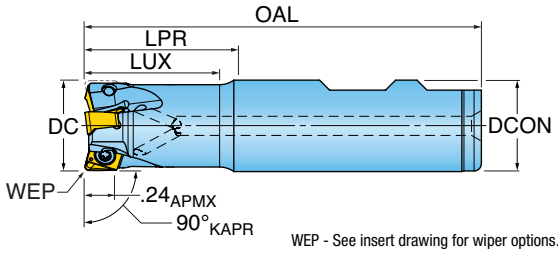
	 Screw	 Driver	 **OPTIONAL** Wrench	 **OPTIONAL** Thin Wrench	 **OPTIONAL** Torque Wrench	 **OPTIONAL** Torque Driver Handle	 **OPTIONAL** Preset Torque Bit	 **OPTIONAL** Torque Driver Bit
1TJ1B-0700784R01	SM18-041-00	DS-TP06S-NEU	-	-	-	DS-A00-.25-S	DT-05-.25	DS-TP06B
1TJ1B-10017E1R01	SM18-041-00	DS-TP06S-NEU	-	-	-	DS-A00-.25-S	DT-05-.25	DS-TP06B
1TJ1B-12020E2R01	SM18-041-00	DS-TP06S-NEU	-	-	-	DS-A00-.25-S	DT-05-.25	DS-TP06B
1TJ1B-15025E2R01	SM18-041-00	DS-TP06S-NEU	-	-	-	DS-A00-.25-S	DT-05-.25	DS-TP06B
1TJ1B-03006R8R01	SM18-041-00	DS-TP06S-NEU	-	-	-	DS-A00-.25-S	DT-05-.25	DS-TP06B
1TJ1B-05007S4R01	SM18-041-00	DS-TP06S-NEU	-	-	-	DS-A00-.25-S	DT-05-.25	DS-TP06B
1TJ1B-06008S6R01	SM18-041-00	DS-TP06S-NEU	-	-	-	DS-A00-.25-S	DT-05-.25	DS-TP06B
1TJ1B-07008S7R01	SM18-041-00	DS-TP06S-NEU	-	-	-	DS-A00-.25-S	DT-05-.25	DS-TP06B
1TJ1B-08010S8R01	SM18-041-00	DS-TP06S-NEU	-	-	-	DS-A00-.25-S	DT-05-.25	DS-TP06B
1TJ1B-10012S1R01	SM18-041-00	DS-TP06S-NEU	-	-	-	DS-A00-.25-S	DT-05-.25	DS-TP06B
1TJ1B-05007X4R01	SM18-041-00	DS-TP06S-NEU	-	-	-	DS-A00-.25-S	DT-05-.25	DS-TP06B
1TJ1B-06008X5R01	SM18-041-00	DS-TP06S-NEU	610MM	-	-	DS-A00-.25-S	DT-05-.25	DS-TP06B
1TJ1B-07010X6R01	SM18-041-00	DS-TP06S-NEU	615MM	-	-	DS-A00-.25-S	DT-05-.25	DS-TP06B
1TJ1B-10012X7R01	SM18-041-00	DS-TP06S-NEU	617MM	-	-	DS-A00-.25-S	DT-05-.25	DS-TP06B
1TJ1B-03006T6R01	SM18-041-00	DS-TP06S-NEU	-	WS-0029	DT-90-08	DS-A00-.25-S	DT-05-.25	DS-TP06B
1TJ1B-05006T8R01	SM18-041-00	DS-TP06S-NEU	-	WS-0030	DT-130-10	DS-A00-.25-S	DT-05-.25	DS-TP06B
1TJ1B-06008TRR01	SM18-041-00	DS-TP06S-NEU	-	WS-0044	DT-250-13	DS-A00-.25-S	DT-05-.25	DS-TP06B
1TJ1B-07010TSR01	SM18-041-00	DS-TP06S-NEU	-	WS-0059	DT-250-16	DS-A00-.25-S	DT-05-.25	DS-TP06B
1TJ1B-10012TUR01	SM18-041-00	DS-TP06S-NEU	-	WS-0061	DT-350-20	DS-A00-.25-S	DT-05-.25	DS-TP06B

DIPOSDUO™ 06 SERIES 1TJ1D (WELDON SHANK) FORMERLY DIPOS TETRA™

90° END MILLS (6MM INSERT)







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.
1TJ1D-0600779R01	0.625	0.75	0.72	2.66	2	0.625
1TJ1D-0701284R01	0.750	1.25	1.20	3.25	3	0.750
1TJ1D-0801284R01	0.875	1.25	1.25	3.25	3	0.750
1TJ1D-1001780R01	1.000	1.75	1.72	4.00	4	1.000
1TJ1D-1001784R01	1.000	1.75	1.72	3.75	4	0.750
1TJ1D-1201781R01	1.250	1.75	1.72	4.00	5	1.250
1TJ1D-1201784R01	1.250	1.75	1.75	3.75	5	0.750
1TJ1D-1501784R01	1.500	1.75	1.75	3.75	6	0.750
1TJ1D-1502281R01	1.500	2.25	2.25	4.50	6	1.250

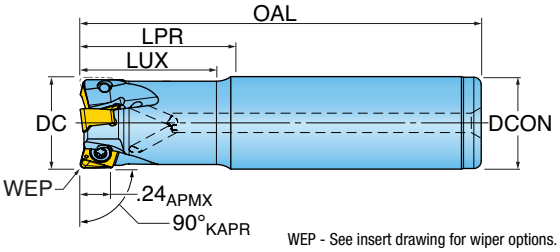
Cutter Body must be relieved for use with insert corner radii larger than R.031"; (Body R = Insert R -.02").
Refer to New Product Announcement for Ramp Angle data (sorted by insert corner radius).

DIPOSDUO™ 06 SERIES 1TJ1D (CYLINDRICAL SHANK) FORMERLY DIPOS TETRA™

90° END MILLS (6MM INSERT)







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.
1TJ1D-06020S6R01	0.625	2.09	1.25	4.00	2	0.625
1TJ1D-07030S7R01	0.750	3.00	1.25	5.00	3	0.750
1TJ1D-10037S1R01	1.000	3.75	1.25	6.00	4	1.000
1TJ1D-12042S9R01	1.250	4.25	1.25	6.50	5	1.250
1TJ1D-15047S5R01	1.500	4.75	1.25	7.00	6	1.500

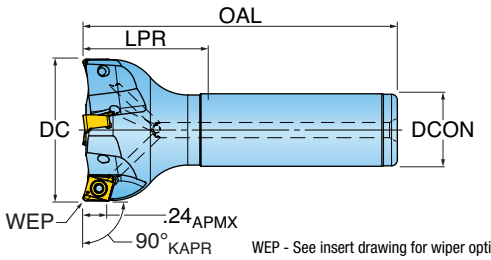
Cutter Body must be relieved for use with insert corner radii larger than R.031"; (Body R = Insert R -.02").
Designed with modification in mind. Extend usable length by turning back the neck diameter or shorten the overall length by cutting off back end.
Refer to New Product Announcement for Ramp Angle data (sorted by insert corner radius).

DIPOSDUO™ 06 SERIES 1TJ1D (KNEE MILL CYLINDRICAL SHANK) FORMERLY DIPOS TETRA™

90° END MILLS (6MM INSERT)







WEP - See insert drawing for wiper options.

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

Cutter Body must be relieved for use with insert corner radii larger than R.031"; (Body R = Insert R -.02").
Refer to New Product Announcement for Ramp Angle data (sorted by insert corner radius).

Ideal on Knee mills when coupled with toolholder series R8ER.

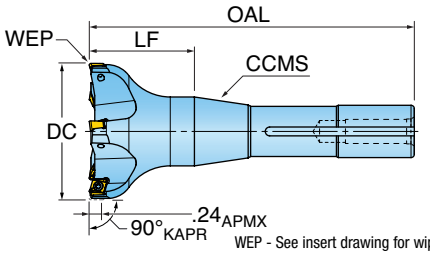


DIPOSDUO™ 06 SERIES 1TJ1D (KNEE MILL R8 STYLE) FORMERLY DIPOS TETRA™

90° END MILLS (6MM INSERT)







WEP - See insert drawing for wiper options.

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

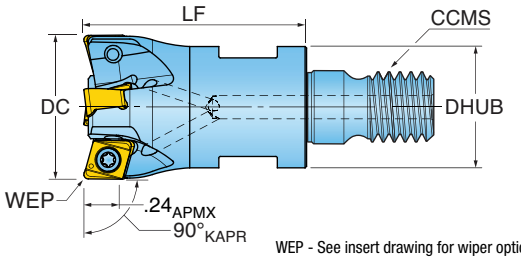
Cutter Body must be relieved for use with insert corner radii larger than R.031"; (Body R = Insert R -.02").
Refer to New Product Announcement for Ramp Angle data (sorted by insert corner radius).

DIPOSDUO™ 06 SERIES 1TJ1D (TOP•ON STYLE) FORMERLY DIPOS•TETRA™

90° MODULAR END MILLS







WEP - See insert drawing for wiper options.

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

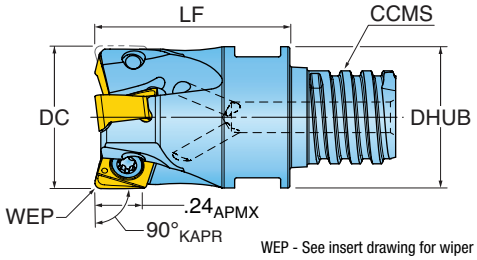
Cutter Body must be relieved for use with insert corner radii larger than R.031"; (Body R = Insert R -.02").
Refer to New Product Announcement for Ramp Angle data (sorted by insert corner radius).

DIPOSDUO™ 06 SERIES 1TJ1D (CHIP•SURFER STYLE) FORMERLY DIPOS•TETRA™

90° MODULAR END MILLS (6MM INSERT)







WEP - See insert drawing for wiper options.

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

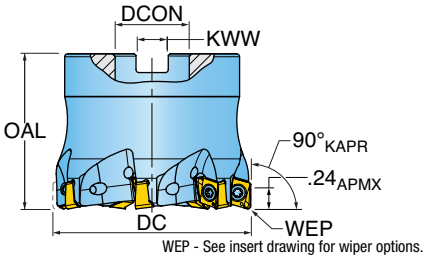
Cutter Body must be relieved for use with insert corner radii larger than R.031"; (Body R = Insert R -.02").
Refer to New Product Announcement for Ramp Angle data (sorted by insert corner radius).

DIPOSDUO™ 06 SERIES TJ1D FORMERLY DIPOS TETRA™

90° FACE MILLS (6MM INSERT)







WEP - See insert drawing for wiper options.

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

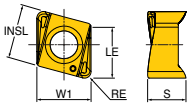
Cutter Body must be relieved for use with insert corner radii larger than R.031"; (Body R = Insert R -.02").
Refer to New Product Announcement for Ramp Angle data (sorted by insert corner radius).

DIPOSDUO™ 06 INSERTS FORMERLY DIPOSTETRA™

SW | HW | HF | -R | -PH | -P

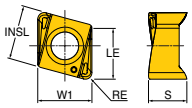
MNHU06-R





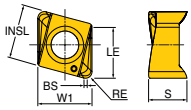
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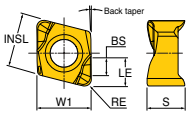
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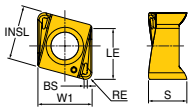
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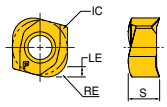
MNCU06-P





UNHU06_HF





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					•	•	•	•
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					•	•	•	•
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			•		•		•	
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			•		•		•	
MNHU060320R-PH	SS/Hi-Temp/Ti	0.079 R	-	0.200	0.260	0.260	0.165	4	Right							•	
MNHU060304R-HW	SS/Hi-Temp/Ti - Face Wiper	0.015 R	0.039	0.240	0.260	0.260	0.184	4	Right					•			
MNHU060308R-HW	SS/Hi-Temp/Ti - Face Wiper	0.031 R	0.023	0.240	0.260	0.260	0.184	4	Right					•		•	
MNHU060310R-SW	Backdraft - Side Wiper	0.039	0.043	0.082	0.260	0.260	0.185	4	Right				•	•			
MNHU060315R-SW	Backdraft - Side Wiper	0.059	0.070	0.130	0.260	0.260	0.177	4	Right				•	•			
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		•						

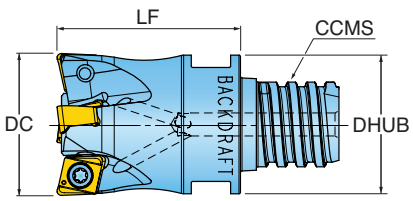
Part Number	Application	REEQ Program Radius Equivalent	LE Cutting Edge Eff. Length	INSL Insert Length	W1 Insert Width	S Thickness	NOI Number of Indexes	IH Insert Hand	Grade	IN2504	IN2530	IN2505
UNHU060320R-HF	Hi-Feed	0.078	0.039	0.260	0.260	0.152	4	Right		•	•	•

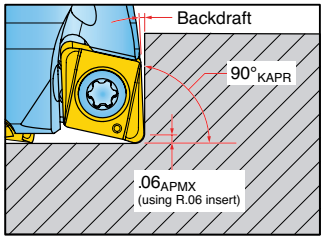
DIPOSDUO™ 06 SERIES 1TV1D (CHIP•SURFER STYLE) FORMERLY DIPOS•TETRA™

BACKDRAFT END MILLS (6MM INSERT)









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

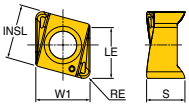
Cutter Body must be relieved for use with insert corner radii larger than R.031"; (Body R = Insert R -.02").
Refer to New Product Announcement for Ramp Angle data (sorted by insert corner radius).
Recommend .020" maximum axial stepdown on straight wall finish applications.
Well suited for long reach applications.

DIPOSDUO™ 06 SERIES 1TV1D INSERTS FORMERLY DIPOS•TETRA™



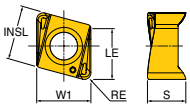
MNHU06-R





MNHU06-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			•	•	•	•
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			•	•	•	•
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		•	•		•	
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		•	•		•	
MNHU060320R-PH	SS/Hi-Temp/Ti	0.079 R	0.200	0.260	0.260	0.165	4	Right					•	

DIPOSDUO™ 06 HARDWARE FORMERLY DIPOS TETRA™

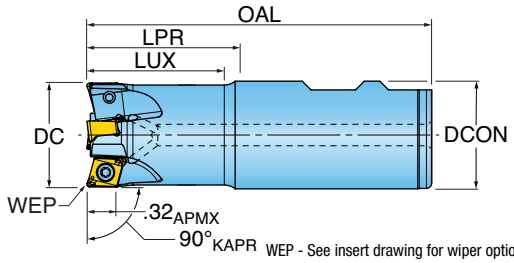
				 **OPTIONAL**		 **OPTIONAL**	 **OPTIONAL**	 **OPTIONAL**	 **OPTIONAL**
	Screw	Driver	Retention Bolt	Coolant Retention Bolt	Wrench	Torque Wrench	Torque Driver Handle	Preset Torque Bit	Torque Driver Bit
1TJ1D-06020S6R01	SM30-068-30	DS-T08W	-	-	-	-	DS-A00-.25-S	DT-11-.25	DS-T08B
1TJ1D-07030S7R01	SM30-068-30	DS-T08W	-	-	-	-	DS-A00-.25-S	DT-11-.25	DS-T08B
1TJ1D-10037S1R01	SM30-068-30	DS-T08W	-	-	-	-	DS-A00-.25-S	DT-11-.25	DS-T08B
1TJ1D-12042S9R01	SM30-068-30	DS-T08W	-	-	-	-	DS-A00-.25-S	DT-11-.25	DS-T08B
1TJ1D-15047S5R01	SM30-068-30	DS-T08W	-	-	-	-	DS-A00-.25-S	DT-11-.25	DS-T08B
1TJ1D-0600779R01	SM30-068-30	DS-T08W	-	-	-	-	DS-A00-.25-S	DT-11-.25	DS-T08B
1TJ1D-0701284R01	SM30-068-30	DS-T08W	-	-	-	-	DS-A00-.25-S	DT-11-.25	DS-T08B
1TJ1D-0801284R01	SM30-068-30	DS-T08W	-	-	-	-	DS-A00-.25-S	DT-11-.25	DS-T08B
1TJ1D-1001780R01	SM30-068-30	DS-T08W	-	-	-	-	DS-A00-.25-S	DT-11-.25	DS-T08B
1TJ1D-1001784R01	SM30-068-30	DS-T08W	-	-	-	-	DS-A00-.25-S	DT-11-.25	DS-T08B
1TJ1D-1201781R01	SM30-068-30	DS-T08W	-	-	-	-	DS-A00-.25-S	DT-11-.25	DS-T08B
1TJ1D-1201784R01	SM30-068-30	DS-T08W	-	-	-	-	DS-A00-.25-S	DT-11-.25	DS-T08B
1TJ1D-1501784R01	SM30-068-30	DS-T08W	-	-	-	-	DS-A00-.25-S	DT-11-.25	DS-T08B
1TJ1D-1502281R01	SM30-068-30	DS-T08W	-	-	-	-	DS-A00-.25-S	DT-11-.25	DS-T08B
1TJ1D-10012S7R01	SM30-068-30	DS-T08W	-	-	-	-	DS-A00-.25-S	DT-11-.25	DS-T08B
1TJ1D-15012S7R01	SM30-068-30	DS-T08W	-	-	-	-	DS-A00-.25-S	DT-11-.25	DS-T08B
1TJ1D-20012S7R01	SM30-068-30	DS-T08W	-	-	-	-	DS-A00-.25-S	DT-11-.25	DS-T08B
1TJ1D-2501940R01	SM30-068-30	DS-T08W	-	-	-	-	DS-A00-.25-S	DT-11-.25	DS-T08B
1TJ1D-3001940R01	SM30-068-30	DS-T08W	-	-	-	-	DS-A00-.25-S	DT-11-.25	DS-T08B
1TJ1D-07015X6R01	SM30-068-30	DS-T08W	-	-	615MM	-	DS-A00-.25-S	DT-11-.25	DS-T08B
1TJ1D-10015X7R01	SM30-068-30	DS-T08W	-	-	617MM	-	DS-A00-.25-S	DT-11-.25	DS-T08B
1TJ1D-12017X8R01	SM30-068-30	DS-T08W	-	-	622MM	-	DS-A00-.25-S	DT-11-.25	DS-T08B
1TJ1D-15017X8R01	SM30-068-30	DS-T08W	-	-	622MM	-	DS-A00-.25-S	DT-11-.25	DS-T08B
1TJ1D-06008TRR01	SM30-068-30	DS-T08W	-	-	WS-0044	DT-250-13	DS-A00-.25-S	DT-11-.25	DS-T08B
1TJ1D-07010TSR01	SM30-068-30	DS-T08W	-	-	WS-0059	DT-250-16	DS-A00-.25-S	DT-11-.25	DS-T08B
1TJ1D-10012TUR01	SM30-068-30	DS-T08W	-	-	WS-0061	DT-350-20	DS-A00-.25-S	DT-11-.25	DS-T08B
1TV1D-06208TRR10	SM30-068-30	DS-T08W	-	-	WS-0044	DT-250-13	DS-A00-.25-S	DT-11-.25	DS-T08B
1TV1D-07010TSR02	SM30-068-30	DS-T08W	-	-	WS-0059	DT-250-16	DS-A00-.25-S	DT-11-.25	DS-T08B
1TV1D-10012TUR02	SM30-068-30	DS-T08W	-	-	WS-0061	DT-350-20	DS-A00-.25-S	DT-11-.25	DS-T08B
TJ1D-15R01	SM30-068-30	DS-T08W	SD-04-46	-	-	-	DS-A00-.25-S	DT-11-.25	DS-T08B
TJ1D-20R01	SM30-068-30	DS-T08W	SD-06-46	SD-06-89	-	-	DS-A00-.25-S	DT-11-.25	DS-T08B
TJ1D-25R01	SM30-068-30	DS-T08W	SD-06-46	SD-06-89	-	-	DS-A00-.25-S	DT-11-.25	DS-T08B
TJ1D-30R01	SM30-068-30	DS-T08W	SD-08-46	SD-08-92	-	-	DS-A00-.25-S	DT-11-.25	DS-T08B

DIPOSDUO™ 09 SERIES 1TJ1F (WELDON SHANK)

90° END MILLS (9MM INSERT)







WEP - See insert drawing for wiper options.

Part Number	DC Cutting Dia.	LUX Usable Length Max.	LPR Protruding Length	OAL Overall Length	ZEFF Eff. Teeth	DCON Shank Dia.
1TJ1F-1001780R01	1.000	1.72	1.75	4.00	3	1.000
1TJ1F-1201781R01	1.250	1.72	1.75	4.00	4	1.250
1TJ1F-1502281R01	1.500	2.20	2.25	4.50	5	1.250

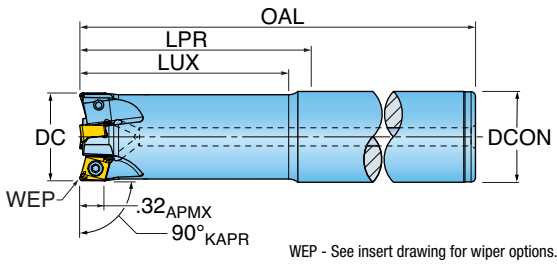
When using -HF insert, cutter body corner radius must be modified to R.12" for proper clearance.
Refer to New Product Announcement for Ramp Angle data (sorted by insert corner radius).

DIPOSDUO™ 09 SERIES 1TJ1F (CYLINDRICAL SHANK)

90° END MILLS (9MM INSERT)







WEP - See insert drawing for wiper options.

Part Number	DC Cutting Dia.	LUX Usable Length Max.	LPR Protruding Length	OAL Overall Length	ZEFF Eff. Teeth	DCON Shank Dia.
1TJ1F-10057S1R01	1.000	2.40	5.75	8.00	3	1.000
1TJ1F-12077S9R01	1.250	2.90	7.75	10.00	4	1.250
1TJ1F-15073S5R01	1.500	2.90	7.34	10.00	5	1.500

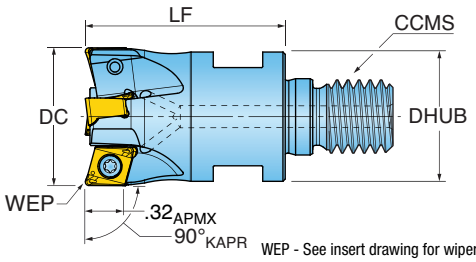
When using -HF insert, cutter body corner radius must be modified to R.12" for proper clearance.
Designed with modification in mind. Extend usable length by turning back the neck diameter or shorten the overall length by cutting off back end.
Refer to New Product Announcement for Ramp Angle data (sorted by insert corner radius).

DIPOSDUO™ 09 SERIES 1TJ1F (TOP•ON STYLE)

90° MODULAR END MILLS (9MM INSERT)

Shoulder | Channel | Ramp | Corkscrew | Facing | Pocketing | Coolant





WEP - See insert drawing for wiper options.

Part Number	DC Cutting Dia.	LF Functional Length	ZEFF Eff. Teeth	CCMS Connection Code	DHUB Hub Dia.
1TJ1F-10015X7R01	1.000	1.50	3	TopOn M12	0.81
1TJ1F-12017X8R01	1.250	1.75	4	TopOn M16	1.13
1TJ1F-15017X9R01	1.500	1.75	5	TopOn M16	1.13

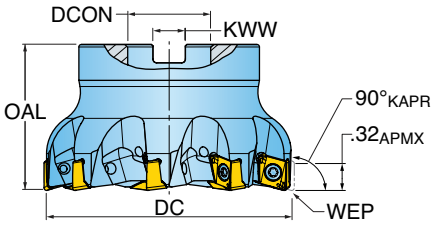
When using -HF insert, cutter body corner radius must be modified to R.12" for proper clearance.
Refer to New Product Announcement for Ramp Angle data (sorted by insert corner radius).

DIPOSDUO™ 09 SERIES TJ6F

90° FACE MILLS (9MM INSERT)

Shoulder | Channel | Ramp | Corkscrew | Facing | Pocketing | Coolant





WEP - See insert drawing for wiper options.

Part Number	DC Cutting Dia.	OAL Overall Length	ZEFF Eff. Teeth	DCON Bore Dia.	KWW Keyway
TJ6F-15R01	1.500	1.570	5	0.500	0.250
TJ6F-20R01	2.000	1.570	6	0.750	0.312
TJ6F-25R01	2.500	1.570	7	0.750	0.312
TJ6F-30R01	3.000	1.750	9	1.000	0.375
TJ6F-40R01	4.000	2.375	11	1.500	0.625

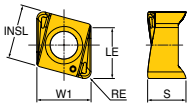
When using -HF insert, cutter body corner radius must be modified to R.12" for proper clearance.
Refer to New Product Announcement for Ramp Angle data (sorted by insert corner radius).

DIPOSDUO™ 09 INSERTS

HF | M | ML | AL

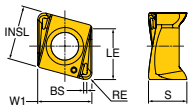
MNHU09-M





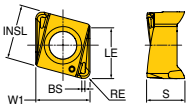
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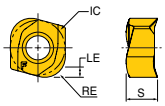
MNCU09_AL





UNHU09_HF





Part Number	Application	RE Corner Radius	BS Wiper Length	LE Cutting Edge Eff. Length	INSL Insert Length	W1 Insert Width	S Thickness	NOI Number of Indexes	IH Insert Hand	Grade	IN2505	IN2530	IN2510	IN2504	IN10K
MNHU090408R-M	Multi-Purpose	0.031	-	0.314	0.338	0.338	0.232	4	Right		•	•	•	•	
MNHU090416R-M	Multi-Purpose	0.062	-	0.314	0.338	0.338	0.224	4	Right		•	•	•		
MNHU090404R-ML	SS/Hi-Temp/Ti - Face Wiper	0.015	0.047	0.314	0.338	0.338	0.248	4	Right		•				
MNHU090408R-ML	SS/Hi-Temp/Ti - Face Wiper	0.031	0.031	0.314	0.338	0.338	0.248	4	Right		•	•			
MNCU090404FR-AL	Grd/Pol for Al - Face Wiper	0.015	0.047	0.314	0.338	0.338	0.248	4	Right						•
MNCU090408FR-AL	Grd/Pol for Al - Face Wiper	0.031	0.031	0.314	0.338	0.338	0.244	4	Right						•

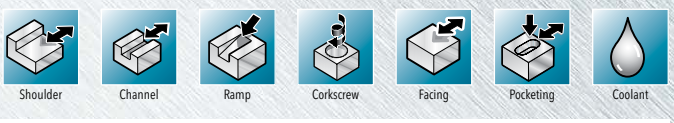
Part Number	Application	REEQ Program Radius Equivalent	LE Cutting Edge Eff. Length	INSL Insert Length	W1 Insert Width	S Thickness	NOI Number of Indexes	IH Insert Hand	Grade	IN2505
UNHU090432R-HF	Hi-Feed	0.125	0.059	0.338	0.338	0.187	4	Right		•

DIPOSDUO™ 09 HARDWARE

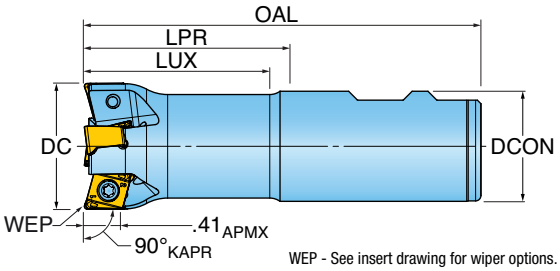
	Screw	Driver Handle	Torx Driver Blade	Retention Bolt	**OPTIONAL** Coolant Retention Bolt	**OPTIONAL** Wrench	**OPTIONAL** Torque Driver Handle	**OPTIONAL** Preset Torque Bit	**OPTIONAL** Torque Driver Bit
1TJ1F-1001780R01	SM35-088-10	DS-A00T	DS-T106B	-	-	-	DS-A00-.25-T	DT-30-.25	DS-T10B1
1TJ1F-1201781R01	SM35-088-10	DS-A00T	DS-T106B	-	-	-	DS-A00-.25-T	DT-30-.25	DS-T10B1
1TJ1F-1502281R01	SM35-088-10	DS-A00T	DS-T106B	-	-	-	DS-A00-.25-T	DT-30-.25	DS-T10B1
1TJ1F-10057S1R01	SM35-088-10	DS-A00T	DS-T106B	-	-	-	DS-A00-.25-T	DT-30-.25	DS-T10B1
1TJ1F-12077S9R01	SM35-088-10	DS-A00T	DS-T106B	-	-	-	DS-A00-.25-T	DT-30-.25	DS-T10B1
1TJ1F-15073S5R01	SM35-088-10	DS-A00T	DS-T106B	-	-	-	DS-A00-.25-T	DT-30-.25	DS-T10B1
1TJ1F-10015X7R01	SM35-088-10	DS-A00T	DS-T106B	-	-	617MM	DS-A00-.25-T	DT-30-.25	DS-T10B1
1TJ1F-12017X8R01	SM35-088-10	DS-A00T	DS-T106B	-	-	622MM	DS-A00-.25-T	DT-30-.25	DS-T10B1
1TJ1F-15017X9R01	SM35-088-10	DS-A00T	DS-T106B	-	-	630MM	DS-A00-.25-T	DT-30-.25	DS-T10B1
TJ6F-15R01	SM35-088-10	DS-A00T	DS-T106B	SD-04-86	-	-	DS-A00-.25-T	DT-30-.25	DS-T10B1
TJ6F-20R01	SM35-088-10	DS-A00T	DS-T106B	SD-06-46	SD-06-89	-	DS-A00-.25-T	DT-30-.25	DS-T10B1
TJ6F-25R01	SM35-088-10	DS-A00T	DS-T106B	SD-06-46	SD-06-89	-	DS-A00-.25-T	DT-30-.25	DS-T10B1
TJ6F-30R01	SM35-088-10	DS-A00T	DS-T106B	SD-08-46	SD-08-92	-	DS-A00-.25-T	DT-30-.25	DS-T10B1
TJ6F-40R01	SM35-088-10	DS-A00T	DS-T106B	SD-12-82	SD-12-99	-	DS-A00-.25-T	DT-30-.25	DS-T10B1

DIPOSDUO™11 SERIES 1TJ1G (WELDON SHANK)

90° END MILLS (11MM INSERT)







WEP - See insert drawing for wiper options.

Part Number	DC Cutting Dia.	LUX Usable Length Max.	LPR Protruding Length	OAL Overall Length	ZEFF Eff. Teeth	DCON Shank Dia.
1TJ1G-1001780R01	1.000	1.72	1.75	4.00	2	1.000
1TJ1G-1202281R01	1.250	2.22	2.25	4.50	3	1.250
1TJ1G-1502281R01	1.500	2.22	2.25	4.50	4	1.250

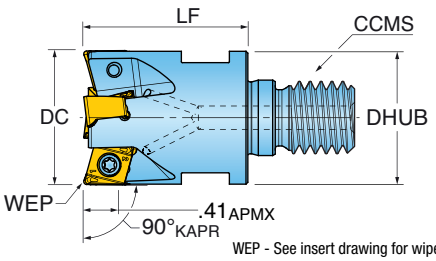
When using -HF insert, cutter body corner radius must be modified to R.15" for proper clearance.
Refer to New Product Announcement for Ramp Angle data (sorted by insert corner radius).

DIPOSDUO™11 SERIES 1TJ1G (TOP•ON STYLE)

90° MODULAR END MILLS (11MM INSERT)







WEP - See insert drawing for wiper options.

Part Number	DC Cutting Diameter	LF Functional Length	ZEFF Effective Teeth	CCMS Connection Code	DHUB Hub Diameter
1TJ1G-10015X7R01	1.000	1.50	2	TopOn M12	0.81
1TJ1G-12017X8R01	1.250	1.75	3	TopOn M16	1.13
1TJ1G-15017X9R01	1.500	1.75	4	TopOn M20	1.41

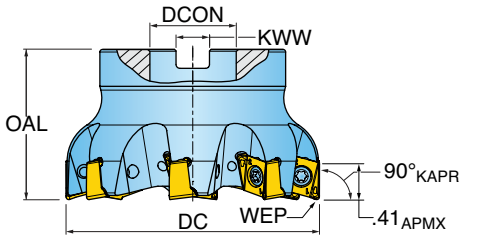
When using -HF insert, cutter body corner radius must be modified to R.15" for proper clearance.
Refer to New Product Announcement for Ramp Angle data (sorted by insert corner radius).

DIPOSDUO™ 11 SERIES TJ5G, TJ6G

90° FACE MILLS (11MM INSERT)





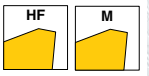


WEP - See insert drawing for wiper options.

Part Number	DC Cutting Dia.	OAL Overall Length	ZEFF Eff. Teeth	DCON Bore Dia.	KWW Keyway
TJ5G-20R01	2.000	1.750	5	0.750	0.312
TJ6G-20R01	2.000	1.750	4	0.750	0.312
TJ5G-25R01	2.500	1.750	6	1.000	0.375
TJ6G-25R01	2.500	1.750	4	1.000	0.375
TJ5G-30R01	3.000	1.750	8	1.000	0.375
TJ6G-30R01	3.000	1.750	6	1.000	0.375
TJ5G-40R01	4.000	2.375	10	1.500	0.625
TJ6G-40R01	4.000	2.375	7	1.500	0.625

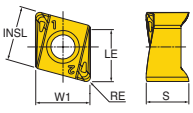
When using -HF insert, cutter body corner radius must be modified to R.15" for proper clearance.
Refer to New Product Announcement for Ramp Angle data (sorted by insert corner radius).

DIPOSDUO™ 11 INSERTS



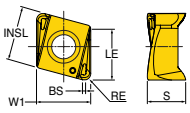
MNHU11_M





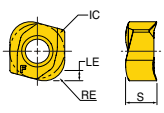
MNHU11_PNR-M





UNHU11_HF





Part Number	Application	RE Corner Radius	BS Wiper Length	LE Cutting Edge Eff. Length	INSL Insert Length	W1 Insert Width	S Thickness	NOI Number of Indexes	IH Insert Hand	Grade	IN2505	IN2530	IN2510
MNHU110608R-M	Multi-Purpose	0.031	-	0.410	0.421	0.421	0.318	4	Right		•	•	•
MNHU110608PNR-M	Multi-Purpose - Integrated Wiper	0.031	0.039	0.410	0.421	0.421	0.318	4	Right		•	•	

Part Number	Application	REEQ Program Radius Equivalent	LE Cutting Edge Eff. Length	INSL Insert Length	W1 Insert Width	S Thickness	NOI Number of Indexes	IH Insert Hand	Grade	IN2505
UNHU110640R-HF	Hi-Feed	0.157	0.078	0.421	0.421	0.240	4	Right		•

DIPOSDUO™11 HARDWARE

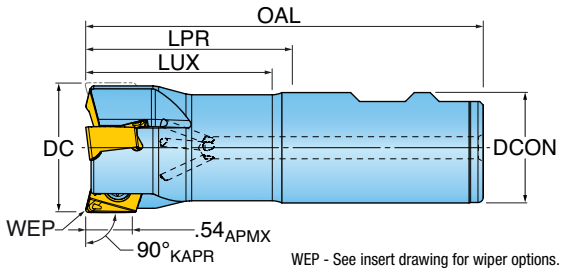
	 Screw	 Driver Handle	 Torx Driver Blade	 Retention Bolt	 **OPTIONAL** Coolant Retention Bolt	 **OPTIONAL** Wrench	 **OPTIONAL** Torque Driver Handle	 **OPTIONAL** Preset Torque Bit	 **OPTIONAL** Torque Driver Bit
1TJ1G-1001780R01	SM40-100-10	DS-A00T	DS-T156B	-	-	-	DS-A00-.25-T	DT-35-.25	DS-T15B1
1TJ1G-1202281R01	SM40-100-10	DS-A00T	DS-T156B	-	-	-	DS-A00-.25-T	DT-35-.25	DS-T15B1
1TJ1G-1502281R01	SM40-100-10	DS-A00T	DS-T156B	-	-	-	DS-A00-.25-T	DT-35-.25	DS-T15B1
1TJ1G-10015X7R01	SM40-100-10	DS-A00T	DS-T156B	-	-	617MM	DS-A00-.25-T	DT-35-.25	DS-T15B1
1TJ1G-12017X8R01	SM40-100-10	DS-A00T	DS-T156B	-	-	622MM	DS-A00-.25-T	DT-35-.25	DS-T15B1
1TJ1G-15017X9R01	SM40-100-10	DS-A00T	DS-T156B	-	-	630MM	DS-A00-.25-T	DT-35-.25	DS-T15B1
TJ5G-20R01	SM40-100-10	DS-A00T	DS-T156B	SD-06-46	SD-06-89	-	DS-A00-.25-T	DT-35-.25	DS-T15B1
TJ6G-20R01	SM40-100-10	DS-A00T	DS-T156B	SD-06-46	SD-06-89	-	DS-A00-.25-T	DT-35-.25	DS-T15B1
TJ5G-25R01	SM40-100-10	DS-A00T	DS-T156B	SD-08-47	SD-08-C9	-	DS-A00-.25-T	DT-35-.25	DS-T15B1
TJ6G-25R01	SM40-100-10	DS-A00T	DS-T156B	SD-08-47	SD-08-C9	-	DS-A00-.25-T	DT-35-.25	DS-T15B1
TJ5G-30R01	SM40-100-10	DS-A00T	DS-T156B	SD-08-47	SD-08-C9	-	DS-A00-.25-T	DT-35-.25	DS-T15B1
TJ6G-30R01	SM40-100-10	DS-A00T	DS-T156B	SD-08-47	SD-08-C9	-	DS-A00-.25-T	DT-35-.25	DS-T15B1
TJ5G-40R01	SM40-100-10	DS-A00T	DS-T156B	SD-12-82	SD-12-99	-	DS-A00-.25-T	DT-35-.25	DS-T15B1
TJ6G-40R01	SM40-100-10	DS-A00T	DS-T156B	SD-12-82	SD-12-99	-	DS-A00-.25-T	DT-35-.25	DS-T15B1

DIPOSDUO™14 SERIES 1TJ1J (WELDON SHANK)

90° END MILLS (14MM INSERT)







WEP - See insert drawing for wiper options.

Part Number	DC Cutting Dia.	LUX Usable Length Max.	LPR Protruding Length	OAL Overall Length	ZEFF Eff. Teeth	DCON Shank Dia.
1TJ1J-1202281R01	1.250	2.22	2.25	4.50	2	1.250
1TJ1J-1502281R01	1.500	2.22	2.25	4.50	3	1.250

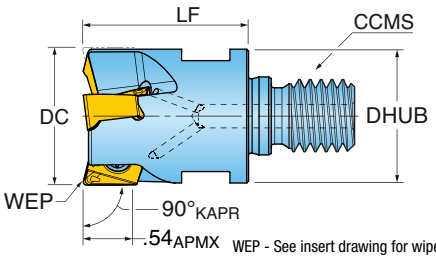
When using -HF insert, cutter body corner radius must be modified to R.19" for proper clearance.
Refer to New Product Announcement for Ramp Angle data (sorted by insert corner radius).

DIPOSDUO™ 14 SERIES 1TJ1J (TOP•ON STYLE)

90° MODULAR END MILLS (14MM INSERT)

Shoulder | Channel | Ramp | Corkscrew | Facing | Pocketing | Coolant





WEP - See insert drawing for wiper options.

Part Number	DC Cutting Diameter	LF Functional Length	ZEFF Effective Teeth	CCMS Connection Code	DHUB Hub Diameter
1TJ1J-12017X8R01	1.250	1.75	2	TopOn M16	1.13
1TJ1J-15017X9R01	1.500	1.75	3	TopOn M20	1.41

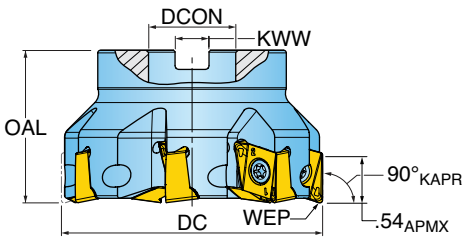
When using -HF insert, cutter body corner radius must be modified to R.19" for proper clearance.
Refer to New Product Announcement for Ramp Angle data (sorted by insert corner radius).

DIPOSDUO™ 14 SERIES TJ5J, TJ6J

90° ROUGH & RAMP FACE MILL (14MM INSERT)

Shoulder | Channel | Ramp | Corkscrew | Facing | Pocketing | Coolant





WEP - See insert drawing for wiper options.

Part Number	DC Cutting Dia.	OAL Overall Length	ZEFF Eff. Teeth	DCON Bore Dia.	KWW Keyway
TJ5J-20R01	2.000	1.750	4	0.750	0.312
TJ5J-25R01	2.500	1.750	6	1.000	0.375
TJ6J-25R01	2.500	1.750	4	1.000	0.375
TJ5J-30R01	3.000	1.750	7	1.000	0.375
TJ6J-30R01	3.000	1.750	5	1.000	0.375
TJ5J-40R01	4.000	2.375	9	1.500	0.625
TJ6J-40R01	4.000	2.375	6	1.500	0.625

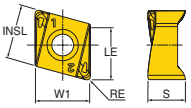
When using -HF insert, cutter body corner radius must be modified to R.19" for proper clearance.
Refer to New Product Announcement for Ramp Angle data (sorted by insert corner radius).

DIPOSDUO™14 INSERTS

HF M

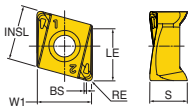
MNHU14_M





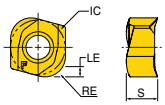
MNHU14_PNR-M





UNHU14_HF





Part Number	Application	RE Corner Radius	BS Wiper Length	LE Cutting Edge Eff. Length	INSL Insert Length	W1 Insert Width	S Thickness	NOI Number of Indexes	IH Insert Hand	Grade	IN2505	IN2530	IN2510
MNHU140708R-M	Multi-Purpose	0.031	-	0.540	0.551	0.551	0.362	4	Right		•	•	•
MNHU140708PNR-M	Multi-Purpose - Integrated Wiper	0.031	0.049	0.540	0.551	0.551	0.381	4	Right		•	•	

Part Number	Application	REEQ Program Radius Equivalent	LE Cutting Edge Eff. Length	INSL Insert Length	W1 Insert Width	S Thickness	NOI Number of Indexes	IH Insert Hand	Grade	IN2505
UNHU140750R-HF	Hi-Feed	0.196	0.118	0.551	0.551	0.267	4	Right		•

DIPOSDUO™14 HARDWARE

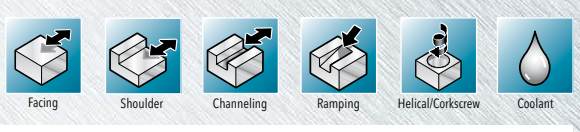
	 Screw	 Driver Handle	 Torx Driver Blade	 Retention Bolt	 **OPTIONAL** Coolant Retention Bolt	 **OPTIONAL** Wrench	 **OPTIONAL** Torque Driver Handle	 **OPTIONAL** Preset Torque Bit	 **OPTIONAL** Torque Driver Bit
1TJ1J-1202281R01	SM50-127-10	DS-A00T	DS-T206B	-	-	-	DS-A00-.25-T	DT-44-.25	DS-T20B1
1TJ1J-1502281R01	SM50-127-10	DS-A00T	DS-T206B	-	-	-	DS-A00-.25-T	DT-44-.25	DS-T20B1
1TJ1J-12017X8R01	SM50-127-10	DS-A00T	DS-T206B	-	-	622MM	DS-A00-.25-T	DT-44-.25	DS-T20B1
1TJ1J-15017X9R01	SM50-127-10	DS-A00T	DS-T206B	-	-	630MM	DS-A00-.25-T	DT-44-.25	DS-T20B1
TJ5J-20R01	SM50-127-10	DS-A00T	DS-T206B	SD-06-47	SD-06-A6	-	DS-A00-.25-T	DT-44-.25	DS-T20B1
TJ5J-25R01	SM50-127-10	DS-A00T	DS-T206B	SD-08-47	SD-08-C9	-	DS-A00-.25-T	DT-44-.25	DS-T20B1
TJ6J-25R01	SM50-127-10	DS-A00T	DS-T206B	SD-08-47	SD-08-C9	-	DS-A00-.25-T	DT-44-.25	DS-T20B1
TJ5J-30R01	SM50-127-10	DS-A00T	DS-T206B	SD-08-47	SD-08-C9	-	DS-A00-.25-T	DT-44-.25	DS-T20B1
TJ6J-30R01	SM50-127-10	DS-A00T	DS-T206B	SD-08-47	SD-08-C9	-	DS-A00-.25-T	DT-44-.25	DS-T20B1
TJ5J-40R01	SM50-127-10	DS-A00T	DS-T206B	SD-12-89	SD-12-99	-	DS-A00-.25-T	DT-44-.25	DS-T20B1
TJ6J-40R01	SM50-127-10	DS-A00T	DS-T206B	SD-12-89	SD-12-99	-	DS-A00-.25-T	DT-44-.25	DS-T20B1

3-EDGED HIPOSTRIO INSERTS PRICED LIKE 2-EDGED HIPOS PRODUCT = 1 FREE EDGE!

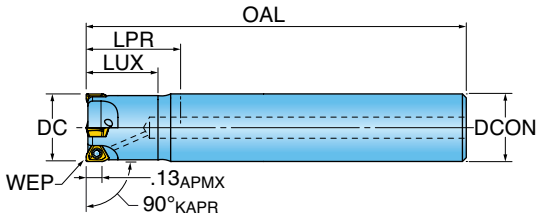
- High positive cutting geometry; ideal for small machines and gummy materials
- Four insert sizes for complete cutter diameter, depth & density coverage
- Ramping capability for cutting versatility
- Inserts with integrated wiper flats typically produce surface finishes between 32-63 Ra
- Cutters ported with coolant

HIPOSTRIO™ 04 SERIES 1KJ1B (CYLINDRICAL SHANK)

90° END MILL (4MM INSERT)







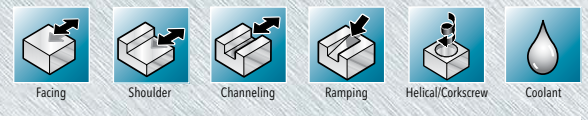
WEP - See insert drawing for wiper options.

Part Number	DC Cutting Diameter	LUX Usable Length Max.	LPR Protruding Length	OAL Overall Length	ZEFF Effective Teeth	DCON Shank Diameter	RMPX Ramp Angle Max.
1KJ1B-03006R7R01	0.312	0.62	1.58	3.00	1	0.312	2.1
1KJ1B-03007R8R01	0.375	0.75	1.58	3.00	2	0.375	2.1
1KJ1B-04007S4R01	0.437	0.75	1.22	3.00	2	0.500	3.0
1KJ1B-05008S4R01	0.500	0.87	1.72	3.50	3	0.500	2.5
1KJ1B-05010S6R01	0.562	1.00	1.59	3.50	3	0.625	2.2
1KJ1B-06010S6R01	0.625	1.00	1.59	3.50	4	0.625	1.6

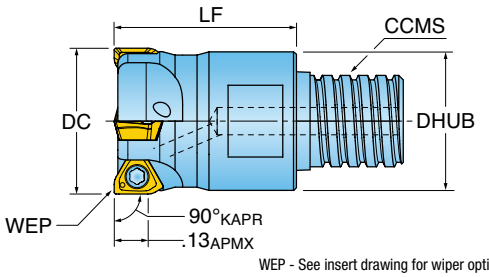
Designed with modification in mind. Extend usable length by turning back the neck diameter or shorten the overall length by cutting off back end.

HIPOSTRIO™ 04 SERIES 1KJ1B (CHIP•SURFER STYLE)

90° MODULAR END MILL (4MM INSERT)





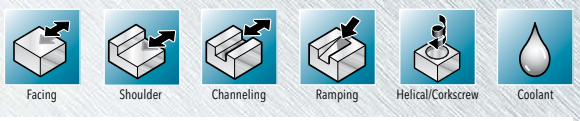


WEP - See insert drawing for wiper options.

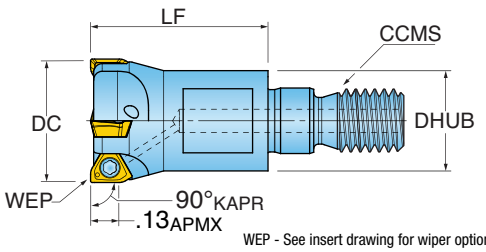
Part Number	DC Cutting Diameter	LF Functional Length	ZEFF Effective Teeth	CCMS Connection Code	DHUB Hub Diameter	RMPX Ramp Angle Max.
1KJ1B-03006T6R01	0.375	0.63	2	Chip Surfer T06	0.36	2.1
1KJ1B-05006T8R01	0.500	0.65	3	Chip Surfer T08	0.48	2.5
1KJ1B-06008TRR01	0.625	0.80	4	Chip Surfer T10	0.60	1.6

HIPOSTRIO™ 04 SERIES 1KJ1B (TOP•ON STYLE)

90° MODULAR END MILL (4MM INSERT)







WEP - See insert drawing for wiper options.

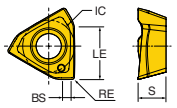
Part Number	DC Cutting Diameter	LF Functional Length	ZEFF Effective Teeth	CCMS Connection Code	DHUB Hub Diameter	RMPX Ramp Angle Max.
1KJ1B-05075X4R01	0.500	0.75	3	TopOn M06	0.46	2.5
1KJ1B-06087X5R01	0.625	0.88	4	TopOn M08	0.50	1.6

HIPOSTRIO™ 04 INSERTS



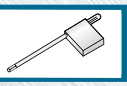
THLS04_M





Part Number	Application	RE Corner Radius	BS Wiper Length	LE Cutting Edge Eff. Length	IC Inscribed Circle Dia.	S Thickness	IH Insert Hand	Grade	IN2505	IN2530
THLS040202R-M	Multi-Purpose	0.008	0.027	0.130	0.153	0.083	Right		•	•
THLS040204R-M	Multi-Purpose	0.015	0.019	0.130	0.153	0.083	Right		•	•

HIPOSTRIO™ 04 HARDWARE

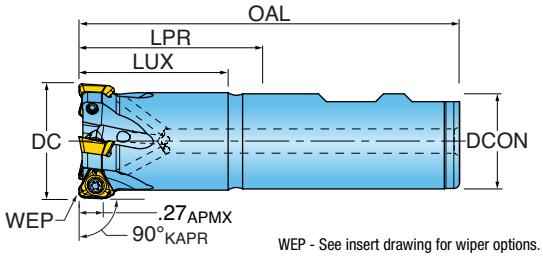
	 Insert Screw	 Driver	 **OPTIONAL** Wrench	 **OPTIONAL** Thin Wrench	 **OPTIONAL** Torque Wrench	 **OPTIONAL** Torque Driver Handle	 **OPTIONAL** Preset Torque Bit	 **OPTIONAL** Torque Driver Bit
1KJ1B-03006R7R01	SM18-041-00	DS-TP06S-NEU	-	-	-	DS-A00-.25-S	DT-05-.25	DS-TP06B
1KJ1B-03007R8R01	SM18-041-00	DS-TP06S-NEU	-	-	-	DS-A00-.25-S	DT-05-.25	DS-TP06B
1KJ1B-04007S4R01	SM18-041-00	DS-TP06S-NEU	-	-	-	DS-A00-.25-S	DT-05-.25	DS-TP06B
1KJ1B-05008S4R01	SM18-041-00	DS-TP06S-NEU	-	-	-	DS-A00-.25-S	DT-05-.25	DS-TP06B
1KJ1B-05010S6R01	SM18-041-00	DS-TP06S-NEU	-	-	-	DS-A00-.25-S	DT-05-.25	DS-TP06B
1KJ1B-06010S6R01	SM18-041-00	DS-TP06S-NEU	-	-	-	DS-A00-.25-S	DT-05-.25	DS-TP06B
1KJ1B-03006T6R01	SM18-041-00	DS-TP06S-NEU	-	WS-0029	DT-90-08	DS-A00-.25-S	DT-05-.25	DS-TP06B
1KJ1B-05006T8R01	SM18-041-00	DS-TP06S-NEU	-	WS-0030	DT-130-10	DS-A00-.25-S	DT-05-.25	DS-TP06B
1KJ1B-06008TRR01	SM18-041-00	DS-TP06S-NEU	-	WS-0044	DT-250-13	DS-A00-.25-S	DT-05-.25	DS-TP06B
1KJ1B-05075X4R01	SM18-041-00	DS-TP06S-NEU	-	-	-	DS-A00-.25-S	DT-05-.25	DS-TP06B
1KJ1B-06087X5R01	SM18-041-00	DS-TP06S-NEU	610MM	-	-	DS-A00-.25-S	DT-05-.25	DS-TP06B

HIPOSTRIO™ 06 SERIES 1KJ1D (WELDON SHANK) FORMERLY GOLDTRIO

90° END MILL (06MM INSERT)







WEP - See insert drawing for wiper options.

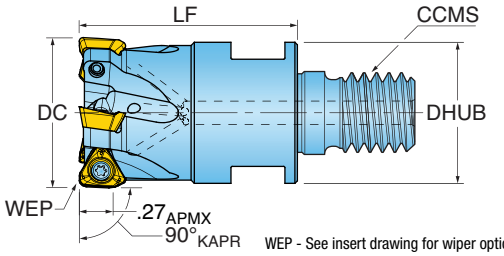
Part Number	DC Cutting Diameter	LUX Usable Length Max.	LPR Protruding Length	OAL Overall Length	ZEFF Effective Teeth	DCON Shank Diameter	CSP Coolant	RMPX Ramp Angle Max.
1KJ1D-0601279R01	0.625	1.22	1.25	3.25	1	0.625	Yes	4
1KJ1D-0702084R01	0.725	1.80	2.00	4.00	2	0.750	Yes	3.1
1KJ1D-0701184R01	0.750	1.05	1.25	3.25	2	0.750	Yes	3.1
1KJ1D-0701784R01	0.750	1.55	1.75	3.75	2	0.750	Yes	3.1
1KJ1D-0703084R01	0.750	2.80	3.00	5.00	2	0.750	Yes	3.1
1KJ1D-0801784R01	0.875	1.75	1.75	3.75	2	0.750	Yes	2.5
1KJ1D-1001780R01	1.000	1.55	1.75	4.00	3	1.000	Yes	2.1
1KJ1D-1001784R01	1.000	1.75	1.75	3.75	3	0.750	Yes	2.1
1KJ1D-1003780R01	1.000	3.38	3.75	6.00	3	1.000	Yes	2.1
1KJ1D-1003784R01	1.000	3.55	3.75	6.00	3	0.750	Yes	2.1
1KJ1D-1201780R01	1.250	1.75	1.75	4.00	5	1.000	Yes	1.5
1KJ1D-1201784R01	1.250	1.75	1.75	3.75	4	0.750	Yes	1.5
1KJ1D-1501780R01	1.500	1.75	1.75	4.00	6	1.000	Yes	1.3
1KJ1D-1501784R01	1.500	1.75	1.75	3.75	5	0.750	Yes	1.3
1KJ1D-1502281R01	1.500	2.25	2.25	4.50	6	1.250	Yes	1.3

HIPOSTRIO™ 06 SERIES 1KJ1D (TOP•ON M-ADAPTION STYLE) FORMERLY GOLDTRIO

90° MODULAR END MILL (06MM INSERT)

Facing | Shoulder | Channeling | Ramping | Helical/Corkscrew | Coolant





WEP - See insert drawing for wiper options.

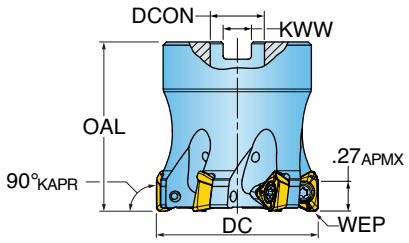
Part Number	DC Cutting Diameter	LF Functional Length	ZEFF Effective Teeth	CCMS Connection Code	DHUB Hub Diameter	CSP Coolant	RMPX Ramp Angle Max.
1KJ1D-07015X6R01	0.750	1.50	2	TopOn M10	.69	Yes	3.1
1KJ1D-10015X7R01	1.000	1.50	2	TopOn M12	.81	Yes	2.1
1KJ1D-10015X7R02	1.000	1.50	3	TopOn M12	.81	Yes	2.1
1KJ1D-12017X8R02	1.250	1.75	5	TopOn M16	1.13	Yes	1.5
1KJ1D-15017X8R01	1.500	1.75	5	TopOn M16	1.13	Yes	1.3

HIPOSTRIO™ 06 SERIES KJ5D, KJ6D FORMERLY GOLDTRIO

90° FACE MILL (06MM INSERT)

Facing | Shoulder | Channeling | Ramping | Helical/Corkscrew | Coolant





WEP - See insert drawing for wiper options.

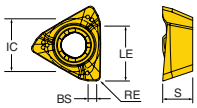
Part Number	DC Cutting Diameter	OAL Overall Length	ZEFF Effective Teeth	DCON Bore Diameter	KWW Keyway	CSP Coolant	RMPX Ramp Angle Max.
KJ5D-15R01	1.500	1.57	6	0.500	0.250	Yes	1.3
KJ5D-20R01	2.000	1.57	7	0.750	0.312	Yes	1.2
KJ6D-30R01	3.000	1.75	9	1.000	0.375	Yes	.4

HIPOSTRIO™ 06 INSERTS FORMERLY GOLD-TRIO

R P HR

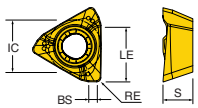
THES06





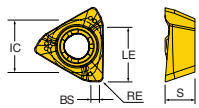
THES06_P





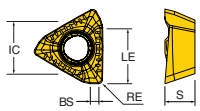
THLS06





THLS06_HR





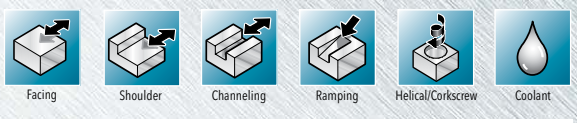
Part Number	Application	RE Corner Radius	BS Wiper Length	LE Cutting Edge Length	IC Inscribed Circle Diameter	S Thickness	Grade	IN10K	IN2035	IN2504	IN2505	IN2510	IN2530	IN2540	IN4030
THES060404R	Multi-Purpose; Ground Periphery	0.015 R	0.051	0.270	0.272	0.157					•				
THES060408R	Multi-Purpose; Ground Periphery	0.031 R	0.035	0.270	0.272	0.157					•				
THES060404FR-P	Grd/Pol for Al	0.015 R	0.051	0.270	0.272	0.157		•							
THES060408FR-P	Grd/Pol for Al	0.031 R	0.035	0.270	0.272	0.157		•							
THLS060404R	Multi-Purpose	0.015 R	0.051	0.270	0.272	0.157				•	•	•	•		
THLS060408R	Multi-Purpose	0.031 R	0.035	0.270	0.272	0.157				•	•	•	•	•	•
THLS060416R	Multi-Purpose	0.062 R	0.022	0.270	0.272	0.157				•	•				
THLS060404R-HR	SS/Hi-Temp/Ti	0.015 R	0.051	0.270	0.272	0.157			•						
THLS060408R-HR	SS/Hi-Temp/Ti	0.031 R	0.035	0.270	0.272	0.157			•		•		•		

HIPOSTRIO™ 06 HARDWARE FORMERLY GOLD-TRIO

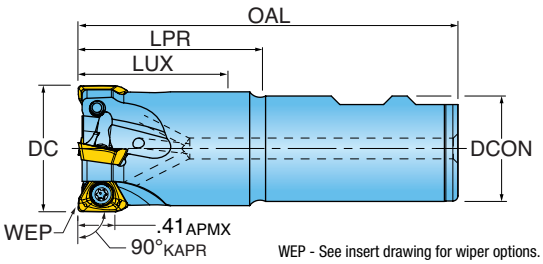
	 Insert Screw	 Screw Driver	 Retention Bolt	 Retention Bolt w/Coolant	 Wrench	 **OPTIONAL** Torque Driver Handle	 **OPTIONAL** Preset Torque Bit	 **OPTIONAL** Torque Driver Bit
1KJ1D-0601279R01	SM25-065-R0	DS-T08W	-	-	-	DS-A00-.25-S	DT-11-.25	DS-TP08B
1KJ1D-0702084R01	SM25-065-R0	DS-T08W	-	-	-	DS-A00-.25-S	DT-11-.25	DS-TP08B
1KJ1D-0701184R01	SM25-065-R0	DS-T08W	-	-	-	DS-A00-.25-S	DT-11-.25	DS-TP08B
1KJ1D-0701784R01	SM25-065-R0	DS-T08W	-	-	-	DS-A00-.25-S	DT-11-.25	DS-TP08B
1KJ1D-0703084R01	SM25-065-R0	DS-T08W	-	-	-	DS-A00-.25-S	DT-11-.25	DS-TP08B
1KJ1D-0801784R01	SM25-065-R0	DS-T08W	-	-	-	DS-A00-.25-S	DT-11-.25	DS-TP08B
1KJ1D-1001780R01	SM25-065-R0	DS-T08W	-	-	-	DS-A00-.25-S	DT-11-.25	DS-TP08B
1KJ1D-1001784R01	SM25-065-R0	DS-T08W	-	-	-	DS-A00-.25-S	DT-11-.25	DS-TP08B
1KJ1D-1003780R01	SM25-065-R0	DS-T08W	-	-	-	DS-A00-.25-S	DT-11-.25	DS-TP08B
1KJ1D-1003784R01	SM25-065-R0	DS-T08W	-	-	-	DS-A00-.25-S	DT-11-.25	DS-TP08B
1KJ1D-1201780R01	SM25-065-R0	DS-T08W	-	-	-	DS-A00-.25-S	DT-11-.25	DS-TP08B
1KJ1D-1201784R01	SM25-065-R0	DS-T08W	-	-	-	DS-A00-.25-S	DT-11-.25	DS-TP08B
1KJ1D-1501780R01	SM25-065-R0	DS-T08W	-	-	-	DS-A00-.25-S	DT-11-.25	DS-TP08B
1KJ1D-1501784R01	SM25-065-R0	DS-T08W	-	-	-	DS-A00-.25-S	DT-11-.25	DS-TP08B
1KJ1D-1502281R01	SM25-065-R0	DS-T08W	-	-	-	DS-A00-.25-S	DT-11-.25	DS-TP08B
1KJ1D-07015X6R01	SM25-065-R0	DS-T08W	-	-	615MM	DS-A00-.25-S	DT-11-.25	DS-TP08B
1KJ1D-10015X7R01	SM25-065-R0	DS-T08W	-	-	617MM	DS-A00-.25-S	DT-11-.25	DS-TP08B
1KJ1D-10015X7R02	SM25-065-R0	DS-T08W	-	-	617MM	DS-A00-.25-S	DT-11-.25	DS-TP08B
1KJ1D-12017X8R02	SM25-065-R0	DS-T08W	-	-	622MM	DS-A00-.25-S	DT-11-.25	DS-TP08B
1KJ1D-15017X8R01	SM25-065-R0	DS-T08W	-	-	622MM	DS-A00-.25-S	DT-11-.25	DS-TP08B
KJ5D-15R01	SM25-065-R0	DS-T08W	SD-04-46	-	-	DS-A00-.25-S	DT-11-.25	DS-TP08B
KJ5D-20R01	SM25-065-R0	DS-T08W	SD-06-46	SD-06-89	-	DS-A00-.25-S	DT-11-.25	DS-TP08B
KJ6D-30R01	SM25-065-R0	DS-T08W	SD-08-46	SD-08-92	-	DS-A00-.25-S	DT-11-.25	DS-TP08B

HIPOSTRIO™ 10 SERIES 1KJ1G (WELDON SHANK) FORMERLY GOLDTRIO

90° END MILL (10MM INSERT)





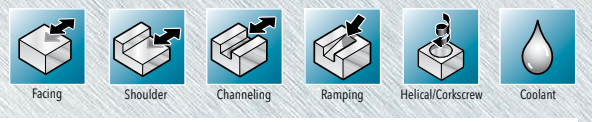


WEP - See insert drawing for wiper options.

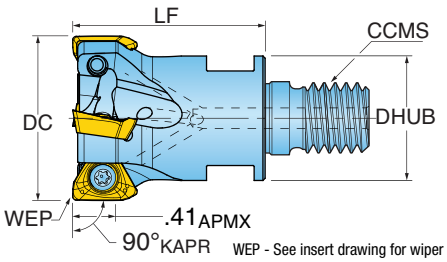
Part Number	DC Cutting Diameter	LUX Usable Length Max.	LPR Protruding Length	OAL Overall Length	ZEFF Effective Teeth	DCON Shank Diameter	CSP Coolant	RMPX Ramp Angle Max.
1KJ1G-1201784R01	1.250	1.75	1.75	3.75	3	0.750	Yes	2.3
1KJ1G-1202281R01	1.250	2.05	2.25	4.50	2	1.250	Yes	2.3
1KJ1G-1202281R02	1.250	2.05	2.25	4.50	3	1.250	Yes	2.3
1KJ1G-1204281R01	1.250	4.05	4.25	6.50	3	1.250	Yes	0
1KJ1G-1502281R01	1.500	2.20	2.25	4.50	3	1.250	Yes	1.8
1KJ1G-1502281R02	1.500	2.20	2.25	4.50	4	1.250	Yes	1.8
1KJ1G-1504281R01	1.500	4.25	4.25	6.50	3	1.250	Yes	0
1KJ1G-2002281R01	2.000	2.25	2.25	4.50	5	1.250	Yes	1.5

HIPOSTRIO™ 10 SERIES 1KJ1G (TOP•ON M-ADAPTION STYLE) FORMERLY GOLDTRIO

90° MODULAR END MILL (10MM INSERT)







WEP - See insert drawing for wiper options.

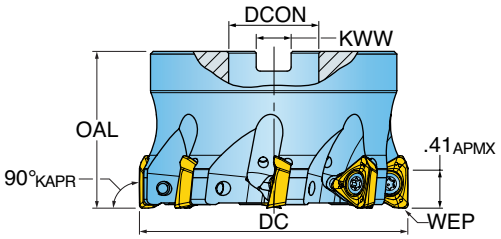
Part Number	DC Cutting Diameter	LF Functional Length	ZEFF Effective Teeth	CCMS Connection Code	DHUB Hub Diameter	CSP Coolant	RMPX Ramp Angle Max.
1KJ1G-12017X8R01	1.250	1.50	3	TopOn M16	1.13	Yes	2.3
1KJ1G-15017X8R01	1.500	1.75	4	TopOn M16	1.13	Yes	1.8

HIPOSTRIO™ 10 SERIES KJ5G, KJ6G FORMERLY GOLD-TRIO

90° FACE MILL (10MM INSERT)

Facing | Shoulder | Channeling | Ramping | Helical/Corkscrew | Coolant





WEP - See insert drawing for wiper options.

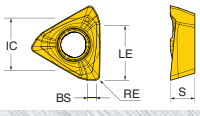
Part Number	DC Cutting Diameter	OAL Overall Length	ZEFF Effective Teeth	DCON Bore Diameter	KWW Keyway	CSP Coolant	RMPX Ramp Angle Max.
KJ6G-15R01	1.500	1.375	4	0.500	0.250	Yes	1.4
KJ5G-20R01	2.000	1.570	5	0.750	0.312	Yes	1.5
KJ6G-20R01	2.000	1.570	3	0.750	0.312	Yes	.8
KJ5G-25R01	2.500	1.570	6	0.750	0.312	Yes	1.1
KJ5G-30R01	3.000	1.750	8	1.000	0.375	Yes	.8
KJ6G-30R01	3.000	1.750	5	1.000	0.375	Yes	.8
KJ6G-30R02	3.000	1.750	3	1.000	0.375	Yes	.8
KJ5G-40R02	4.000	2.375	10	1.500	0.625	Yes	.6
KJ6G-40R02	4.000	2.375	8	1.500	0.625	Yes	.6
KJ6G-50R02	5.000	2.375	11	1.500	0.625	Yes	.5

HIPOSTRIO™ 10 INSERTS FORMERLY GOLDTRIO

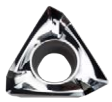
R P HR

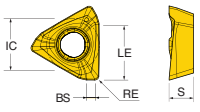
THES10





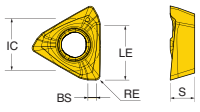
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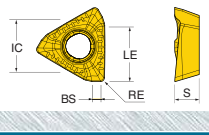
THLS10





THLS10_HR





Part Number	Application	RE Corner Radius	BS Wiper Length	LE Cutting Edge Length	IC Inscribed Circle Diameter	S Thickness	Grade	IN10K	IN2035	IN2504	IN2505	IN2510	IN2530	IN2540	IN4030
THES100504R	Multi-Purpose; Ground Periphery	0.015 R	0.078	0.430	0.421	0.197					•				
THES100508R	Multi-Purpose; Ground Periphery	0.031 R	0.062	0.430	0.421	0.197					•				
THES100516R	Multi-Purpose; Ground Periphery	0.062 R	0.031	0.430	0.421	0.197					•				
THES100504FR-P	Grd/Pol for Al	0.015 R	0.078	0.430	0.421	0.197		•							
THES100508FR-P	Grd/Pol for Al	0.031 R	0.062	0.430	0.421	0.197		•							
THLS100508R	Multi-Purpose	0.031 R	0.062	0.430	0.421	0.197			•	•	•	•	•	•	•
THLS100516R	Multi-Purpose	0.062 R	0.031	0.430	0.421	0.197				•	•				
THLS100524R	Multi-Purpose	0.094 R	0.020	0.430	0.421	0.197					•				
THLS100508R-HR	SS/Hi-Temp/Ti	0.031 R	0.062	0.430	0.421	0.197			•		•		•		

HIPOSTRIO™ 10 HARDWARE FORMERLY GOLDTRIO

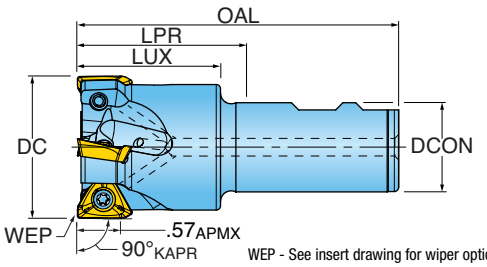
	 Insert Screw	 Driver Handle	 Torx Driver Blade	 Retention Bolt	 Retention Bolt w/Coolant	 Wrench	 **OPTIONAL** Torque Driver Handle	 **OPTIONAL** Torque Driver Bit	 **OPTIONAL** Preset Torque Bit
1KJ1G-1201784R01	SM40-100-R0	DS-A00T	DS-T156B	-	-	-	DS-A00-.25-T	DS-T15B1	DT-35-.25
1KJ1G-1202281R01	SM40-100-R0	DS-A00T	DS-T156B	-	-	-	DS-A00-.25-T	DS-T15B1	DT-35-.25
1KJ1G-1202281R02	SM40-100-R0	DS-A00T	DS-T156B	-	-	-	DS-A00-.25-T	DS-T15B1	DT-35-.25
1KJ1G-1204281R01	SM40-100-R0	DS-A00T	DS-T156B	-	-	-	DS-A00-.25-T	DS-T15B1	DT-35-.25
1KJ1G-1502281R01	SM40-100-R0	DS-A00T	DS-T156B	-	-	-	DS-A00-.25-T	DS-T15B1	DT-35-.25
1KJ1G-1502281R02	SM40-100-R0	DS-A00T	DS-T156B	-	-	-	DS-A00-.25-T	DS-T15B1	DT-35-.25
1KJ1G-1504281R01	SM40-100-R0	DS-A00T	DS-T156B	-	-	-	DS-A00-.25-T	DS-T15B1	DT-35-.25
1KJ1G-2002281R01	SM40-100-R0	DS-A00T	DS-T156B	-	-	-	DS-A00-.25-T	DS-T15B1	DT-35-.25
1KJ1G-12017X8R01	SM40-100-R0	DS-A00T	DS-T156B	-	-	622MM	DS-A00-.25-T	DS-T15B1	DT-35-.25
1KJ1G-15017X8R01	SM40-100-R0	DS-A00T	DS-T156B	-	-	622MM	DS-A00-.25-T	DS-T15B1	DT-35-.25
KJ6G-15R01	SM40-100-R0	DS-A00T	DS-T156B	SE04-15	-	-	DS-A00-.25-T	DS-T15B1	DT-35-.25
KJ5G-20R01	SM40-100-R0	DS-A00T	DS-T156B	SD-06-46	SD-06-89	-	DS-A00-.25-T	DS-T15B1	DT-35-.25
KJ6G-20R01	SM40-100-R0	DS-A00T	DS-T156B	SD-06-46	SD-06-89	-	DS-A00-.25-T	DS-T15B1	DT-35-.25
KJ5G-25R01	SM40-100-R0	DS-A00T	DS-T156B	SD-06-46	SD-06-89	-	DS-A00-.25-T	DS-T15B1	DT-35-.25
KJ5G-30R01	SM40-100-R0	DS-A00T	DS-T156B	SD-08-46	SD-08-92	-	DS-A00-.25-T	DS-T15B1	DT-35-.25
KJ6G-30R01	SM40-100-R0	DS-A00T	DS-T156B	SD-08-46	SD-08-92	-	DS-A00-.25-T	DS-T15B1	DT-35-.25
KJ6G-30R02	SM40-100-R0	DS-A00T	DS-T156B	SD-08-46	SD-08-92	-	DS-A00-.25-T	DS-T15B1	DT-35-.25
KJ5G-40R01	SM40-100-R0	DS-A00T	DS-T156B	SD-12-89	SD-12-99	-	DS-A00-.25-T	DS-T15B1	DT-35-.25
KJ6G-40R01	SM40-100-R0	DS-A00T	DS-T156B	SD-12-89	SD-12-99	-	DS-A00-.25-T	DS-T15B1	DT-35-.25
KJ6G-50R01	SM40-100-R0	DS-A00T	DS-T156B	SD-12-89	SD-12-99	-	DS-A00-.25-T	DS-T15B1	DT-35-.25

HIPOSTRIO™ 13 SERIES 1KJ1P (WELDON SHANK) FORMERLY GOLDTRIO

90° END MILL (13MM INSERT)

Facing | Shoulder | Channeling | Ramping | Helical/Corkscrew | Coolant





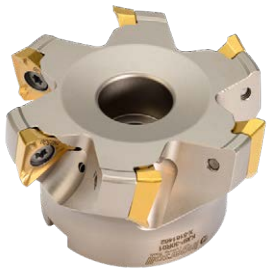
WEP - See insert drawing for wiper options.

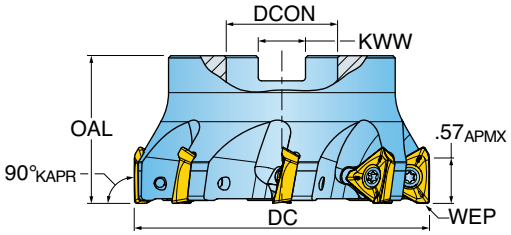
Part Number	DC Cutting Diameter	LUX Usable Length Max.	LPR Protruding Length	OAL Overall Length	ZEFF Effective Teeth	DCON Shank Diameter	CSP Coolant	RMPX Ramp Angle Max.
1KJ1P-2002281R01	2.000	2.00	2.25	4.50	4	1.250	Yes	1.5

HIPOSTRIO™ 13 SERIES KJ5P, KJ6P FORMERLY GOLDTRIO

90° FACE MILL (13MM INSERT)

Facing | Shoulder | Channeling | Ramping | Helical/Corkscrew | Coolant





WEP - See insert drawing for wiper options.

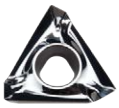
Part Number	DC Cutting Diameter	OAL Overall Length	ZEFF Effective Teeth	DCON Bore Diameter	KWW Keyway	CSP Coolant	RMPX Ramp Angle Max.
KJ5P-20R01	2.000	1.750	5	.750	0.312	Yes	1.5
KJ6P-20R01	2.000	1.750	4	.750	0.312	Yes	1.5
KJ5P-25R01	2.500	1.750	6	.750	0.312	Yes	1.5
KJ5P-30R01	3.000	1.750	7	1.000	0.375	Yes	1.0
KJ6P-30R01	3.000	1.750	6	1.000	0.375	Yes	1.0
KJ5P-40R02	4.000	2.375	8	1.500	0.625	Yes	.7
KJ6P-40R02	4.000	2.375	6	1.500	0.625	Yes	.7
KJ6P-50R02	5.000	2.000	9	1.500	0.625	Yes	.8
KJ5P-60R01	6.000	2.000	12	1.500	0.625	No	.6
KJ6P-60R01	6.000	2.000	8	1.500	0.625	No	.6
KJ6P-65R01*	6.500	2.000	10	1.500	0.625	No	.4

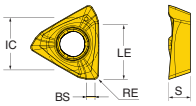
* Ideal for Boring Mills with a 6.0 Quill.

HIPOSTRIO™ 13 INSERTS FORMERLY GOLDTRIO

R P HR

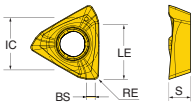
THES13_P





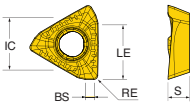
THLS13





THLS13_HR





Part Number	Application	RE Corner Radius	BS Wiper Length	LE Cutting Edge Length	IC Inscribed Circle Diameter	S Thickness	Grade	IN10K	IN2035	IN2505	IN2510	IN2530	IN2540	IN4030
THES130604FR-P	Grd/Pol for Al	0.015 R	0.078	0.590	0.531	0.236		•						
THES130608FR-P	Grd/Pol for Al	0.031 R	0.078	0.590	0.531	0.236		•						
THLS130608R	Multi-Purpose	0.031 R	0.078	0.590	0.531	0.236				•	•	•	•	•
THLS130616R	Multi-Purpose	0.062 R	0.047	0.590	0.531	0.236				•		•		
THLS130624R	Multi-Purpose	0.094 R	0.024	0.590	0.531	0.236				•				
THLS130632R	Multi-Purpose	0.125 R	0.020	0.590	0.531	0.236				•				
THLS130608R-HR	SS/Hi-Temp/Ti	0.031 R	0.078	0.590	0.531	0.236			•	•		•		
THLS130616R-HR	SS/Hi-Temp/Ti	0.062 R	0.047	0.590	0.531	0.236			•					
THLS130624R-HR	SS/Hi-Temp/Ti	0.094 R	0.024	0.590	0.531	0.236			•					
THLS130632R-HR	SS/Hi-Temp/Ti	0.125 R	0.020	0.590	0.531	0.236			•					

HIPOSTRIO™ 13 HARDWARE FORMERLY GOLDTRIO

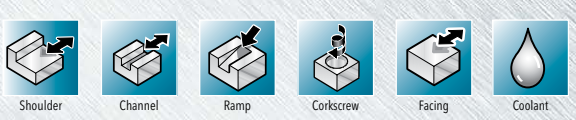
	 Insert Screw	 Driver Handle	 Torx Driver Blade	 Retention Bolt	 Retention Bolt w/Coolant	 **OPTIONAL** Torque Driver Handle	 **OPTIONAL** Torque Driver Bit	 **OPTIONAL** Preset Torque Bit
1KJ1P-2002281R01	SM45-120-R0	DS-A00T	DS-T206B	-	-	DS-A00-.25-T	DS-T20B1	DT-44-.25
KJ5P-20R01	SM45-100-R0	DS-A00T	DS-T206B	SB-04-15	-	DS-A00-.25-T	DS-T20B1	DT-44-.25
KJ6P-20R01	SM45-100-R0	DS-A00T	DS-T206B	SB-04-15	-	DS-A00-.25-T	DS-T20B1	DT-44-.25
KJ5P-25R01	SM45-120-R0	DS-A00T	DS-T206B	SD-06-47	SD-06-89	DS-A00-.25-T	DS-T20B1	DT-44-.25
KJ5P-30R01	SM45-120-R0	DS-A00T	DS-T206B	SD-08-47	SD-08-92	DS-A00-.25-T	DS-T20B1	DT-44-.25
KJ6P-30R01	SM45-120-R0	DS-A00T	DS-T206B	SD-08-46	SD-08-92	DS-A00-.25-T	DS-T20B1	DT-44-.25
KJ5P-40R02	SM45-120-R0	DS-A00T	DS-T206B	-	SD-12-99	DS-A00-.25-T	DS-T20B1	DT-44-.25
KJ6P-40R02	SM45-120-R0	DS-A00T	DS-T206B	-	SD-12-99	DS-A00-.25-T	DS-T20B1	DT-44-.25
KJ6P-50R02	SM45-120-R0	DS-A00T	DS-T206B	-	SD-12-99	DS-A00-.25-T	DS-T20B1	DT-44-.25
KJ5P-60R01	SM45-120-R0	DS-A00T	DS-T206B	-	-	DS-A00-.25-T	DS-T20B1	DT-44-.25
KJ6P-60R01	SM45-120-R0	DS-A00T	DS-T206B	-	-	DS-A00-.25-T	DS-T20B1	DT-44-.25
KJ6P-65R01	SM45-120-R0	DS-A00T	DS-T206B	-	-	DS-A00-.25-T	DS-T20B1	DT-44-.25

MINI SIZED 90° SHOULDER AND HIGH-FEED MILLS WITH STRONG V-SHAPED INSERT

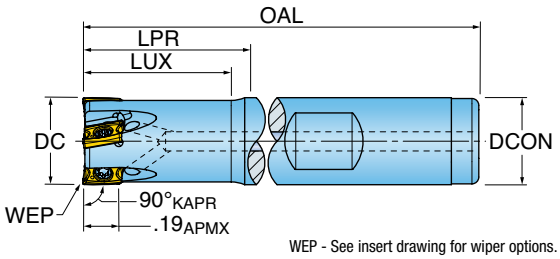
- FNKT-M is for 90°roughing, FNKT-L is for 90° finishing with lower cutting forces & UNKT-HF is for Hi-Feed Roughing
- 90° and Hi-Feed inserts fit the same pockets
- Integrated wiper flats produce 32-63 Ra surface finishes
- V-Bottom pocket fosters easy insert indexing, increased core diameter and minimizes insert screw stress
- High cutter densities with small IC insert sizes
- All cutters are plumbed with coolant through the tool
- Economical solid carbide alternative!

HIPOSSFEEDV™ 05 SERIES 12J1A (WELDON SHANK)

90° END MILL (5MM INSERT)







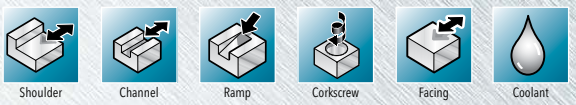
WEP - See insert drawing for wiper options.

Part Number	DC Cutting Dia.	LUX Usable Length Max.	LPR Protruding Length	OAL Overall Length	ZEFF Eff. Teeth	DCON Shank Dia.
12J1A-0300977R01	0.375	0.90	0.94	2.50	3	0.375
12J1A-0400978R01	0.437	0.93	0.97	2.75	3	0.500
12J1A-0500978R01	0.500	0.93	0.97	2.75	4	0.500
12J1A-0501079R01	0.500	1.05	1.09	3.00	4	0.625

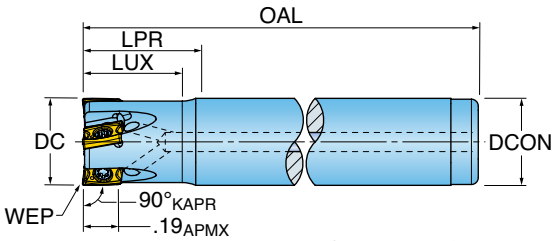
When using Hi-Feed Insert, modify body corner to R.070.

HIPOSSFEEDV™ 05 SERIES 12J1A (CYLINDRICAL SHANK)

90° END MILL (5MM INSERT)







WEP - See insert drawing for wiper options.

Part Number	DC Cutting Dia.	LUX Usable Length Max.	LPR Protruding Length	OAL Overall Length	ZEFF Eff. Teeth	DCON Shank Dia.
12J1A-02005R6R01	0.250	0.45	1.08	2.50	1	0.250
12J1A-03005R7R01	0.312	0.45	1.08	2.50	2	0.312
12J1A-03006R8R01	0.375	0.60	1.08	2.50	3	0.375
12J1A-04006S4R01	0.437	0.60	1.22	3.00	3	0.500
12J1A-05006S4R01	0.500	0.60	1.22	3.00	4	0.500

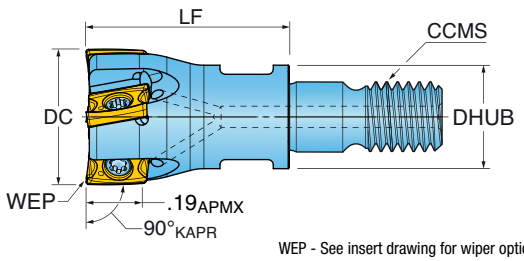
When using Hi-Feed Insert, modify body corner to R.070.
Designed with modification in mind. Extend usable length by turning back the neck diameter or shorten the overall length by cutting off back end.

HIPOSSFEEDV™ 05 SERIES 12J1A (TOP•ON STYLE)

90° MODULAR END MILL (5MM INSERT)







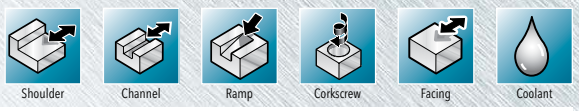
WEP - See insert drawing for wiper options.

Part Number	DC Cutting Diameter	APMX Depth of Cut Max.	LF Functional Length	ZEFF Effective Teeth	KAPR Cutting Edge Angle	CCMS Connection Code	DHUB Hub Diameter
12J1A-05007X4R01	0.500	0.190	0.75	4	90	TopOn M06	0.38

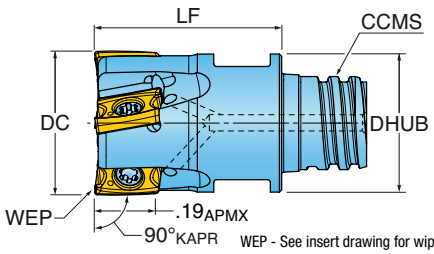
When using Hi-Feed Insert, modify body corner to R.070.

HIPOSSFEEDV™ 05 SERIES 12J1A (CHIP•SURFER STYLE)

90° MODULAR END MILL (5MM INSERT)







WEP - See insert drawing for wiper options.

Part Number	DC Cutting Diameter	LF Functional Length	ZEFF Effective Teeth	CCMS Connection Code	DHUB Hub Diameter
12J1A-03006T6R01	0.375	0.63	3	Chip Surfer T06	0.36
12J1A-05006T8R01	0.500	0.65	4	Chip Surfer T08	0.48

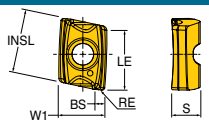
When using Hi-Feed Insert, modify body corner to R.070.

HIPOSSFEEDV™ 05 INSERTS



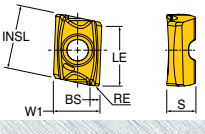
FNKT05_M





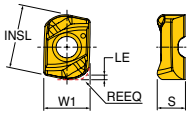
FNHT05_L





UNKT05_HF





Part Number	Application	RE Corner Radius	BS Wiper Length	LE Cutting Edge Eff. Length	INSL Insert Length	W1 Insert Width	S Thickness	NOI Number of Indexes	IH Insert Hand	Grade	IN2505	IN2530	IN2005
FNKT050202R-M	Multi-Purpose	0.008	0.013	0.190	0.248	0.165	0.102	2	Right		•	•	
FNHT050202R-L	Multi-Purpose, Keen Edge	0.008	0.013	0.190	0.248	0.165	0.102	2	Right		•	•	•

Part Number	Application	REEQ Program Radius Equivalent	LE Cutting Edge Eff. Length	INSL Insert Length	W1 Insert Width	S Thickness	NOI Number of Indexes	IH Insert Hand	Grade	IN2505	IN2530	IN2504
UNKT0502TR-HF	Hi-Feed	0.030	0.019	0.216	0.165	0.098	2	Right		•	•	•

HIPOSSFEEDV™ 05 HARDWARE

			 **OPTIONAL**	 **OPTIONAL**	 **OPTIONAL**	 **OPTIONAL**	 **OPTIONAL**
	Screw	Driver	Thin Wrench	Torque Wrench	Torque Driver Handle	Torque Driver Bit	Preset Torque Bit
12J1A-0300977R01	SM18-033-00	DS-TP06S-NEU	-	-	DS-A00-.25-S	DT-06-.25	DS-TP06B
12J1A-0400978R01	SM18-033-00	DS-TP06S-NEU	-	-	DS-A00-.25-S	DT-06-.25	DS-TP06B
12J1A-0500978R01	SM18-033-00	DS-TP06S-NEU	-	-	DS-A00-.25-S	DT-06-.25	DS-TP06B
12J1A-0501079R01	SM18-033-00	DS-TP06S-NEU	-	-	DS-A00-.25-S	DT-06-.25	DS-TP06B
12J1A-02005R6R01	SM18-033-00	DS-TP06S-NEU	-	-	DS-A00-.25-S	DT-06-.25	DS-TP06B
12J1A-03005R7R01	SM18-033-00	DS-TP06S-NEU	-	-	DS-A00-.25-S	DT-06-.25	DS-TP06B
12J1A-03006R8R01	SM18-033-00	DS-TP06S-NEU	-	-	DS-A00-.25-S	DT-06-.25	DS-TP06B
12J1A-04006S4R01	SM18-033-00	DS-TP06S-NEU	-	-	DS-A00-.25-S	DT-06-.25	DS-TP06B
12J1A-05006S4R01	SM18-033-00	DS-TP06S-NEU	-	-	DS-A00-.25-S	DT-06-.25	DS-TP06B
12J1A-05007X4R01	SM18-033-00	DS-TP06S-NEU	-	-	DS-A00-.25-S	DT-06-.25	DS-TP06B
12J1A-03006T6R01	SM18-033-00	DS-TP06S-NEU	WS-0029	DT-90-08	DS-A00-.25-S	DT-06-.25	DS-TP06B
12J1A-05006T8R01	SM18-033-00	DS-TP06S-NEU	WS-0030	DT-130-10	DS-A00-.25-S	DT-06-.25	DS-TP06B

THE EXPANSION OF OUR MOST POPULAR HIGH-FEED MILLING LINE TO INCLUDE TWO NEW PRODUCT FAMILIES

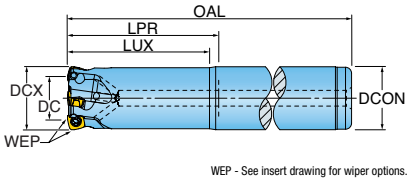
- 3 distinct insert geometries provide an optimal solution across all material classes and application types
- Ingeniously designed insert mounting for reliabile and fast feed-rates
- All inserts include radial wipers for smooth profiling, shouldering and hole interpolation which can eliminate secondary operations
- End mills and face mills incorporating 5 distinct insert sizes and cutter diameters ranging from .375"- 7.000"
- GoldSFeed is the most complete and extensive High-Feed milling line in metalworking

GOLDSFEED™ 04 SERIES 15G1B (CYLINDRICAL SHANK)

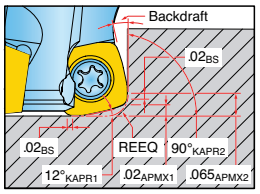
HIGH FEED END MILLS (4MM INSERT)







WEP - See insert drawing for wiper options.

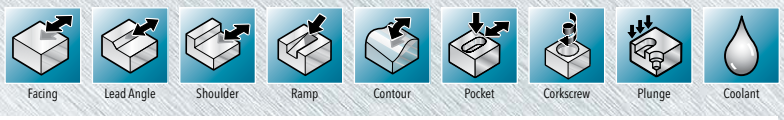


Part Number	DCX Cutting Dia. Max.	DC Cutting Dia.	LUX Usuable Length Max.	LPR Protruding Length	REEQ Program Radius Equivalent	OAL Overall Length	ZEFF Effective Teeth	DCON Shank Dia.	RMPX Ramp Angle Max.
15G1B-03015R8R01	0.375	0.167	1.300	1.500	0.043	2.920	2	0.375	1.8
15G1B-05015S4R01	0.500	0.291	1.300	1.500	0.042	3.280	3	0.500	4.7
15G1B-06015S6R01	0.625	0.415	1.300	1.500	0.042	3.410	4	0.625	3
15G1B-07015S7R01	0.750	0.540	1.300	1.500	0.042	3.500	5	0.750	2.2

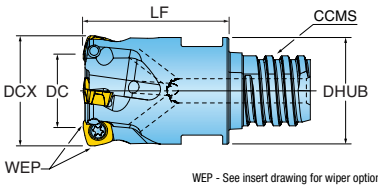
Insert screw tightening torque: 10-14 in*lb.

GOLDSFEED™ 04 SERIES 15G1B (CHIP•SURFER STYLE)

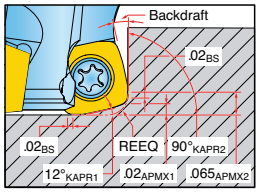
HIGH FEED END MILLS (4MM INSERT)







WEP - See insert drawing for wiper options.



Part Number	DCX Cutting Dia. Max.	DC Cutting Dia.	LF Functional Length	ZEFF Effective Teeth	REEQ Program Radius Equivalent	DHUB Hub Dia.	CCMS Connection Code Machine Side	RMPX Ramp Angle Max.
15G1B-03006T6R01	0.375	0.167	0.669	2	0.043	0.369	Chip Surfer T06	1.8
15G1B-05007T8R01	0.500	0.291	0.748	3	0.042	0.485	Chip Surfer T08	4.7
15G1B-06008TRR01	0.625	0.415	0.827	4	0.042	0.605	Chip Surfer T10	3
15G1B-07010TSR01	0.750	0.540	1.024	5	0.042	0.725	Chip Surfer T12	2.2

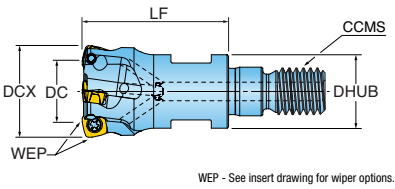
Insert screw tightening torque: 10-14 in*lb.

GOLDSFEED™ 04 SERIES 15G1B (TOP•ON STYLE)

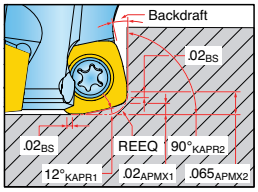
HIGH FEED END MILLS (4MM INSERT)







WEP - See insert drawing for wiper options.



Part Number	DCX Cutting Dia. Max.	DC Cutting Dia.	LF Functional Length	ZEFF Effective Teeth	REEQ Program Radius Equivalent	DHUB Hub Dia.	CCMS Connection Code Machine Side	RMPX Ramp Angle Max.
15G1B-05007X4R01	0.500	0.291	0.75	3	0.042	0.465	TopOn M06	4.7
15G1B-06010X5R01	0.625	0.415	1.00	4	0.042	0.505	TopOn M08	3
15G1B-07010X6R01	0.750	0.540	1.00	5	0.043	0.704	TopOn M10	2.2

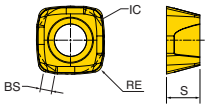
Insert screw tightening torque: 10-14 in*lb.

GOLDSFEED™ 04 INSERTS



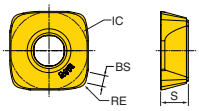
SDXS0402MPR-MM





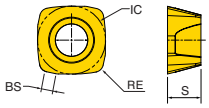
SDXS0402MPR-MR





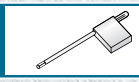
SDXS0402MPR-MR1





Part Number	Application	RE Corner Radius	BS Wiper Length	IC Inscribed Circle	S Thickness	IH Insert Hand	Grade IN2505	Grade IN2530
SDXS0402MPR-MM	Hi-Feed, Positive Geometry	0.021	0.022	04 mm	0.079	Right	•	•
SDXS0402MPR-MR	High Feed, Heavy Duty	0.021	0.022	04 mm	0.079	Right	•	•
SDXS0402MPR-MR1	Hi-Feed, Heavy-Duty Keen Edge	0.021	0.022	04 mm	0.079	Right	•	•

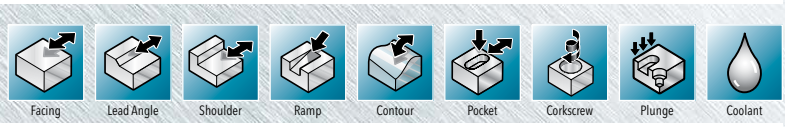
GOLDSFEED™ 04 HARDWARE

	 Driver	 Screw	
15G1B-03015R8R01	DS-TP06S-NEU	TS18034I/HG-P	
15G1B-05015S4R01	DS-TP06S-NEU	TS18034I/HG-P	
15G1B-06015S6R01	DS-TP06S-NEU	SM18-041-00	
15G1B-07015S7R01	DS-TP06S-NEU	SM18-041-00	
15G1B-03006T6R01	DS-TP06S-NEU	TS18034I/HG-P	
15G1B-05007T8R01	DS-TP06S-NEU	TS18034I/HG-P	
15G1B-06008TRR01	DS-TP06S-NEU	SM18-041-00	
15G1B-07010TSR01	DS-TP06S-NEU	SM18-041-00	
15G1B-05007X4R01	DS-TP06S-NEU	TS18034I/HG-P	
15G1B-06010X5R01	DS-TP06S-NEU	SM18-041-00	
15G1B-07010X6R01	DS-TP06S-NEU	SM18-041-00	

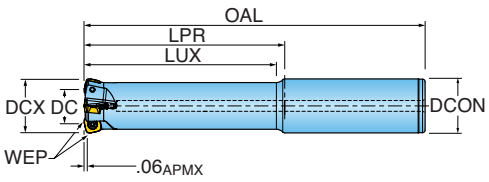
Insert screw tightening torque: 10-14 in*lb.

GOLDSFEED™ 09 SERIES 15G1F (CYLINDRICAL SHANK) FORMERLY GOLD-QUAD F

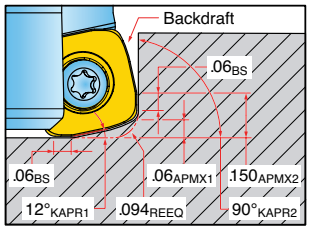
HIGH FEED END MILLS (9MM INSERT)







WEP - See insert drawing for wiper options.



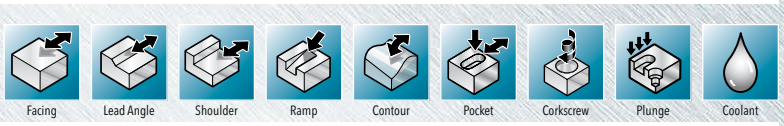
Part Number	DCX Cutting Dia. Max.	DC Cutting Dia.	LUX Usable Length Max.	LPR Protruding Length	OAL Overall Length	ZEFF Eff. Teeth	REEQ Program Radius Equivalent	KAPR Cutting Edge Angle	DCON Shank Dia.	RMPX Ramp Angle Max.
15G1F-10019S1R01	1.000	0.524	1.78	1.97	7.00	3	0.094	12.0	1.000	5.5
15G1F-10020S1R01	1.000	0.524	1.81	2.00	10.00	3	0.094	12.0	1.000	5.5
15G1F-12047S9R01	1.250	0.773	4.55	4.75	8.00	3	0.094	12.0	1.250	3.3
15G1F-12047S9R02	1.250	0.773	4.55	4.75	8.00	4	0.094	12.0	1.250	3.3
15G1F-15060S9R01	1.500	1.022	6.00	6.00	10.00	4	0.094	12.0	1.250	2.3
15G1F-15060S9R02	1.500	1.022	6.00	6.00	10.00	5	0.094	12.0	1.250	2.3

Insert screw tightening torque: 14-18 in*lb.

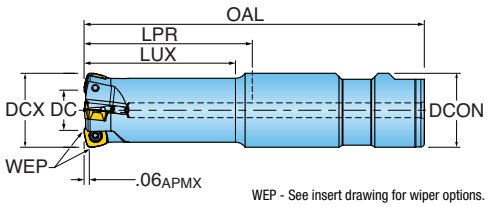
GOLDSFEED™ 09 SERIES 15G1F (WELDON SHANK)

FORMERLY GOLD-QUAD F

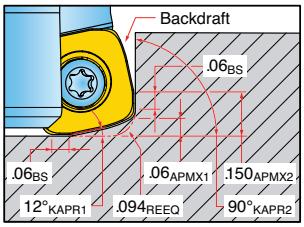
HIGH FEED END MILLS (9MM INSERT)







WEP - See insert drawing for wiper options.



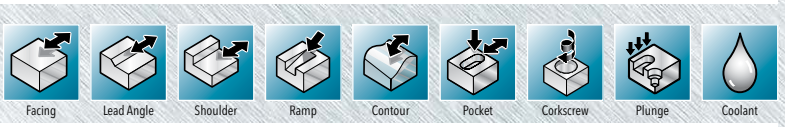
Part Number	DCX Cutting Dia. Max.	DC Cutting Dia.	LUX Usable Length Max.	LPR Protruding Length	OAL Overall Length	ZEFF Eff. Teeth	REEQ Program Radius Equivalent	KAPR Cutting Edge Angle	DCON Shank Dia.	RMPX Ramp Angle Max.
15G1F-12027E2R01	1.250	0.773	2.55	2.75	5.75	3	0.094	12°	1.250	3.3
15G1F-12027E2R02	1.250	0.773	2.55	2.75	5.75	4	0.094	12°	1.250	3.3
15G1F-12047E2R01	1.250	0.773	4.55	4.75	7.75	3	0.094	12°	1.250	3.3
15G1F-15016E2R01	1.500	1.022	1.69	1.69	6.00	4	0.094	12°	1.250	2.3
15G1F-15016E2R02	1.500	1.022	1.69	1.69	6.00	5	0.094	12°	1.250	2.3

Insert screw tightening torque: 14-18 in*lb.

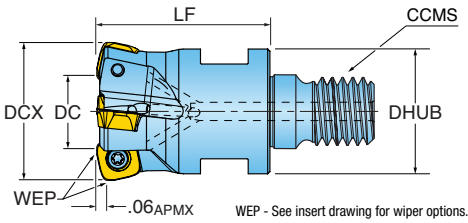
GOLDSFEED™ 09 SERIES 15G1F (TOP•ON STYLE)

FORMERLY GOLD-QUAD F

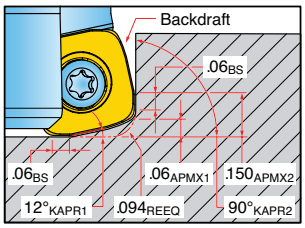
HIGH FEED END MILLS (9MM INSERT)







WEP - See insert drawing for wiper options.



Part Number	DCX Cutting Dia. Max.	DC Cutting Diameter	LF Functional Length	ZEFF Effective Teeth	REEQ Program Radius Equivalent	KAPR Cutting Edge Angle	DHUB Hub Diameter	CCMS Connection Code	RMPX Ramp Angle Max.
15G1F-10015X7R01	1.000	0.524	1.57	3	0.094	12.0	.82	TopOn M12	5.5
15G1F-12015X8R02	1.250	0.773	1.57	4	0.094	12.0	1.13	TopOn M16	3.3
15G1F-15017X9R01	1.500	1.022	1.57	5	0.094	12.0	1.42	TopOn M20	2.3

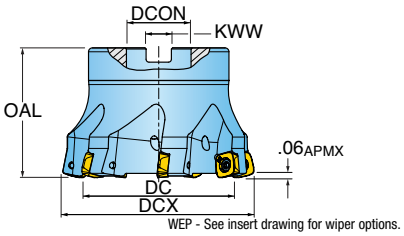
Insert screw tightening torque: 14-18 in*lb.

GOLDSFEED™ 09 SERIES 5G5F, 5G6F FORMERLY GOLD-QUAD F

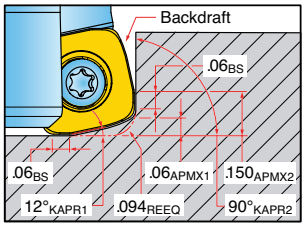
HIGH FEED FACE MILLS (9MM INSERT)

Facing | Lead Angle | Shoulder | Ramp | Contour | Pocket | Corkscrew | Plunge | Coolant





WEP - See insert drawing for wiper options.



Part Number	DCX Cutting Dia. Max.	DC Cutting Dia.	OAL Overall Length	ZEFF Eff. Teeth	REEQ Program Radius Equivalent	DCON Shank Dia.	KWW Keyway	RMPX Ramp Angle Max.
5G5F-20R01	2.000	1.521	1.97	7	0.094	0.750	0.31	1.5
5G6F-20R01	2.000	1.521	1.97	6	0.094	0.750	0.31	1.5
5G5F-25R01	2.500	2.020	1.97	8	0.094	0.750	0.31	1.1
5G5F-30R01	3.000	2.520	2.00	9	0.094	1.000	0.38	.8
5G6F-30R01	3.000	2.520	2.00	7	0.094	1.000	0.38	.8

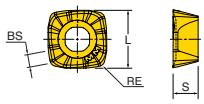
Insert screw tightening torque: 14-18 in*lb.

GOLDSFEED™ 09 INSERTS FORMERLY GOLD-QUAD F

MM | MR | MR1

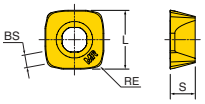
SDXS0904MPR-MM





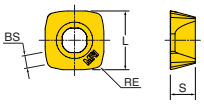
SDXS0904MPR-MR





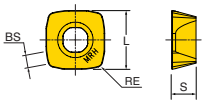
SDXS0904MPR-MR1





SDXS0904MPR-MRH





Part Number	Application	RE Corner Radius	BS Wiper Length	L Cutting Edge Length	S Thickness	Grade	IN2504	IN4005	IN2505	IN4030	IN2530	IN7035	IN4035	IN2535
SDXS0904MPR-MM	Multi-Purpose	.040	.060	.370	.158			•	•	•	•	•	•	•
SDXS0904MPR-MR	Heavy-Duty	.040	.060	.370	.158			•	•	•	•		•	•
SDXS0904MPR-MR1	Flat-Top, Keen Edge	.040	.060	.370	.158					•	•	•	•	•
SDXS0904MPR-MRH	Hardened Steels	.040	.060	.370	.158		•							

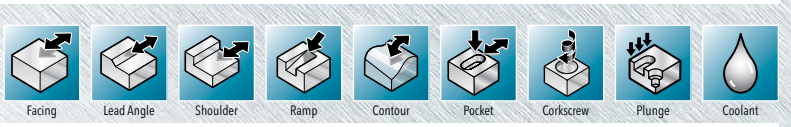
GOLDSFEED™ 09 HARDWARE FORMERLY GOLD-QUAD F

	 Insert Screw	 Driver	 Retention Bolt	 **OPTIONAL** Coolant Bolt	
15G1F-10019S1R01	SM30-075-R0	DS-T09W	-	-	
15G1F-10020S1R01	SM30-075-R0	DS-T09W	-	-	
15G1F-10015X7R01	SM30-075-R0	DS-T09W	-	-	
15G1F-12047S9R02	SM30-075-R0	DS-T09W	-	-	
15G1F-12047S9R01	SM30-075-R0	DS-T09W	-	-	
15G1F-12027E2R02	SM30-075-R0	DS-T09W	-	-	
15G1F-12027E2R01	SM30-075-R0	DS-T09W	-	-	
15G1F-12047E2R01	SM30-075-R0	DS-T09W	-	-	
15G1F-12015X8R02	SM30-075-R0	DS-T09W	-	-	
15G1F-15060S9R02	SM30-075-R0	DS-T09W	-	-	
15G1F-15060S9R01	SM30-075-R0	DS-T09W	-	-	
15G1F-15016E2R02	SM30-075-R0	DS-T09W	-	-	
15G1F-15016E2R01	SM30-075-R0	DS-T09W	-	-	
15G1F-15017X9R01	SM30-075-R0	DS-T09W	-	-	
5G5F-20R01	SM30-075-R0	DS-T09W	SD-06-48	SD06-A6	
5G6F-20R01	SM30-075-R0	DS-T09W	SD-06-48	SD06-A6	
5G5F-25R01	SM30-075-R0	DS-T09W	SD-06-48	SD06-A6	
5G5F-30R01	SM30-075-R0	DS-T09W	SD-08-47	SD-08-C9	
5G6F-30R01	SM30-075-R0	DS-T09W	SD-08-47	SD-08-C9	

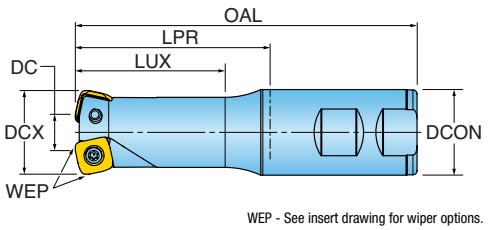
Insert screw tightening torque: 14-18 in*lb.

GOLDSFEED™ 13 SERIES 15M1P FORMERLY GOLD-QUAD F

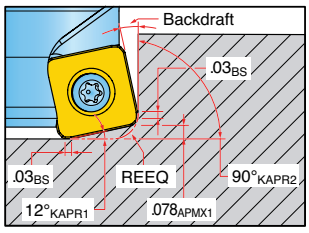
HIGH FEED END MILLS (13MM INSERT)







WEP - See insert drawing for wiper options.

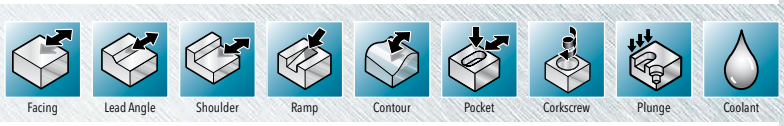


Part Number	DCX Cutting Dia. Max.	DC Cutting Dia.	LUX Usable Length Max.	LPR Protruding Length	OAL Overall Length	ZEFF Eff. Teeth	REEQ Program Radius Equivalent	DCON Shank Dia.	RMPX Ramp Angle Max.
15M1P-1202781R01	1.250	0.423	2.14	2.75	5.00	2	0.125	1.250 Weldon	4.7
15M1P-12047S9R01	1.250	0.423	4.18	4.75	8.00	2	0.125	1.250 Cylindrical	4.7
15M1P-1502786R01	1.500	0.673	2.19	2.75	5.41	3	0.125	1.500 Weldon	2.8
15M1P-1505386R01	1.500	0.673	4.77	5.34	8.00	3	0.125	1.500 Weldon	2.8

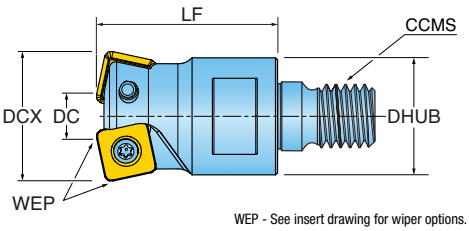
Insert screw tightening torque: 30-35 in*lb.

GOLDSFEED™ 13 SERIES 15M1P (TOP•ON STYLE) FORMERLY GOLD•QUAD F

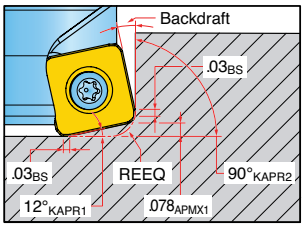
HIGH FEED END MILLS (13MM INSERT)







WEP - See insert drawing for wiper options.

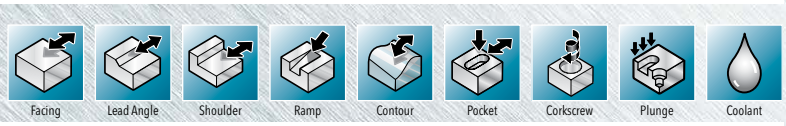


Part Number	DCX Cutting Dia. Max.	DC Cutting Diameter	APMX Depth of Cut Max.	LF Functional Length	ZEFF Effective Teeth	REEQ Program Radius Equivalent	DHUB Hub Diameter	CCMS Connection Code	RMPX Ramp Angle Max.
15M1P-12017X8R01	1.250	0.423	0.088	1.75	2	0.125	1.13	TopOn M16	4.7

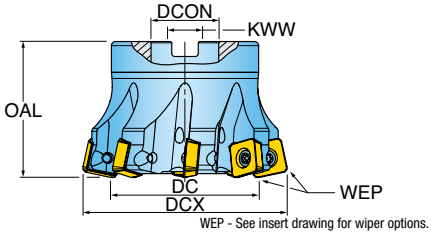
Insert screw tightening torque: 30-35 in*lb.

GOLDSFEED™ 13 SERIES 5M5P, 5M6P FORMERLY GOLD•QUAD F

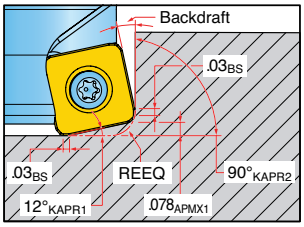
HIGH FEED END MILLS (13MM INSERT)







WEP - See insert drawing for wiper options.



Part Number	DCX* Cutting Dia. Max.	DC* Cutting Dia.	OAL* Overall Length	ZEFF Eff. Teeth	DCON Bore Dia.	KWW Keyway	RMPX* Ramp Angle Max.	REEQ* Program Radius Equivalent
5M5P-20R01	2.000	1.170	2.000	5	0.750	0.313	3.9	0.125
5M6P-20R01	2.000	1.170	2.000	4	0.750	0.313	3.9	0.125
5M5P-25R01	2.500	1.670	2.000	6	0.750	0.313	2.7	0.125
5M6P-25R01	2.500	1.670	2.000	5	0.750	0.313	2.7	0.125
5M5P-30R01	3.000	2.170	2.000	8	1.000	0.375	1.6	0.125
5M5P-30R02	3.000	2.170	2.000	8	1.250	0.500	1.6	0.125
5M6P-30R01	3.000	2.170	2.000	6	1.000	0.375	1.6	0.125
5M6P-30R02	3.000	2.170	2.000	6	1.250	0.500	1.6	0.125
5M5P-40R01	4.000	3.170	2.500	10	1.500	0.625	1.1	0.125
5M6P-40R01	4.000	3.170	2.500	8	1.500	0.625	1.1	0.125
5M5P-50R01	5.000	4.170	2.500	11	1.500	0.625	.8	0.125
5M6P-50R01	5.000	4.170	2.500	9	1.500	0.625	.8	0.125

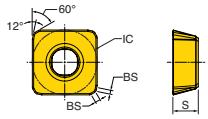
All of the above data is with insert SDES1305MDR installed. Please see Technical Literature for dimensions when using other inserts.
Insert screw tightening torque: 30-35 in*lb.

GOLDSFEED™ 13 INSERTS FORMERLY GOLD-QUAD F

MM MR MR1

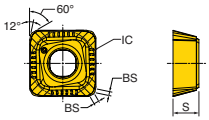
SDES1305MDR





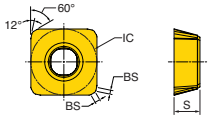
SDMS1305MDR-PH





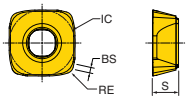
SDES1305MDR-001





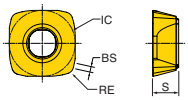
SDES1305MPR





SDES1305MPR-001





Part Number	Application	RE Corner Radius	BS Wiper Length	IC Inscribed Circle	S Thickness	Grade	IN2505	IN2530	IN4005	IN4030	IN4035
SDES1305MDR	Hi-Feed, Flat Face / Wiper - Facets	.125	0.030	13 mm	.200		•	•			
SDMS1305MDR-PH	Hi-Feed, Pos Precision / Wiper - Facets	.125	0.030	13 mm	.200		•	•	•	•	•
SDES1305MDR-001	Hi-Feed, Precision Flat Face / Wiper - Facets	.125	0.030	13 mm	.200		•	•			
SDES1305MPR	Hi-Feed, Heavy Duty - Standard	.140	0.060	13 mm	.200		•	•	•		•
SDES1305MPR-001	Hi-Feed, Heavy Duty - Precision	.140	0.060	13 mm	.200		•	•	•	•	•

GOLDSFEED™ 13 HARDWARE FORMERLY GOLD-QUAD F

	 Insert Screw	 Driver	 Driver Bit	 Retention Bolt	 **OPTIONAL** Coolant Bolt	
15M1P-1202781R01	SM40-100-R0	DS-A00T	BLD T15/S7	-	-	
15M1P-12047S9R01	SM40-100-R0	DS-A00T	BLD T15/S7	-	-	
15M1P-1502786R01	SM40-100-R0	DS-A00T	BLD T15/S7	-	-	
15M1P-1505386R01	SM40-100-R0	DS-A00T	BLD T15/S7	-	-	
15M1P-12017X8R01	SM40-100-R0	DS-A00T	BLD T15/S7	-	-	
5M5P-20R01	SM40-100-R0	DS-A00T	BLD T15/S7	SD-06-48	SD06-A6	
5M6P-20R01	SM40-100-R0	DS-A00T	BLD T15/S7	SD-06-48	SD06-A6	
5M5P-25R01	SM40-100-R0	DS-A00T	BLD T15/S7	SD-06-48	SD06-A6	
5M6P-25R01	SM40-100-R0	DS-A00T	BLD T15/S7	SD-06-48	SD06-A6	
5M5P-30R01	SM40-100-R0	DS-A00T	BLD T15/S7	SD-08-47	SD-08-92	
5M6P-30R01	SM40-100-R0	DS-A00T	BLD T15/S7	SD-08-47	SD-08-92	
5M5P-30R02	SM40-100-R0	DS-A00T	BLD T15/S7	SD-10-47	SD-10-99	
5M6P-30R02	SM40-100-R0	DS-A00T	BLD T15/S7	SD-10-47	SD-10-99	
5M5P-40R01	SM40-100-R0	DS-A00T	BLD T15/S7	SD-12-82	SD-12-99	
5M6P-40R01	SM40-100-R0	DS-A00T	BLD T15/S7	SD-12-82	SD-12-99	
5M5P-50R01	SM40-100-R0	DS-A00T	BLD T15/S7	SD-12-82	SD-12-99	
5M6P-50R01	SM40-100-R0	DS-A00T	BLD T15/S7	SD-12-82	SD-12-99	

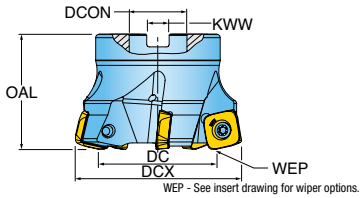
Insert screw tightening torque: 30-35 in*lb.

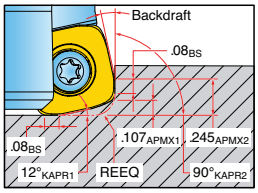
GOLDSFEED™ 16 SERIES 5G5Q, 5G6Q

HIGH FEED END MILLS (16MM INSERT)





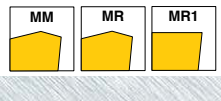




Part Number	DCX Cutting Dia. Max.	DC Cutting Dia.	APMX Depth of Cut Max.	OAL Overall Length	ZEFF Effective Teeth	REEQ Program Radius Equivalent	DCON Bore Dia.	KWW Keyway	RMPX Ramp Angle Max.
5G5Q-25R01	2.500	1.645	0.107	2.000	5	0.167	0.750	0.31	3.3
5G5Q-25R02	2.500	1.645	0.107	2.000	5	0.167	1.000	0.38	3.3
5G5Q-30R01	3.000	2.144	0.107	2.000	6	0.167	1.000	0.38	2.4
5G6Q-30R01	3.000	2.144	0.107	2.000	5	0.167	1.000	0.38	2.4
5G5Q-30R02	3.000	2.144	0.107	2.000	6	0.167	1.250	0.50	2.4
5G5Q-40R01	4.000	3.144	0.107	2.500	8	0.166	1.500	0.63	1.6
5G6Q-40R01	4.000	3.144	0.106	2.500	6	0.166	1.500	0.63	1.6
5G6Q-50R01	5.000	4.144	0.106	2.500	8	0.166	1.500	0.63	1.2
5G6Q-60R01	6.000	5.144	0.106	2.500	9	0.166	1.500	0.63	.9

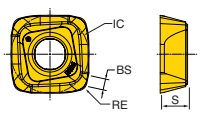
Insert screw tightening torque: 40-45 in*lb.

GOLDSFEED™ 16 INSERTS



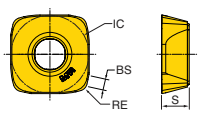
SDXS1605MPR-MM





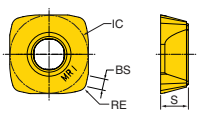
SDXS1605MPR-MR





SDXS1605MPR-MR1





Part Number	Application	RE Corner Radius	BS Wiper Length	IC Inscribed Circle	S Thickness	NOI Number of Indexes	IH Insert Hand	Grade	IN2505	IN2515	IN2530	IN2535	IN4005	IN4015	IN4030	IN4035	IN7035
SDXS1605MPR-MM	Positive Geometry	0.210	0.079	16 mm	0.220	4	Right		•	•	•	•	•	•	•	•	•
SDXS1605MPR-MR	Utility Insert - Heavy Duty	0.210	0.079	16 mm	0.220	4	Right		•		•	•	•			•	
SDXS1605MPR-MR1	Utility Insert- Heavy Duty- Keen Edge	0.210	0.079	16 mm	0.220	4	Right		•	•	•	•	•	•		•	•

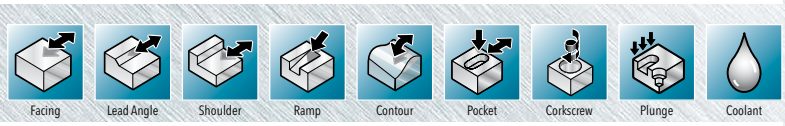
GOLDSFEED™ 16 HARDWARE

	 Screw	 Retention Bolt	 Driver Handle	 Torx Driver Blade	
5G5Q-25R01	SM50-130-R0	SD-06-48	DS-A00T	DS-T206B	
5G5Q-25R02	SM50-130-R0	SD-08-48	DS-A00T	DS-T206B	
5G5Q-30R01	SM50-130-R0	SD-08-47	DS-A00T	DS-T206B	
5G6Q-30R01	SM50-130-R0	SD-08-47	DS-A00T	DS-T206B	
5G5Q-30R02	SM50-130-R0	SD-10-47	DS-A00T	DS-T206B	
5G5Q-40R01	SM50-130-R0	SD-12-82	DS-A00T	DS-T206B	
5G6Q-40R01	SM50-130-R0	SD-12-82	DS-A00T	DS-T206B	
5G6Q-50R01	SM50-130-R0	SD-12-82	DS-A00T	DS-T206B	
5G6Q-60R01	SM50-130-R0	SD-12-82	DS-A00T	DS-T206B	

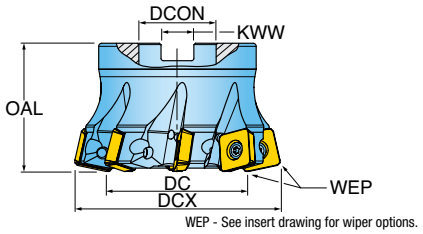
Insert screw tightening torque: 40-45 in*lb.

GOLDSFEED™ 19 SERIES 5G5M, 5G6M FORMERLY GOLD QUAD

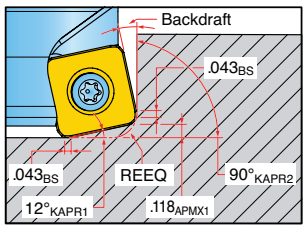
HIGH FEED END MILLS (19MM INSERT)







WEP - See insert drawing for wiper options.



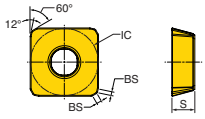
Part Number	DCX* Cutting Dia. Max.	DC* Cutting Dia.	OAL* Overall Length	ZEFF Eff. Teeth	DCON Bore Dia.	KWW Keyway	RMPX* Ramp Angle Max.	REEQ* Program Radius Equivalent
5G5M-30R01	3.000	1.755	2.000	6	1.000	0.375	4.4	0.180
5G6M-30R01	3.000	1.755	2.000	5	1.000	0.375	4.4	0.180
5G5M-40R01	4.000	2.755	2.500	8	1.500	0.625	2.6	0.180
5G6M-40R01	4.000	2.755	2.500	6	1.500	0.625	2.6	0.180
5G5M-50R01	5.000	3.755	2.500	9	1.500	0.625	1.9	0.180
5G6M-50R01	5.000	3.755	2.500	7	1.500	0.625	1.9	0.180
5G5M-60R01	6.000	4.755	2.500	10	1.500	0.625	1.5	0.180
5G6M-60R01	6.000	4.755	2.500	8	1.500	0.625	1.5	0.180
5G6M-70R01	7.000	5.755	2.500	8	1.500	0.625	1.23	0.180

All of the above data is with insert SDES1906MDR installed. Please see Technical Literature for dimensions when using other inserts.
Insert screw tightening torque: 72-77 in*lb.

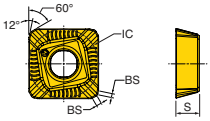
GOLDSFEED™ 19 INSERTS FORMERLY GOLD-QUAD F

MM | MR | MR1

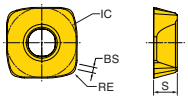
SDES1906MDR

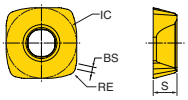
SDMS1906MDR-PH

SDES1906MPR

SDES1906MPR-001

Part Number	Application	RE Corner Radius	BS Wiper Length	IC Inscribed Circle	S Thickness	Grade	IN2505	IN2530	IN4005	IN4030	IN4035
SDES1906MDR	Hi-Feed, Flat Face / Wiper - Facets	.180	0.043	19 mm	.250		•	•			
SDMS1906MDR-PH	Hi-Feed, Pos Precision / Wiper - Facets	.180	0.043	19 mm	.250		•	•	•	•	•
SDES1906MPR	Hi-Feed, Heavy Duty - Standard	.212	0.061	19 mm	.250		•	•	•		•
SDES1906MPR-001	Hi-Feed, Heavy Duty - Precision	.212	0.061	19 mm	.250		•	•	•	•	•

GOLDSFEED™ 19 HARDWARE FORMERLY GOLD-QUAD F

	 Insert Screw	 Driver	 Retention Bolt	 **OPTIONAL** Coolant Bolt
5G5M-30R01	SM60-135-R0	DS-T25T	SD-08-47	SD-08-92
5G6M-30R01	SM60-135-R0	DS-T25T	SD-08-47	SD-08-92
5G5M-40R01	SM60-135-R0	DS-T25T	SD-12-82	SD-12-99
5G6M-40R01	SM60-135-R0	DS-T25T	SD-12-82	SD-12-99
5G5M-50R01	SM60-135-R0	DS-T25T	SD-12-82	SD-12-99
5G6M-50R01	SM60-135-R0	DS-T25T	SD-12-82	SD-12-99
5G5M-60R01	SM60-135-R0	DS-T25T	SD-12-82	SD-12-99
5G6M-60R01	SM60-135-R0	DS-T25T	SD-12-82	SD-12-99
5G6M-70R01	SM60-135-R0	DS-T25T	SD-12-82	SD-12-99

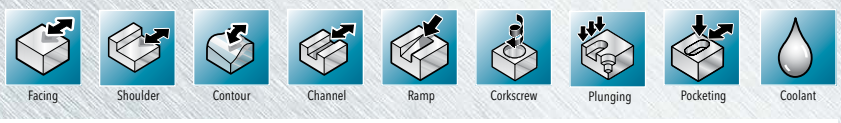
Insert screw tightening torque: 72-77 in*lb.

NEW IC SIZES, NEW DIAMETER RANGES, NEW GRADE AND A NEW NAME, DIPOSFEED!

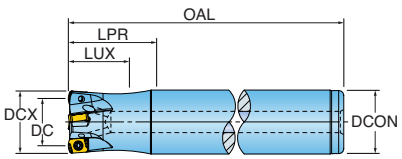
- Cutter body options include: End Mill, Top-On, Chip Surfer and Face Mill
- Cutter diameter range, .312 up to 4.00 inch
- Higher insert densities for super productivity!
- Depth of cut (DOC) capability from .5mm (.020) to 2mm (.078)
- APT ranges from .008 to .157 allow for extreme productivity!
- Optimal insert cutting edge preparations & rake face geometries for all material groups.
- Inserts offer 4 cutting edges for cost-effective machining and economy!
- Rigid clamping & high tensile clamping screws
- Lower cutting forces and efficient milling
- An expanded high-feed family under one new name, DIPOSFEED! (formerly, HiFeed Mini & Midi)

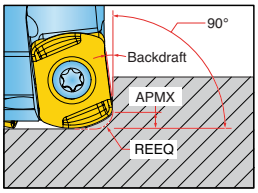
DIPOSFEED™ 04 SERIES 1TG1B (CYLINDRICAL SHANK)

END MILLS, 04MM IC INSERT SERIES





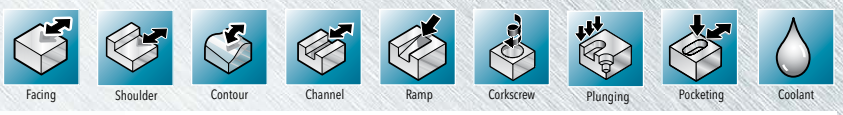


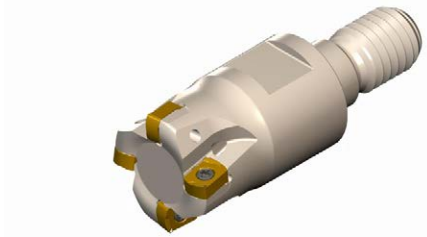


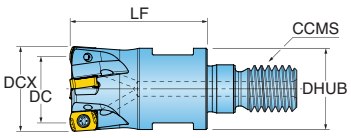
Part Number	DCX Cutting Dia. Max.	DC Cutting Dia.	LUX Usable Length Max.	LPR Protruding Length	OAL Overall Length	ZEFF Eff. Teeth	REEQ Program Radius Equivalent	DCON Shank Dia.	RMPX Ramp Angle Max.	APMX Depth of Cut Max.
1TG1B-03007R7R01	0.312	0.150	0.62	0.75	3.25	1	0.035	0.312	.64	0.020
1TG1B-03007R8R01	0.375	0.207	0.62	0.75	4.00	1	0.035	0.375	.75	0.020
1TG1B-04007R9R01	0.438	0.266	0.62	0.75	4.00	2	0.035	0.438	.85	0.020
1TG1B-05007S4R01	0.500	0.327	0.62	0.75	4.50	3	0.035	0.500	.9	0.020
1TG1B-06010S6R01	0.625	0.450	0.98	1.00	6.00	4	0.035	0.625	.7	0.020
1TG1B-07010S7R01	0.750	0.575	0.98	1.00	7.50	4	0.035	0.750	1.1	0.020
1TG1B-08010S8R01	0.875	0.700	0.98	1.00	7.50	5	0.035	0.875	1	0.020
1TG1B-10010S1R01	1.000	0.824	0.98	1.00	8.00	6	0.035	1.000	.85	0.020

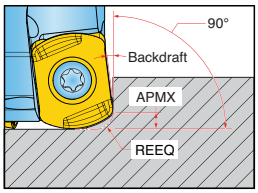
DIPOSFEED™ 04 SERIES 1TG1B (TOP•ON STYLE)

MODULAR END MILLS, 04MM IC INSERT SERIES





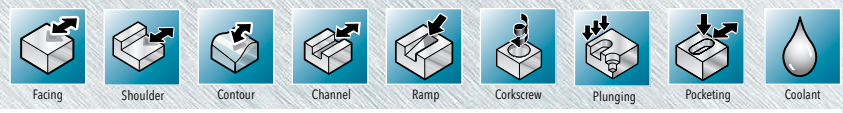




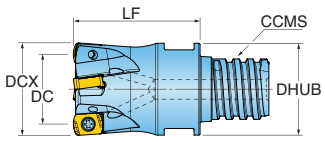
Part Number	DCX Cutting Dia. Max.	DC Cutting Diameter	LF Functional Length	ZEFF Effective Teeth	REEQ Program Radius Equivalent	DHUB Hub Diameter	CCMS Connection Code	RMPX Ramp Angle Max.	APMX Depth of Cut Max.
1TG1B-03006X4R01	0.394	0.224	0.67	2	0.035	0.38	TopOn M06	.9	0.020
1TG1B-04006X4R01	0.438	0.266	0.67	2	0.035	0.41	TopOn M06	.8	0.020
1TG1B-05006X4R01	0.500	0.327	0.67	3	0.035	0.47	TopOn M06	1	0.020
1TG1B-06009X5R01	0.625	0.450	0.98	4	0.035	0.50	TopOn M08	.7	0.020
1TG1B-07011X6R01	0.750	0.575	1.18	4	0.035	0.70	TopOn M10	1.25	0.020
1TG1B-08011X6R01	0.875	0.700	1.18	5	0.035	0.70	TopOn M10	1	0.020
1TG1B-10013X7R01	1.000	0.824	1.37	6	0.035	0.82	TopOn M12	.85	0.020
1TG1B-12015X8R01	1.250	1.074	1.57	8	0.035	1.13	TopOn M16	.64	0.020

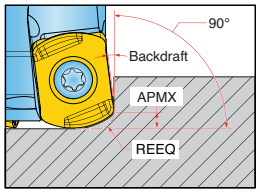
DIPOSFEED™ 04 SERIES 1TG1B (CHIP•SURFER STYLE)

HI-FEED MODULAR END MILLS 04MM IC INSERT SERIES









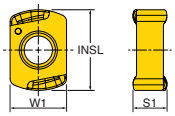
Part Number	DCX Cutting Dia. Max.	DC Cutting Diameter	LF Functional Length	ZEFF Effective Teeth	REEQ Program Radius Equivalent	DHUB Hub Diameter	CCMS Connection Code	RMPX Ramp Angle Max.	APMX Depth of Cut Max.
1TG1B-03006T6R01	0.394	0.224	0.63	2	0.035	0.37	Chip Surfer T06	.91	0.020
1TG1B-04006T6R01	0.438	0.266	0.63	2	0.035	0.37	Chip Surfer T06	.88	0.020
1TG1B-05006T8R01	0.500	0.327	0.65	3	0.035	0.49	Chip Surfer T08	1	0.020
1TG1B-06008TRR01	0.625	0.450	0.80	4	0.035	0.61	Chip Surfer T10	.7	0.020
1TG1B-07010TSR01	0.750	0.575	1.00	4	0.035	0.73	Chip Surfer T12	1.25	0.020
1TG1B-08010TSR01	0.875	0.700	1.00	5	0.035	0.73	Chip Surfer T12	1	0.020
1TG1B-10012TUR01	1.000	0.824	1.25	6	0.035	0.95	Chip Surfer T15	.85	0.020

DIPOSFEED™ 04 INSERTS

MOTR | MOTR-ML

UNLU04





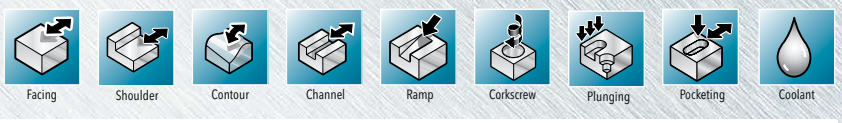
Part Number	Application	REEQ Program Radius Equivalent	INSL Insert Length	W1 Insert Width	S1 Thickness Overall	NOI Number of Indexes	IH Insert Hand	Grade	IN2504	IN2505	IN2530
UNLU0402M0TR	Multi-Purpose	.035	.236	.165	.098	4	Right		•	•	•
UNLU0402M0TR-ML	Precision	.035	.236	.165	.098	4	Right			•	•

DIPOSFEED™ 04 HARDWARE

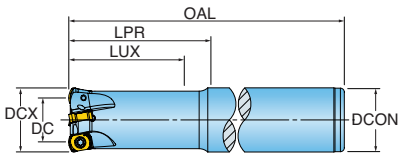
	 Screw	 Driver	 **OPTIONAL** Torque Driver Handle	 **OPTIONAL** Preset Torque Bit	 **OPTIONAL** Torque Driver Bit	 **OPTIONAL** Wrench	
1TG1B-03007R7R01	SM18-041-00	DS-TP06S	DS-A00-.25S	DT-05-.25	DS-TP06TB	-	
1TG1B-03007R8R01	SM18-041-00	DS-TP06S	DS-A00-.25S	DT-05-.25	DS-TP06TB	-	
1TG1B-04007R9R01	SM18-041-00	DS-TP06S	DS-A00-.25S	DT-05-.25	DS-TP06TB	-	
1TG1B-05007S4R01	SM18-041-00	DS-TP06S	DS-A00-.25S	DT-05-.25	DS-TP06TB	-	
1TG1B-06010S6R01	SM18-041-00	DS-TP06S	DS-A00-.25S	DT-05-.25	DS-TP06TB	-	
1TG1B-07010S7R01	SM18-041-00	DS-TP06S	DS-A00-.25S	DT-05-.25	DS-TP06TB	-	
1TG1B-08010S8R01	SM18-041-00	DS-TP06S	DS-A00-.25S	DT-05-.25	DS-TP06TB	-	
1TG1B-10010S1R01	SM18-041-00	DS-TP06S	DS-A00-.25S	DT-05-.25	DS-TP06TB	-	
1TG1B-03006X4R01	SM18-041-00	DS-TP06S	DS-A00-.25S	DT-05-.25	DS-TP06TB	-	
1TG1B-04006X4R01	SM18-041-00	DS-TP06S	DS-A00-.25S	DT-05-.25	DS-TP06TB	-	
1TG1B-05006X4R01	SM18-041-00	DS-TP06S	DS-A00-.25S	DT-05-.25	DS-TP06TB	-	
1TG1B-06009X5R01	SM18-041-00	DS-TP06S	DS-A00-.25S	DT-05-.25	DS-TP06TB	610MM	
1TG1G-07011X6R01	SM18-041-00	DS-TP06S	DS-A00-.25S	DT-05-.25	DS-TP06TB	615MM	
1TG1G-08011X6R01	SM18-041-00	DS-TP06S	DS-A00-.25S	DT-05-.25	DS-TP06TB	615MM	
1TG1B-10013X7R01	SM18-041-00	DS-TP06S	DS-A00-.25S	DT-05-.25	DS-TP06TB	617MM	
1TG1B-12015X8R01	SM18-041-00	DS-TP06S	DS-A00-.25S	DT-05-.25	DS-TP06TB	622MM	
1TG1B-03006T6R01	SM18-041-00	DS-TP06S	DS-A00-.25S	DT-05-.25	DS-TP06TB	WS-0029	
1TG1B-04006T6R01	SM18-041-00	DS-TP06S	DS-A00-.25S	DT-05-.25	DS-TP06TB	WS-0029	
1TG1B-05006T8R01	SM18-041-00	DS-TP06S	DS-A00-.25S	DT-05-.25	DS-TP06TB	WS-0030	
1TG1B-06008TRR01	SM18-041-00	DS-TP06S	DS-A00-.25S	DT-05-.25	DS-TP06TB	WS-0044	
1TG1B-07010TSR01	SM18-041-00	DS-TP06S	DS-A00-.25S	DT-05-.25	DS-TP06TB	WS-0059	
1TG1B-08010TSR01	SM18-041-00	DS-TP06S	DS-A00-.25S	DT-05-.25	DS-TP06TB	WS-0059	
1TG1B-10012TUR01	SM18-041-00	DS-TP06S	DS-A00-.25S	DT-05-.25	DS-TP06TB	WS-0059	

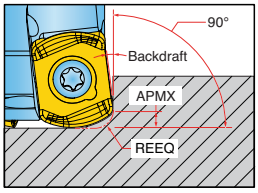
DIPOSFEED™ 06 SERIES 1TG1F (CYLINDRICAL SHANK) FORMERLY HIPOFEED MINI

END MILLS, 06MM IC INSERT SERIES





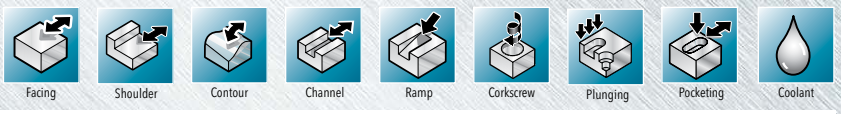




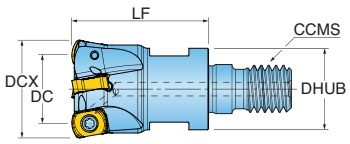
Part Number	DCX Cutting Dia. Max.	DC Cutting Dia.	LUX Usable Length Max.	LPR Protruding Length	OAL Overall Length	ZEFF Eff. Teeth	REEQ Program Radius Equivalent	DCON Shank Dia.	RMPX Ramp Angle Max.	APMX Depth of Cut Max.
1TG1F-06015S6R01	0.625	0.365	1.26	1.40	4.00	2	0.060	0.625	1.5	0.028
1TG1F-06015ULR01	0.625	0.365	1.26	1.40	4.00	2	0.060	15.50 mm	1.5	0.028
1TG1F-07017UMR01	0.750	0.476	1.50	1.66	5.00	3	0.060	18.50 mm	1.4	0.032
1TG1F-07017UMR02	0.750	0.476	1.50	1.66	6.25	3	0.060	18.50 mm	1.4	0.032
1TG1F-07022S7R01	0.750	0.476	2.00	2.17	5.00	3	0.060	0.750	1.4	0.032
1TG1F-07032S7R01	0.750	0.476	3.00	3.15	6.23	3	0.060	0.750	1.4	0.032
1TG1F-08019S7R01	0.875	0.573	1.82	1.93	7.75	3	0.060	0.750	1.1	0.043
1TG1F-08019UNR01	0.875	0.573	1.75	1.93	7.75	3	0.060	21.50 mm	1.1	0.043
1TG1F-10022S1R01	1.000	0.696	2.00	2.17	10.00	4	0.060	1.000	.8	0.043
1TG1F-10022T5R01	1.000	0.696	2.00	2.16	7.00	4	0.060	25.00 mm	.8	0.043
1TG1F-10022T5R02	1.000	0.696	2.00	2.16	10.00	4	0.060	25.00 mm	.8	0.043
1TG1F-10032S1R01	1.000	0.696	2.00	3.17	7.00	4	0.060	1.000	.8	0.043
1TG1F-1203281R01	1.250	0.946	3.00	3.17	5.50	5	0.060	1.250	.6	0.043
1TG1F-12050E2R01	1.250	0.946	4.75	4.92	8.00	5	0.060	1.250	.6	0.043
1TG1F-15015E2R01	1.500	1.196	2.88	3.00	6.00	6	0.060	1.250	.5	0.043

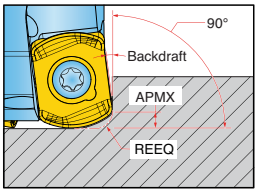
DIPOSFEED™ 06 SERIES 1TG1F (TOP•ON STYLE) FORMERLY HI•FEED MINI

MODULAR END MILLS, 06MM IC INSERT SERIES





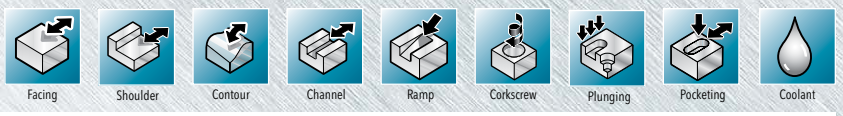




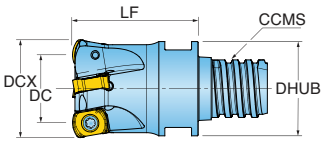
Part Number	DCX Cutting Dia. Max.	DC Cutting Diameter	LF Functional Length	ZEFF Effective Teeth	REEQ Program Radius Equivalent	DHUB Hub Diameter	CCMS Connection Code	RMPX Ramp Angle Max.	APMX Depth of Cut Max.
1TG1F-06010X5R01	0.625	0.365	0.98	2	0.060	0.51	TopOn M08	1.5	0.028
1TG1F-07011X6R01	0.750	0.476	1.18	3	0.060	0.51	TopOn M10	1.4	0.032
1TG1F-10013X7R01	1.000	0.696	1.37	4	0.060	0.82	TopOn M12	.8	0.043
1TG1F-12015X8R01	1.250	0.946	1.57	5	0.060	1.14	TopOn M16	.6	0.043
1TG1F-15015X8R10	1.500	1.196	1.57	6	0.060	1.14	TopOn M16	.8	0.043
1TG1F-15017X9R01	1.500	1.196	1.75	6	0.060	1.42	TopOn M20	.8	0.043

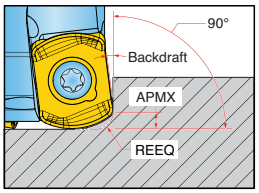
DIPOSFEED™ 06 SERIES 1TG1F (CHIP•SURFER STYLE) FORMERLY HI•FEED MINI

HI-FEED MODULAR END MILLS WITH 4 INDEXES









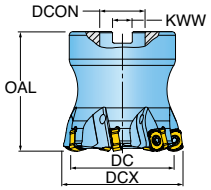
Part Number	DCX Cutting Dia. Max.	DC Cutting Diameter	LF Functional Length	ZEFF Effective Teeth	REEQ Program Radius Equivalent	DHUB Hub Diameter	CCMS Connection Code	RMPX Ramp Angle Max.	APMX Depth of Cut Max.
1TG1F-06008TRR01	0.625	0.365	0.83	2	0.060	0.60	Chip Surfer T10	1.5	0.028
1TG1F-07010TSR01	0.750	0.476	1.02	3	0.060	0.72	Chip Surfer T12	1.4	0.028
1TG1F-10012TUR01	1.000	0.706	1.26	4	0.060	0.95	Chip Surfer T15	.8	0.043

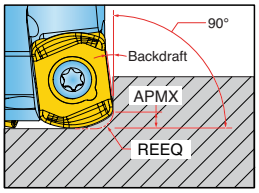
DIPOSFEED™ 06 SERIES TG1F FORMERLY HIFEED MINI

FACE MILLS, 06MM IC INSERT SERIES

Facing | Shoulder | Contour | Channel | Ramp | Corkscrew | Plunging | Pocketing | Coolant







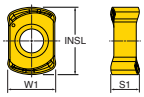
Part Number	DCX Cutting Dia. Max.	DC Cutting Dia.	OAL Overall Length	ZEFF Eff. Teeth	REEQ Program Radius Equivalent	DCON Shank Dia.	KWW Keyway	RMPX Ramp Angle Max.	APMX Depth of Cut Max.
TG1F-20R01	2.000	1.696	1.97	7	0.060	0.750	0.31	.5	0.043

DIPOSFEED™ 06 INSERTS FORMERLY HIFEED MINI

MOTR | MOTR-ML | MOTR-MM

UNLU06





Part Number	Application	REEQ Program Radius Equivalent	INSL Insert Length	W1 Insert Width	S1 Thickness Overall	NOI Number of Indexes	IH Insert Hand	Grade	IN2035	IN2504	IN2505	IN2510	IN2530	IN7035
UNLU0603M0TR	Multi-Purpose	0.060	0.354	0.251	0.142	4	Right		•	•	•	•	•	
UNLU0603M0TR-ML	Precision	0.060	0.354	0.251	0.142	4	Right		•		•		•	•
UNLU0603M0TR-MM	Positive	0.060	0.354	0.251	0.142	4	Right		•	•	•		•	•

DIPOSFEED™ 06 HARDWARE

FORMERLY HI-FEED MINI

	 Insert Screw	 Driver	 Socket Head Cap Screw	 **OPTIONAL** Coolant Bolt	 **OPTIONAL** Torque Driver Handle	 **OPTIONAL** Preset Torque Bit	 **OPTIONAL** Torque Driver Bit	 **OPTIONAL** Wrench
1TG1F-06015S6R01	SM25-075-20	DS-T08W	-	-	DS-A00-.25T	DT-11-.25	DS-0021	-
1TG1F-06015ULR01	SM25-075-20	DS-T08W	-	-	DS-A00-.25T	DT-11-.25	DS-0021	-
1TG1F-07017UMR01	SM25-075-20	DS-T08W	-	-	DS-A00-.25T	DT-11-.25	DS-0021	-
1TG1F-07017UMR02	SM25-075-20	DS-T08W	-	-	DS-A00-.25T	DT-11-.25	DS-0021	-
1TG1F-07022S7R01	SM25-075-20	DS-T08W	-	-	DS-A00-.25T	DT-11-.25	DS-0021	-
1TG1F-07032S7R01	SM25-075-20	DS-T08W	-	-	DS-A00-.25T	DT-11-.25	DS-0021	-
1TG1F-08019S7R01	SM25-075-20	DS-T08W	-	-	DS-A00-.25T	DT-11-.25	DS-0021	-
1TG1F-08019UNR01	SM25-075-20	DS-T08W	-	-	DS-A00-.25T	DT-11-.25	DS-0021	-
1TG1F-10022S1R01	SM25-075-20	DS-T08W	-	-	DS-A00-.25T	DT-11-.25	DS-0021	-
1TG1F-10022T5R01	SM25-075-20	DS-T08W	-	-	DS-A00-.25T	DT-11-.25	DS-0021	-
1TG1F-10022T5R02	SM25-075-20	DS-T08W	-	-	DS-A00-.25T	DT-11-.25	DS-0021	-
1TG1F-10032S1R01	SM25-075-20	DS-T08W	-	-	DS-A00-.25T	DT-11-.25	DS-0021	-
1TG1F-1203281R01	SM25-075-20	DS-T08W	-	-	DS-A00-.25T	DT-11-.25	DS-0021	-
1TG1F-12050E2R01	SM25-075-20	DS-T08W	-	-	DS-A00-.25T	DT-11-.25	DS-0021	-
1TG1F-15015E2R01	SM25-075-20	DS-T08W	-	-	DS-A00-.25T	DT-11-.25	DS-0021	-
1TG1F-06010X5R01	SM25-075-20	DS-T08W	-	-	DS-A00-.25T	DT-11-.25	DS-0021	610MM
1TG1F-07011X6R01	SM25-075-20	DS-T08W	-	-	DS-A00-.25T	DT-11-.25	DS-0021	615MM
1TG1F-10013X7R01	SM25-075-20	DS-T08W	-	-	DS-A00-.25T	DT-11-.25	DS-0021	617MM
1TG1F-12015X8R01	SM25-075-20	DS-T08W	-	-	DS-A00-.25T	DT-11-.25	DS-0021	622MM
1TG1F-15015X8R10	SM25-075-20	DS-T08W	-	-	DS-A00-.25T	DT-11-.25	DS-0021	622MM
1TG1F-15017X9R01	SM25-075-20	DS-T08W	-	-	DS-A00-.25T	DT-11-.25	DS-0021	630MM
1TG1F-06008TRR01	SM25-075-20	DS-T08W	-	-	DS-A00-.25T	DT-11-.25	DS-0021	WS-0044
1TG1F-07010TSR01	SM25-075-20	DS-T08W	-	-	DS-A00-.25T	DT-11-.25	DS-0021	WS-0059
1TG1F-10012TUR01	SM25-075-20	DS-T08W	-	-	DS-A00-.25T	DT-11-.25	DS-0021	WS-0061
TG1F-20R01	SM25-075-20	DS-T08W	SD-06-48	SD-06-A6	DS-A00-.25T	DT-11-.25	DS-0021	-

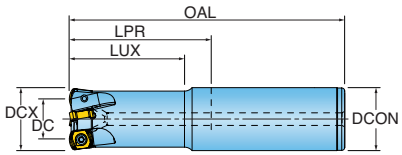
DIPOSFEED™ 09 SERIES 1TG1G (CYLINDRICAL SHANK)

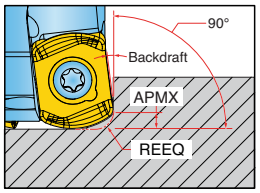
FORMERLY HiFEED MIDI™

END MILLS, 09MM IC INSERT SERIES

Facing | Shoulder | Contour | Channel | Ramp | Corkscrew | Plunging | Pocketing | Coolant







Part Number	DCX Cutting Dia. Max.	DC Cutting Dia.	LUX Usable Length Max.	LPR Protruding Length	OAL Overall Length	ZEFF Eff. Teeth	REEQ Program Radius Equivalent	DCON Shank Dia.	RMPX Ramp Angle Max.	APMX Depth of Cut Max.
1TG1G-10019S1R03	1.000	0.594	1.80	1.97	7.00	3	0.094	1.000	3	0.060
1TG1G-10020S1R03	1.000	0.594	1.83	2.00	10.00	3	0.094	1.000	3	0.060
1TG1G-12027E2R03	1.250	0.841	2.57	2.75	5.75	3	0.094	1.250	2	0.060
1TG1G-12027E2R04	1.250	0.841	2.57	2.75	5.75	4	0.094	1.250	2	0.060
1TG1G-12047E2R03	1.250	0.841	4.57	4.75	7.75	3	0.094	1.250	2	0.060
1TG1G-15016E2R04	1.500	1.090	1.45	1.69	6.00	4	0.094	1.250	1.5	0.060
1TG1G-15016E2R05	1.500	1.090	1.45	1.69	6.00	5	0.094	1.250	1.5	0.060

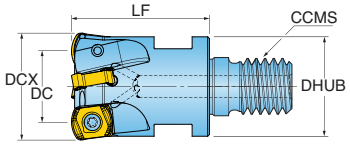
DIPOSFEED™ 09 SERIES 1TG1G (TOP•ON STYLE)

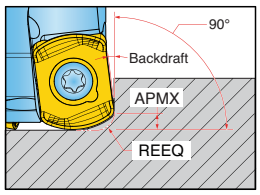
FORMERLY HiFEED MIDI™

MODULAR END MILLS, 09MM IC INSERT SERIES

Facing | Shoulder | Contour | Channel | Ramp | Corkscrew | Plunging | Pocketing | Coolant





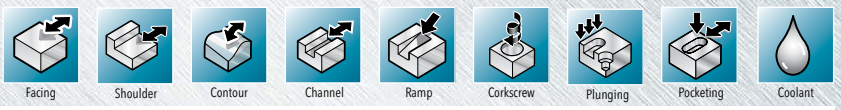


Part Number	DCX Cutting Dia. Max.	DC Cutting Diameter	LF Functional Length	ZEFF Effective Teeth	REEQ Program Radius Equivalent	DHUB Hub Diameter	CCMS Connection Code	RMPX Ramp Angle Max.	APMX Depth of Cut Max.
1TG1G-10015X7R03	1.000	0.594	1.57	3	0.094	0.82	TopOn M12	3	0.060
1TG1G-12015X8R04	1.250	0.841	1.57	4	0.094	1.13	TopOn M16	2	0.060
1TG1G-15015X9R10	1.500	1.090	1.57	5	0.094	1.42	TopOn M20	1.5	0.060

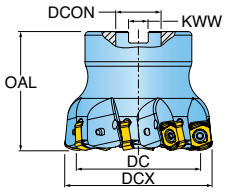
DIPOSFEED™ 09 SERIES TG1G, TG2G

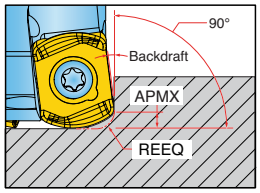
FORMERLY HI-FEED MIDI™

FACE MILLS, 09MM IC INSERT SERIES









Part Number	DCX Cutting Dia. Max.	DC Cutting Dia.	OAL Overall Length	ZEFF Eff. Teeth	REEQ Program Radius Equivalent	DCON Shank Dia.	KWW Keyway	RMPX Ramp Angle Max.	APMX Depth of Cut Max.
TG1G-20R01	2.000	1.593	1.97	7	0.094	0.750	0.31	1	0.060
TG2G-20R01	2.000	1.593	1.97	6	0.094	0.750	0.31	1	0.060
TG1G-25R01	2.500	2.090	1.97	8	0.094	0.750	0.31	.8	0.060
TG1G-30R01	3.000	2.566	1.75	9	0.094	1.000	0.38	.6	0.060
TG2G-30R01	3.000	2.566	1.75	7	0.094	1.000	0.38	.6	0.060

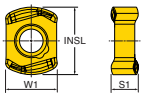
DIPOSFEED™ 09 INSERTS

FORMERLY HI-FEED MIDI™



UNLU09





Part Number	Application	REEQ Program Radius Equivalent	INSL Insert Length	W1 Insert Width	S1 Thickness Overall	NOI Number of Indexes	IH Insert Hand	Grade	IN2035	IN2504	IN2505	IN2510	IN2530	IN7035
UNLU0904M0TR	Multi-Purpose	0.094	0.469	0.361	.189	4	Right		•	•	•	•	•	
UNLU0904M0TR-ML	Precision	0.094	0.469	0.361	.189	4	Right		•		•		•	•
UNLU0904M0TR-MM	Positive Geometry	0.094	0.469	0.361	.189	4	Right		•	•	•		•	•

DIPOSFEED™ 09 HARDWARE FORMERLY HI-FEED MIDI™

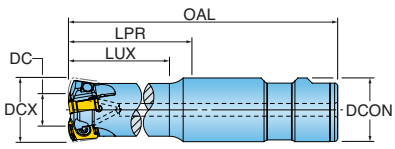
	 Screw	 Driver Handle	 Driver Blade	 Socket Head Cap Screw	 **OPTIONAL** Coolant Bolt	 **OPTIONAL** Torque Driver Handle	 **OPTIONAL** Preset Torque Bit	 **OPTIONAL** Torque Driver Bit	 **OPTIONAL** Wrench
1TG1G-10019S1R03	SM35-088-10	DS-A00T	DS-T106B	-	-	DS-A00-.25-T	DT-30-.25	DS-T10B1	-
1TG1G-10020S1R03	SM35-088-10	DS-A00T	DS-T106B	-	-	DS-A00-.25-T	DT-30-.25	DS-T10B1	-
1TG1G-12027E2R03	SM35-088-10	DS-A00T	DS-T106B	-	-	DS-A00-.25-T	DT-30-.25	DS-T10B1	-
1TG1G-12027E2R04	SM35-088-10	DS-A00T	DS-T106B	-	-	DS-A00-.25-T	DT-30-.25	DS-T10B1	-
1TG1G-12047E2R03	SM35-088-10	DS-A00T	DS-T106B	-	-	DS-A00-.25-T	DT-30-.25	DS-T10B1	-
1TG1G-15016E2R04	SM35-088-10	DS-A00T	DS-T106B	-	-	DS-A00-.25-T	DT-30-.25	DS-T10B1	-
1TG1G-15016E2R05	SM35-088-10	DS-A00T	DS-T106B	-	-	DS-A00-.25-T	DT-30-.25	DS-T10B1	-
1TG1G-10015X7R03	SM35-088-10	DS-A00T	DS-T106B	-	-	DS-A00-.25-T	DT-30-.25	DS-T10B1	617MM
1TG1G-12015X8R04	SM35-088-10	DS-A00T	DS-T106B	-	-	DS-A00-.25-T	DT-30-.25	DS-T10B1	622MM
1TG1G-15015X9R10	SM35-088-10	DS-A00T	DS-T106B	-	-	DS-A00-.25-T	DT-30-.25	DS-T10B1	630MM
TG1G-20R01	SM35-088-10	DS-A00T	DS-T106B	SD-06-48	SD-06-A6	DS-A00-.25-T	DT-30-.25	DS-T10B1	-
TG2G-20R01	SM35-088-10	DS-A00T	DS-T106B	SD-06-48	SD-06-A6	DS-A00-.25-T	DT-30-.25	DS-T10B1	-
TG1G-25R01	SM35-088-10	DS-A00T	DS-T106B	SD-06-48	SD-06-A6	DS-A00-.25-T	DT-30-.25	DS-T10B1	-
TG1G-30R01	SM35-088-10	DS-A00T	DS-T106B	SD-08-46	SD-08-92	DS-A00-.25-T	DT-30-.25	DS-T10B1	-
TG2G-30R01	SM35-088-10	DS-A00T	DS-T106B	SD-08-46	SD-08-92	DS-A00-.25-T	DT-30-.25	DS-T10B1	-

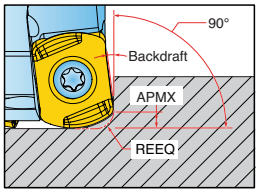
DIPOSFEED™ 11 SERIES 1TG1J (WELDON SHANK)

END MILLS, 11MM IC INSERT SERIES

 Facing
 Shoulder
 Contour
 Channel
 Ramp
 Corkscrew
 Plunging
 Pocketing
 Coolant



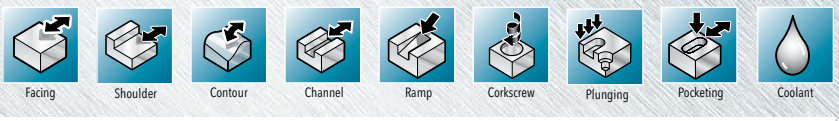




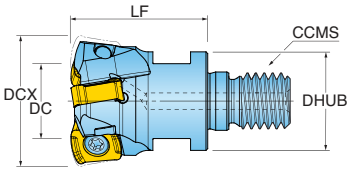
Part Number	DCX Cutting Dia. Max.	DC Cutting Dia.	LUX Usable Length Max.	LPR Protruding Length	OAL Overall Length	ZEFF Eff. Teeth	REEQ Program Radius Equivalent	DCON Shank Dia.	RMPX Ramp Angle Max.	APMX Depth of Cut Max.
1TG1J-12025E2R01	1.250	0.650	2.20	2.50	5.50	2	0.120	1.250	.48	0.078
1TG1J-12030E2R01	1.250	0.650	2.70	3.00	6.00	3	0.120	1.250	.48	0.078
1TG1J-15016E2R01	1.500	0.900	1.60	1.69	6.00	3	0.120	1.250	.54	0.078

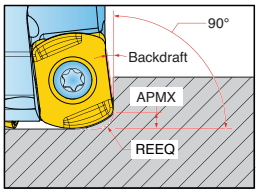
DIPOSFEED™ 11 SERIES 1TG1J (TOP•ON STYLE)

MODULAR END MILLS, 11MM IC INSERT SERIES









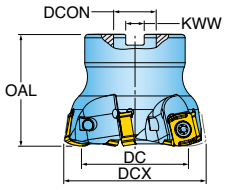
Part Number	DCX Cutting Dia. Max.	DC Cutting Diameter	LF Functional Length	ZEFF Effective Teeth	REEQ Program Radius Equivalent	DHUB Hub Diameter	CCMS Connection Code	RMPX Ramp Angle Max.	APMX Depth of Cut Max.
1TG1J-12015X8R01	1.250	0.650	1.57	2	0.120	1.13	TopOn M16	.48	0.078
1TG1J-15015X8R01	1.500	0.900	1.57	3	0.120	1.13	TopOn M16	.54	0.078
1TG1J-15015X9R01	1.500	0.900	1.57	3	0.120	1.42	TopOn M20	.54	0.078

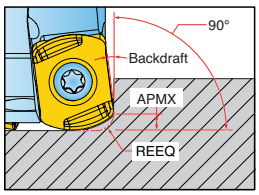
DIPOSFEED™ 11 SERIES TG1J, TG2J

FACE MILLS, 11MM IC INSERT SERIES









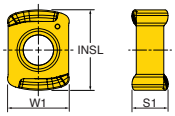
Part Number	DCX Cutting Dia. Max.	DC Cutting Dia.	OAL Overall Length	ZEFF Eff. Teeth	REEQ Program Radius Equivalent	DCON Shank Dia.	KWW Keyway	RMPX Ramp Angle Max.	APMX Depth of Cut Max.
TG1J-20R01	2.000	1.384	1.970	5	0.120	0.750	0.31	.5	0.078
TG2J-20R01	2.000	1.384	1.970	4	0.120	0.750	0.31	.5	0.078
TG1J-25R01	2.500	1.884	1.970	6	0.120	0.750	0.31	.45	0.078
TG2J-25R01	2.500	1.884	1.970	5	0.120	0.750	0.31	.45	0.078
TG1J-30R01	3.000	2.384	1.750	7	0.120	1.000	0.38	.35	0.078
TG2J-30R01	3.000	2.384	1.750	6	0.120	1.000	0.38	.35	0.078
TG1J-40R01	4.000	3.384	2.375	7	0.120	1.000	0.38	.3	0.078
TG2J-40R01	4.000	3.384	2.375	6	0.120	1.000	0.38	.3	0.078

DIPOSFEED™ 11 INSERTS

MOTR | MOTR-ML

UNLU11





Part Number	Application	REEQ Program Radius Equivalent	INSL Insert Length	W1 Insert Width	S1 Thickness Overall	NOI Number of Indexes	IH Insert Hand	Grade	IN2504	IN2505	IN2530	IN6537
UNLU1105M0TR	Multi-Purpose	.120	.575	.441	.256	4	Right		•	•	•	•
UNLU1105M0TR-ML	Precision	.120	.575	.441	.256	4	Right			•	•	

DIPOSFEED™ 11 HARDWARE

	Screw	Driver Handle	Driver Blade	Socket Head Cap Screw	**OPTIONAL** Coolant Bolt	**OPTIONAL** Torque Driver Handle	**OPTIONAL** Preset Torque Bit	**OPTIONAL** Torque Driver Bit	**OPTIONAL** Wrench
1TG1J-12025E2R01	SM50-127-10	DS-A00T	DS-T206B	-	-	DS-A00-.25-T	DT-44-.25	DS-T20B1	-
1TG1J-12030E2R01	SM50-127-10	DS-A00T	DS-T206B	-	-	DS-A00-.25-T	DT-44-.25	DS-T20B1	-
1TG1J-15016E2R01	SM50-127-10	DS-A00T	DS-T206B	-	-	DS-A00-.25-T	DT-44-.25	DS-T20B1	-
1TG1J-12015X8R01	SM50-127-10	DS-A00T	DS-T206B	-	-	DS-A00-.25-T	DT-44-.25	DS-T20B1	622MM
1TG1J-15015X8R01	SM50-127-10	DS-A00T	DS-T206B	-	-	DS-A00-.25-T	DT-44-.25	DS-T20B1	622MM
1TG1J-15015X9R01	SM50-127-10	DS-A00T	DS-T206B	-	-	DS-A00-.25-T	DT-44-.25	DS-T20B1	630MM
TG2J-20R01	SM50-127-10	DS-A00T	DS-T206B	SD-06-48	SD-06-A6	DS-A00-.25-T	DT-44-.25	DS-T20B1	-
TG1J-20R01	SM50-127-10	DS-A00T	DS-T206B	SD-06-48	SD-06-A6	DS-A00-.25-T	DT-44-.25	DS-T20B1	-
TG2J-25R01	SM50-127-10	DS-A00T	DS-T206B	SD-06-48	SD-06-A6	DS-A00-.25-T	DT-44-.25	DS-T20B1	-
TG1J-25R01	SM50-127-10	DS-A00T	DS-T206B	SD-06-48	SD-06-A6	DS-A00-.25-T	DT-44-.25	DS-T20B1	-
TG2J-30R01	SM50-127-10	DS-A00T	DS-T206B	SD-08-46	SD-08-92	DS-A00-.25-T	DT-44-.25	DS-T20B1	-
TG1J-30R01	SM50-127-10	DS-A00T	DS-T206B	SD-08-46	SD-08-92	DS-A00-.25-T	DT-44-.25	DS-T20B1	-
TG2J-40R01	SM50-127-10	DS-A00T	DS-T206B	SD-12-82	SD-12-99	DS-A00-.25-T	DT-44-.25	DS-T20B1	-
TG1J-40R01	SM50-127-10	DS-A00T	DS-T206B	SD-12-82	SD-12-99	DS-A00-.25-T	DT-44-.25	DS-T20B1	-

FIXED POCKET (NON-ADJUSTING) SUPER FINISH MILLS

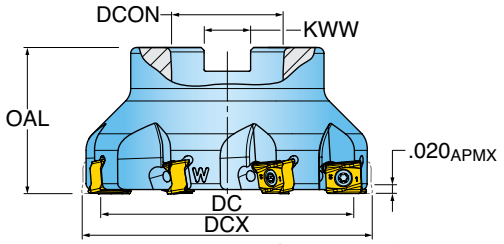
- Long crowned wiper produces 3-15 Ra surface finis
- Non-adjusting design reduces set up time
- Stepped insert orientation alleviates axial & radial forces; only one proud wiper insert
- Can mill up to 90° shoulder
- 12 mm Insert with up to 4 indexes
- High positive axial rake promotes chip evacuation and improves tool life
- Carbide, CBN & PCD insert offering for a wide variety of materials!

DIPOSFINISHT™ SERIES TA3Q

FIXED POCKET (NON-ADJUSTING) FINISH FACE MILL


Facing





WEP - See insert drawing for wiper options.

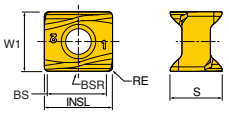
Part Number	DC Cutting Dia.	DCX Cutting Dia. Max.	OAL Overall Length	ZEFF Eff. Teeth	DCON Shank Dia.	KWW Keyway	CSP Coolant
TA3Q-20R01	1.563	2.000	1.570	5	0.750	0.312	Yes
TA3Q-25R01	2.024	2.500	1.570	6	0.750	0.312	Yes
TA3Q-30R01	2.484	3.000	1.750	8	1.000	0.375	Yes
TA3Q-40R01	3.484	4.000	1.750	8	1.500	0.625	Yes
TA3Q-50R01	4.444	5.000	1.750	10	1.500	0.625	Yes
TA3Q-60R01	5.444	6.000	1.750	10	1.500	0.625	No

DIPOSFINISHT™ INSERTS

ML | AL | CBN | PCD

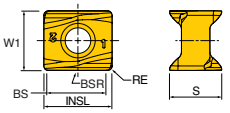
ANED12_ML





ANED12_AL

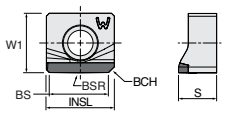




Part Number	Application	RE Corner Radius	BS Wiper Length	BSR Wiper Radius	LE Cutting Edge Eff. Length	INSL Insert Length	W1 Insert Width	S Thickness	NOI Number of Indexes	IH Insert Hand	Grade	IN2505	IN2510	IN10K
ANED1207-ML	Finishing	0.031	0.412	39.400	0.020	0.472	0.413	0.358	4	Right		•	•	
ANED1207-AL	Finishing, Sharp	0.031	0.412	39.400	0.020	0.472	0.413	0.358	4	Right				•

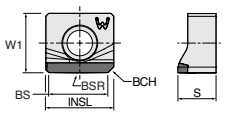
ANED12_CBN





ANED12_PCD





Part Number	Application	BCH Corner Chamfer Length	BS Wiper Length	BSR Wiper Radius	LE Cutting Edge Eff. Length	INSL Insert Length	W1 Insert Width	S Thickness	NOI Number of Indexes	IH Insert Hand	Grade	IN80B	IN93D
ANED1207-CBN	Finishing	0.030	0.412	39.400	0.020	0.472	0.413	0.264	1	Right		•	
ANED1207-PCD	Finishing	0.030	0.412	39.400	0.020	0.472	0.413	0.264	1	Right			•

DIPOSFINISHT™ HARDWARE

	 Screw	 Driver Handle	 Torque Driver Bit	 Retention Bolt	 **OPTIONAL** Coolant Retention Bolt	 **OPTIONAL** Torque Driver Handle	 **OPTIONAL** Preset Torque Bit	 **OPTIONAL** Torque Driver Bit
TA3Q-20R01	SM40-115-00	DS-A00T	DS-T156B1	SD-06-46	SD-06-89	DS-A00-.25-T	DT-35-.25	DS-T15B1
TA3Q-25R01	SM40-115-00	DS-A00T	DS-T156B1	SD-06-46	SD-06-89	DS-A00-.25-T	DT-35-.25	DS-T15B1
TA3Q-30R01	SM40-115-00	DS-A00T	DS-T156B1	SD-08-46	SD-08-92	DS-A00-.25-T	DT-35-.25	DS-T15B1
TA3Q-40R01	SM40-115-00	DS-A00T	DS-T156B1	SD-12-82	SD-12-99	DS-A00-.25-T	DT-35-.25	DS-T15B1
TA3Q-50R01	SM40-115-00	DS-A00T	DS-T156B1	SD-12-82	SD-12-99	DS-A00-.25-T	DT-35-.25	DS-T15B1
TA3Q-60R01	SM40-115-00	DS-A00T	DS-T156B1	-	-	DS-A00-.25-T	DT-35-.25	DS-T15B1

BARREL-STYLE INDEXABLE END MILLS FOR FAST AND PRISTINE FINISHING OF STRAIGHT AND PROFILED SURFACES

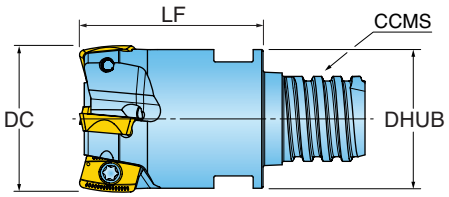
- Precisely crowned inserts decrease finishing time by allowing greater axial advance, "step-downs"
- The insert's seating surfaces are precisely ground to minimize run-out and improved surface finish, even at high feed rates
- Cutter diameters of .625", .750" and 1.00" are each available in our popular Top-On and ultra-precise Chip-Surfer adaptions
- Inclined inserts allow for the finishing of a larger range of stock conditions
- High sheer insert geometry and keen cutting edges are ideal for semi-finish and finish milling

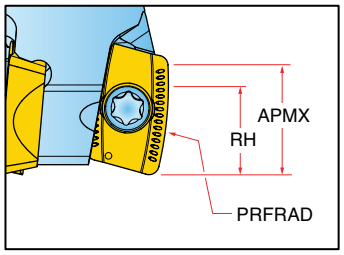
HIPOSPROB™ SERIES 12L8J (CHIP•SURFER STYLE)

INDEXABLE BARREL FORM, USING **20MM** PROFILE RADIUS INSERT (**CDHT090320R-M...**)









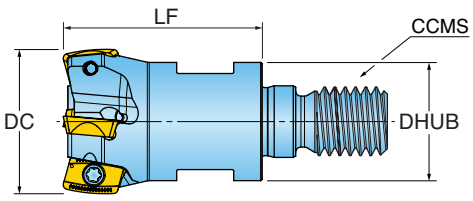
Part Number	DC Cutting Diameter	PRFRAD Profile Radius	RH Radius Height	APMX Depth of Cut Max.	LF Functional Length	ZEFF Effective Teeth	CCMS Connection Code	DHUB Hub Diameter
12L8J-06008TRR01	0.620	0.791	0.252	0.379	0.812	2	Chip Surfer T10	0.605
12L8J-07010TSR01	0.745	0.787	0.252	0.379	1.000	3	Chip Surfer T12	0.725
12L8J-10012TUR01	0.995	0.785	0.253	0.379	1.250	4	Chip Surfer T12	0.945

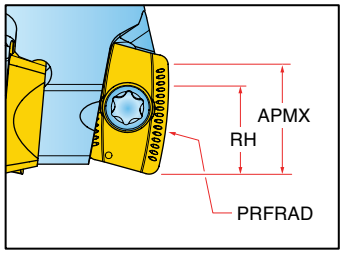
HIPOSPROB™ SERIES 12L8J (TOP•ON STYLE)

INDEXABLE BARREL FORM, USING **20MM** PROFILE RADIUS INSERT (**CDHT090320R-M...**)









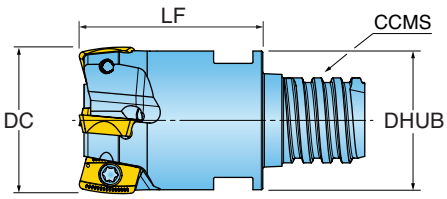
Part Number	DC Cutting Diameter	PRFRAD Profile Radius	RH Radius Height	APMX Depth of Cut Max.	LF Functional Length	ZEFF Effective Teeth	CCMS Connection Code	DHUB Hub Diameter
12L8J-06010X5R01	0.620	0.791	0.252	0.379	1.000	2	Top-On M8	0.502
12L8J-07011X6R01	0.745	0.787	0.252	0.379	1.125	3	Top-On M10	0.699
12L8J-10013X7R01	0.995	0.785	0.253	0.379	1.375	4	Top-On M12	0.817

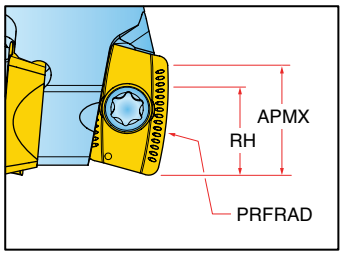
HIPOSPROB™ SERIES 12L8J (CHIP•SURFER STYLE)

INDEXABLE BARREL FORM, USING 30MM PROFILE RADIUS INSERT (CDHT090330R-M...)

Shoulder | Contouring | Coolant







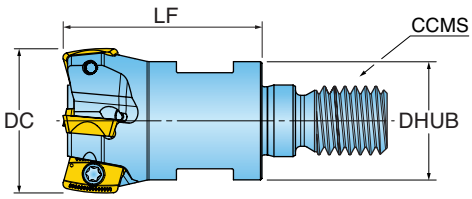
Part Number	DC Cutting Diameter	PRFRAD Profile Radius	RH Radius Height	APMX Depth of Cut Max.	LF Functional Length	ZEFF Effective Teeth	CCMS Connection Code	DHUB Hub Diameter
12L8J-06008TRR01	0.623	1.189	0.285	0.379	0.813	2	Chip Surfer T10	0.605
12L8J-07010TSR01	0.748	1.181	0.285	0.379	1.000	3	Chip Surfer T12	0.725
12L8J-10012TUR01	0.998	1.170	0.285	0.379	1.250	4	Chip Surfer T12	0.945

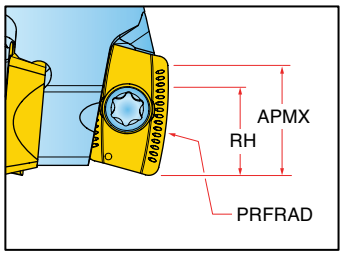
HIPOSPROB™ SERIES 12L8J (TOP•ON STYLE)

INDEXABLE BARREL FORM, USING 30MM PROFILE RADIUS INSERT (CDHT090330R-M...)

Shoulder | Contouring | Coolant







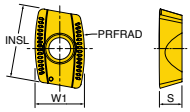
Part Number	DC Cutting Diameter	PRFRAD Profile Radius	RH Radius Height	APMX Depth of Cut Max.	LF Functional Length	ZEFF Effective Teeth	CCMS Connection Code	DHUB Hub Diameter
12L8J-06010X5R01	0.623	1.189	0.285	0.379	1.000	2	Top-On M8	0.502
12L8J-07011X6R01	0.748	1.181	0.285	0.379	1.125	3	Top-On M10	0.699
12L8J-10013X7R01	0.998	1.170	0.285	0.379	1.375	4	Top-On M12	0.817

HIPOSPROB™ INSERTS

ML / MLP

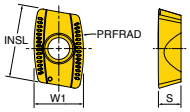
CDHT09-ML





CDHT09-MLP



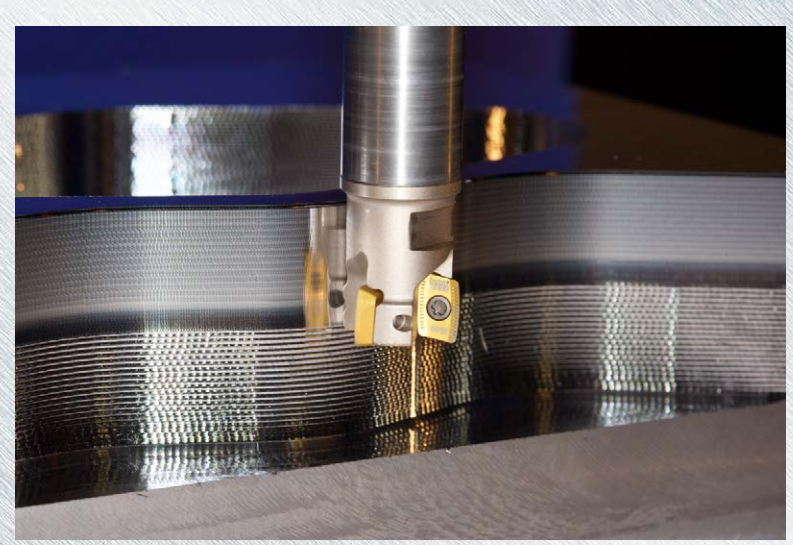


Part Number	Application	PRFRAD Profile Radius	INSL Insert Length	W1 Insert Width	S Thickness	IH Insert Hand	NOI Number of Indexes	Grade	IN2504	IN2505	IN2530	IN05S	IN3004
CDHT090320R-ML	Finishing	.7874	0.375	0.256	0.118	Right	2		•	•	•		
CDHT090320R-MLP	Sharp-For Aluminum	.7874	0.375	0.256	0.118	Right	2					•	•
CDHT090330R-ML	Finishing	1.1811	0.375	0.256	0.118	Right	2		•	•	•		
CDHT090330R-MLP	Sharp-For Aluminum	1.1811	0.375	0.256	0.118	Right	2					•	•

HIPOSPROB™ HARDWARE

	 Insert Screw	 Screw Driver	 **OPTIONAL** Torque Driver Handle	 **OPTIONAL** Preset Torque Bit	 **OPTIONAL** Torque Driver Bit
12L8J-06008TRR01	SE25-054-00	DS-T08W	DS-A00-.25S	DT-11-.25	DS-T08B
12L8J-07010TSR01	SE25-054-00	DS-T08W	DS-A00-.25S	DT-11-.25	DS-T08B
12L8J-10012TUR01	SE25-054-00	DS-T08W	DS-A00-.25S	DT-11-.25	DS-T08B
12L8J-06010X5R01	SE25-054-00	DS-T08W	DS-A00-.25S	DT-11-.25	DS-T08B
12L8J-07011X6R01	SE25-054-00	DS-T08W	DS-A00-.25S	DT-11-.25	DS-T08B
12L8J-10013X7R01	SE25-054-00	DS-T08W	DS-A00-.25S	DT-11-.25	DS-T08B

Insert screw tightening torque: 10.6 in*lbs.

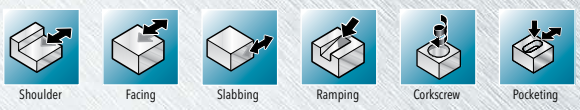


NEW END MILL TIPS WITH 1.5XD FLUTE LENGTH

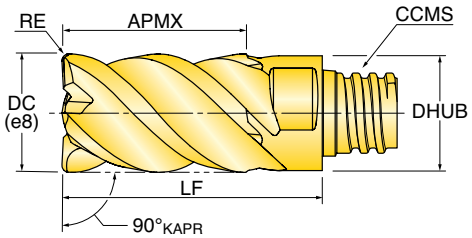
- 4-6 Flute Roughing Mills equipped with serrations to promote accelerated Feed rates and better chip evacuation with airblast
- 4 Flute Rough & Finish Mills equipped with variable pitch to reduce harmonic chatter
- 7-9 Flute Finish Mills equipped different helix and variable pitch to diffuse vibration
- Best suited with Weldon Shank for utmost rigidity and holding
- Tips repeat within +/-.0005" and can be indexed on the machine in seconds

CHIPSURFER™ SERIES 47D

90° VARIABLE PITCH END MILL (1.5XD FLUTE)







Part Number	DC Cutting Diameter	RE/CHW Corner Radius/Chamfer	APMX Depth of Cut Max.	LF Functional Length	ZEFF Effective Flutes	FHA Flute Helix Angle	CCMS Connection Code	DHUB Hub Diameter	RMPX Ramp Angle Max.
47D-3146TQRQ01	0.312	0.015 R	0.469	0.709	4	46.5	Chip Surfer T05	0.300	90
47D-3756T6RQ01	0.375	0.015 R	0.563	0.866	4	46.5	Chip Surfer T06	0.366	90
47D-5075T8RQ01	0.500	0.015 R	0.750	1.063	4	46.5	Chip Surfer T08	0.488	90
47D-6293TRRQ01	0.625	0.015 R	0.938	1.319	4	46.5	Chip Surfer T10	0.602	90
47D-7511TSRQ03	0.750	0.031 R	1.125	1.614	4	46.5	Chip Surfer T12	0.726	90
47D-1015TURQ03	1.000	0.031 R	1.500	2.067	4	46.5	Chip Surfer T15	0.941	90

When assembling, be sure tip is seated firmly on shank with no gap. Tightening Torque: T05=60in*lbs, T06=90in*lbs, T08=130in*lbs, T10=250in*lbs, T12=250in*lbs, T15=350in*lbs. No lubricant on adaption. Wrenches sold seperately.

CHIPSURFER™ 47D HARDWARE

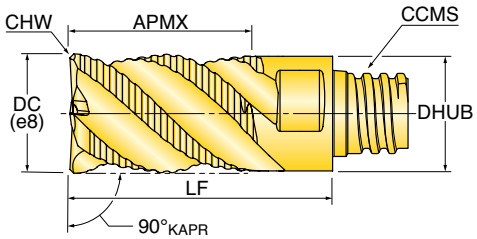
	 **OPTIONAL** Thin Wrench	 **OPTIONAL** Torque Wrench
47D-3146TQRQ01	WS-0043	DT-60-06
47D-3756T6RQ01	WS-0029	DT-90-08
47D-5075T8RQ01	WS-0030	DT-130-10
47D-6293TRRQ01	WS-0044	DT-250-13
47D-7511TSRQ03	WS-0059	DT-250-16
47D-1015TURQ03	WS-0061	DT-350-20

CHIPSURFER™ SERIES 47C, 48C

90° ROUGHING END MILL (1.5XD FLUTE)







Part Number	DC Cutting Diameter	RE/CHW Corner Radius/Chamfer	APMX Depth of Cut Max.	LF Functional Length	ZEFF Effective Flutes	FHA Flute Helix Angle	CCMS Connection Code	DHUB Hub Diameter	RMPX Ramp Angle Max.
47C-3146TQRN01	0.312	0.010 Chamfer	0.469	0.709	4	46	Chip Surfer T05	0.300	90
47C-3756T6RN01	0.375	0.012 Chamfer	0.563	0.866	4	46	Chip Surfer T06	0.366	90
47C-5075T8RN01	0.500	0.014 Chamfer	0.750	1.063	4	46	Chip Surfer T08	0.488	90
47C-6293TRRN01	0.625	0.016 Chamfer	0.938	1.319	5	40	Chip Surfer T10	0.602	7
48C-7511TSRN01	0.750	0.016 Chamfer	1.125	1.614	6	47	Chip Surfer T12	0.726	3
48C-1015TURN02	1.000	0.020 Chamfer	1.500	2.067	6	47	Chip Surfer T15	0.941	3

When assembling, be sure tip is seated firmly on shank with no gap. Tightening Torque: T05=60in*lbs, T06=90in*lbs, T08=130in*lbs, T10=250in*lbs, T12=250in*lbs, T15=350in*lbs. No lubricant on adaption. Wrenches sold seperately.

CHIPSURFER™ 47C, 48C HARDWARE

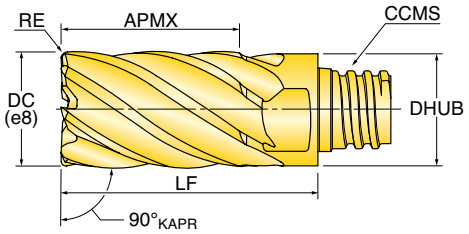
	 **OPTIONAL** Thin Wrench	 **OPTIONAL** Torque Wrench
47C-3146TQRN01	WS-0043	DT-60-06
47C-3756T6RN01	WS-0029	DT-90-08
47C-5075T8RN01	WS-0030	DT-130-10
47C-6293TRRN01	WS-0044	DT-250-13
48C-7511TSRN01	WS-0059	DT-250-16
48C-1015TURN02	WS-0061	DT-350-20

CHIPSURFER™ SERIES 49D

90° FINISHING END MILL (1.5XD FLUTE)







Part Number	DC Cutting Diameter	RE/CHW Corner Radius/Chamfer	APMX Depth of Cut Max.	LF Functional Length	ZEFF Effective Flutes	FHA Flute Helix Angle	CCMS Connection Code	DHUB Hub Diameter	RMPX Ramp Angle Max.
49D-3146TQRQ01	0.312	0.015 R	0.469	0.709	7	36	Chip Surfer T05	0.300	3
49D-3756T6RQ01	0.375	0.015 R	0.563	0.866	7	36	Chip Surfer T06	0.366	3
49D-5075T8RQ01	0.500	0.015 R	0.750	1.063	7	36	Chip Surfer T08	0.488	3
49D-6293TRRQ03	0.625	0.031 R	0.938	1.319	9	36	Chip Surfer T10	0.602	1
49D-7511TSRQ03	0.750	0.031 R	1.125	1.614	9	36	Chip Surfer T12	0.726	1
49D-1015TURQ03	1.000	0.031 R	1.500	2.067	9	36	Chip Surfer T15	0.941	1

When assembling, be sure tip is seated firmly on shank with no gap. Tightening Torque: T05=60in*lbs, T06=90in*lbs, T08=130in*lbs, T10=250in*lbs, T12=250in*lbs, T15=350in*lbs. No lubricant on adaption. Wrenches sold seperately.

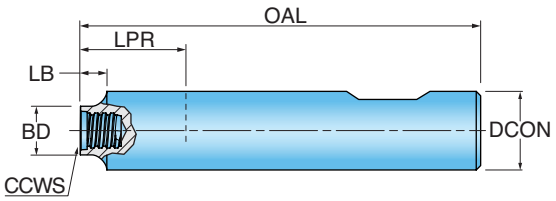
CHIPSURFER™ 49D HARDWARE

	 **OPTIONAL** Thin Wrench	 **OPTIONAL** Torque Wrench
49D-3146TQRQ01	WS-0043	DT-60-06
49D-3756T6RQ01	WS-0029	DT-90-08
49D-5075T8RQ01	WS-0030	DT-130-10
49D-6293TRRQ03	WS-0044	DT-250-13
49D-7511TSRQ03	WS-0059	DT-250-16
49D-1015TURQ03	WS-0061	DT-350-20

CHIPSURFER™ SERIES W*T*SA

STEEL, WELDON-STYLE, NECKED SHANKS





Part Number	CCWS Conn. Code Workpiece Side	LB Body Length 1	LPR Protruding Length	OAL Overall Length	BD Body Diameter	DCON Shank Diameter	BMC Body Mat'l Code
WB050T05SA-00	Chip Surfer T05	0.170	0.40	2.185	0.300	0.500	Steel
WB062T06SA-00	Chip Surfer T06	0.230	0.65	2.560	0.360	0.625	Steel
WB062T08SA-00	Chip Surfer T08	0.130	0.65	2.560	0.480	0.625	Steel
WB075T10SA-00	Chip Surfer T10	0.130	0.76	2.750	0.600	0.750	Steel
WB100T12SA-00	Chip Surfer T12	0.300	0.75	3.000	0.720	1.000	Steel
WB125T15SA-00	Chip Surfer T15	0.300	1.75	4.000	0.940	1.250	Steel

When assembling, be sure tip is seated firmly on shank with no gap. Tightening Torque: T05=60in*lbs, T06=90in*lbs, T08=130in*lbs, T10=250in*lbs, T12=250in*lbs, T15=350in*lbs. No lubricant on adaption. Wrenches sold seperately.

CIRCLE SEGMENT MILLS FINISH 3X FASTER THAN A BALL NOSE!

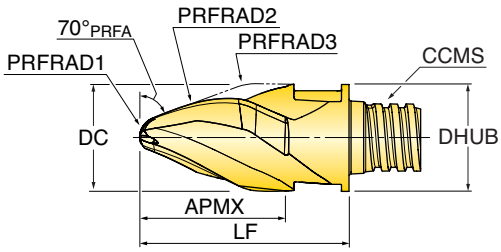
- Lens Form targets use on deck features of a part. For use on 3 & 5 Axis machines.
- Barrel Form targets use on 90° & drafted walls. For use on 3 & 5 Axis machines.
- Taper Form targets use on contoured surfaces. For use on 5 Axis machines.
- Radius blends ensure minimum scallop height for superior finishes.
- Precision cutting edge profile tolerance of +/-.0004"
- Tips repeat within +/-.0005" and can be indexed on the machine in seconds
- Steel, Heavy Metal & Carbide Shank options.

CHIPSURFER™ SERIES 46W_0

TAPER FORM FINISHER FOR STEELS AND HI-TEMPS







Part Number	DC Cutting Diameter	PRFRAD1 Profile Radius	PRFRAD2 Profile Radius	PRFRAD3 Profile Radius	APMX Depth of Cut Max.	LF Functional Length	ZEFF Effective Flutes	FHA Flute Helix Angle	CCMS Connection Code	DHUB Hub Diameter
46W08009TQRB010	8.00 mm	1.50 mm	250.00 mm	4.00 mm	10 mm	15.40 mm	3	30	Chip Surfer T05	7.60 mm
46W10013T6RB020	10.00 mm	2.00 mm	250.00 mm	5.00 mm	14 mm	19.40 mm	3	30	Chip Surfer T06	9.30 mm
46W12013T8RB030	12.00 mm	3.00 mm	250.00 mm	6.00 mm	14 mm	23.40 mm	3	30	Chip Surfer T08	11.50 mm
46W16017TRRB040	16.00 mm	4.00 mm	500.00 mm	8.00 mm	17 mm	26.00 mm	3	30	Chip Surfer T10	15.20 mm

When assembling, be sure tip is seated firmly on shank with no gap. Tightening Torque: T05=60in*lbs, T06=90in*lbs, T08=130in*lbs, T10=250in*lbs.
No lubricant on adaption. Wrenches sold seperately.

CHIPSURFER™ 46W_0 HARDWARE

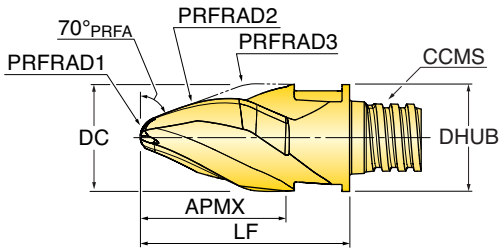
	 Thin Wrench	 **OPTIONAL** Torque Wrench
46W08009TQRB010	WS-0043	DT-60-06
46W10013T6RB020	WS-0029	DT-90-08
46W12013T8RB030	WS-0030	DT-130-10
46W16017TRRB040	WS-0044	DT-250-13

CHIPSURFER™ SERIES 46W_1

TAPER FORM FINISHER FOR NON-FERROUS







Part Number	DC Cutting Diameter	PRFRAD1 Profile Radius	PRFRAD2 Profile Radius	PRFRAD3 Profile Radius	APMX Depth of Cut Max.	LF Functional Length	ZEFF Effective Flutes	FHA Flute Helix Angle	CCMS Connection Code	DHUB Hub Diameter
46W08009TQRB011	8.00 mm	1.50 mm	250.00 mm	4.00 mm	10 mm	15.40 mm	3	30	Chip Surfer T05	7.60 mm
46W10013T6RB021	10.00 mm	2.00 mm	250.00 mm	5.00 mm	14 mm	19.40 mm	3	30	Chip Surfer T06	9.30 mm
46W12013T8RB031	12.00 mm	3.00 mm	250.00 mm	6.00 mm	14 mm	23.40 mm	3	30	Chip Surfer T08	11.50 mm
46W16017TRRB041	16.00 mm	4.00 mm	500.00 mm	8.00 mm	17 mm	26.00 mm	3	30	Chip Surfer T10	15.20 mm

When assembling, be sure tip is seated firmly on shank with no gap. Tightening Torque: T05=60in*lbs, T06=90in*lbs, T08=130in*lbs, T10=250in*lbs.
No lubricant on adaption. Wrenches sold seperately.

CHIPSURFER™ 46W_1 HARDWARE

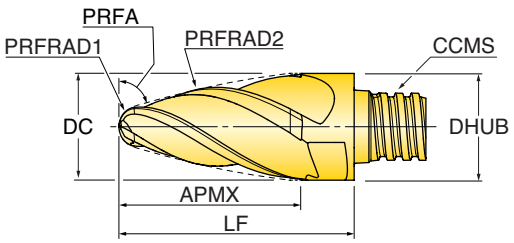
	 Thin Wrench	 **OPTIONAL** Torque Wrench
46W08009TQRB011	WS-0043	DT-60-06
46W10013T6RB021	WS-0029	DT-90-08
46W12013T8RB031	WS-0030	DT-130-10
46W16017TRRB041	WS-0044	DT-250-13

CHIPSURFER™ SERIES 47W_0

TAPER FORM FINISHER FOR STEELS AND HI-TEMPS

Shoulder | Contouring | Slabbing





Part Number	DC Cutting Diameter	PRFRAD1 Profile Radius	PRFRAD2 Profile Radius	PRFA Profile Angle	APMX Depth of Cut Max.	LF Functional Length	ZEFF Effective Flutes	FHA Flute Helix Angle	CCMS Connection Code	DHUB Hub Diameter
47W-3150TQRB06	0.312	0.060	3.150	78	0.530	0.709	4	30	Chip Surfer T05	0.312
47W-3760T6RB12	0.375	0.123	2.950	82	0.600	0.866	4	30	Chip Surfer T06	0.375
47W-5082T8RB16	0.500	0.157	7.500	82	0.820	1.063	4	30	Chip Surfer T08	0.500
METRIC										
47W08014TQRB15	8.00 mm	1.50 mm	80.00 mm	78	14.20 mm	18.00 mm	4	30	Chip Surfer T05	8.00 mm
47W10016T6RB20	10.00 mm	2.00 mm	75.00 mm	78	21.30 mm	27.00 mm	4	30	Chip Surfer T06	10.00 mm
47W12021T8RB20	12.00 mm	2.00 mm	85.00 mm	78	16.50 mm	22.00 mm	4	30	Chip Surfer T08	12.00 mm
47W16027T8RB30	16.00 mm	3.00 mm	75.00 mm	78	27.00 mm	33.40 mm	4	30	Chip Surfer T10	16.00 mm

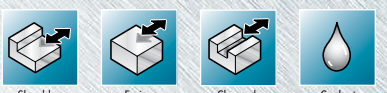
When assembling, be sure tip is seated firmly on shank with no gap. Tightening Torque: T05=60in*lbs, T06=90in*lbs, T08=130in*lbs, T10=250in*lbs.
No lubricant on adaption. Wrenches sold seperately.

CHIPSURFER™ 47W_0 HARDWARE

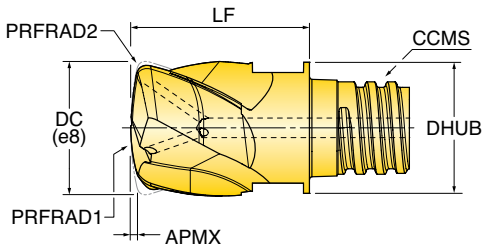
	 Thin Wrench	 **OPTIONAL** Torque Wrench
47W-3150TQRB06	WS-0043	DT-60-06
47W-3760T6RB12	WS-0029	DT-90-08
47W-5082T8RB16	WS-0030	DT-130-10
47W08014TQRB15	WS-0043	DT-60-06
47W10016T6RB20	WS-0029	DT-90-08
47W12021T8RB20	WS-0030	DT-130-10
47W16027T8RB30	WS-0044	DT-250-13

CHIPSURFER™ SERIES 46D_RB

LENS FORM FINISHER







Part Number	DC Cutting Diameter	PRFRAD1 Profile Radius	PRFRAD2 Profile Radius	APMX Depth of Cut Max.	LF Functional Length	ZEFF Effective Flutes	FHA Flute Helix Angle	CCMS Connection Code	DHUB Hub Diameter
46D08005TQRB080	8.00 mm	0.75 mm	15.00 mm	0.10 mm	10.50 mm	3	30	Chip Surfer T05	7.75 mm
46D10007T6RB100	10.00 mm	1.00 mm	20.00 mm	0.10 mm	13.50 mm	3	30	Chip Surfer T06	9.40 mm
46D12009T8RB130	12.00 mm	1.25 mm	25.00 mm	0.15 mm	17.00 mm	3	30	Chip Surfer T08	11.40 mm
46D16013TRRB180	16.00 mm	1.75 mm	35.00 mm	0.30 mm	21.00 mm	3	30	Chip Surfer T10	15.40 mm
46D20016TSRB230	20.00 mm	2.25 mm	45.00 mm	0.40 mm	26.00 mm	3	30	Chip Surfer T12	18.40 mm

When assembling, be sure tip is seated firmly on shank with no gap. Tightening Torque: T05=60in*lbs, T06=90in*lbs, T08=130in*lbs, T10=250in*lbs, T12=250in*lbs.
No lubricant on adaption. Wrenches sold seperately.

CHIPSURFER™ 46D_RB HARDWARE

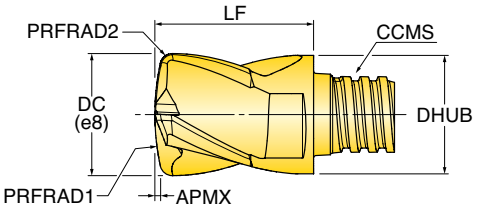
	 Thin Wrench	 **OPTIONAL** Torque Wrench	
46D08005TQRB080	WS-0043	DT-60-06	
46D10007T6RB100	WS-0029	DT-90-08	
46D12009T8RB130	WS-0030	DT-130-10	
46D16013TRRB180	WS-0044	DT-250-13	
46D20016TSRB230	WS-0059	DT-250-16	

CHIPSURFER™ SERIES 47D_RB

LENS FORM FINISHER

Shoulder Facing Channel





Part Number	DC Cutting Diameter	PRFRAD1 Profile Radius	PRFRAD2 Profile Radius	APMX Depth of Cut Max.	LF Functional Length	ZEFF Effective Flutes	FHA Flute Helix Angle	CCMS Connection Code	DHUB Hub Diameter
47D-3119TQRB02	0.312	0.625	0.020	0.004	0.394	4	30	Chip Surfer T05	0.312
47D-3725T6RB04	0.375	0.750	0.039	0.004	0.512	4	30	Chip Surfer T06	0.375
47D-5035T8RB04	0.500	1.000	0.039	0.006	0.650	4	30	Chip Surfer T08	0.500
METRIC									
47D08004TQRB05	8.00 mm	16.00 mm	0.50 mm	0.10 mm	10.00 mm	4	30	Chip Surfer T05	8.00 mm
47D10006T6RB10	10.00 mm	20.00 mm	1.00 mm	0.10 mm	13.00 mm	4	30	Chip Surfer T06	10.00 mm
47D12008T8RB10	12.00 mm	24.00 mm	1.00 mm	0.15 mm	16.50 mm	4	30	Chip Surfer T08	12.00 mm
47D16011TRRB10	16.00 mm	32.00 mm	1.00 mm	0.30 mm	20.50 mm	4	30	Chip Surfer T10	16.00 mm

When assembling, be sure tip is seated firmly on shank with no gap. Tightening Torque: T05=60in*lbs, T06=90in*lbs, T08=130in*lbs, T10=250in*lbs.
No lubricant on adaption. Wrenches sold seperately.

CHIPSURFER™ 47D_RB HARDWARE

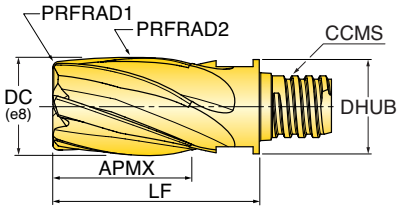
	 Thin Wrench	 **OPTIONAL** Torque Wrench
47D-3119TQRB02	WS-0043	DT-60-06
47D-3725T6RB04	WS-0029	DT-90-08
47D-5035T8RB04	WS-0030	DT-130-10
47D08004TQRB05	WS-0043	DT-60-06
47D10006T6RB10	WS-0029	DT-90-08
47D12008T8RB10	WS-0030	DT-130-10
47D16011TRRB10	WS-0044	DT-250-13

CHIPSURFER™ SERIES 48E_RB

BARREL FORM FINISHER







Part Number	DC Cutting Diameter	PRFRAD1 Profile Radius	PRFRAD2 Profile Radius	APMX Depth of Cut Max.	LF Functional Length	ZEFF Effective Flutes	FHA Flute Helix Angle	CCMS Connection Code	DHUB Hub Diameter
48E12016T8RB271	12.00 mm	0.50 mm	70.00 mm	16.40 mm	27.00 mm	6	30	Chip Surfer T08	11.50 mm
48E16021TRRB342	16.00 mm	0.50 mm	100.00 mm	20.90 mm	33.50 mm	6	30	Chip Surfer T10	15.30 mm

When assembling, be sure tip is seated firmly on shank with no gap. Tightening Torque: T08=130in*lbs, T10=250in*lbs.
No lubricant on adaption. Wrenches sold seperately.

CHIPSURFER™ 48E_RB HARDWARE



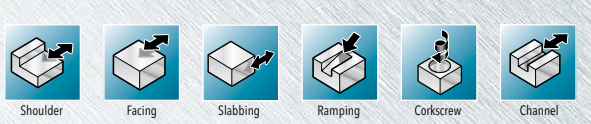
	Thin Wrench	Torque Wrench
48E12016T8RB271	WS-0030	DT-130-10
48E16021TRRB342	WS-0044	DT-250-13

NEW 1.250" DIAMETER END MILL TIPS WITH T21 THREAD ADAPTION

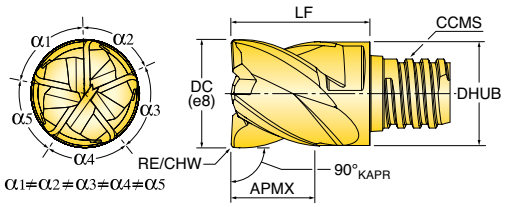
- Rigid and accurate T21 simultaneous fit T-Adaption with +/-.0005" repeatability
- Change tips on and off the machine within seconds
- Torque wrench required to index tips at 970 inch pounds (wrench head sold separately)
- Economical Steel and Long-Reach Carbide shank options

CHIPSURFER™ SERIES 47D_RQ

90° VARIABLE PITCH TIP



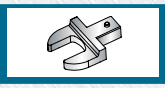




Part Number	DC Cutting Diameter	RE/CHW Corner Radius/Chamfer	APMX Depth of Cut Max.	LF Functional Length	ZEFF Effective Flutes	FHA Flute Helix Angle	CCMS Connection Code	DHUB Hub Diameter	RMPX Ramp Angle Max.
47DE1215TWRQ06	1.250	0.060 R	1.500	2.165	5	36-38	Chip Surfer T21	1.181	1.5
47DE1215TWRQ12	1.250	0.120 R	1.500	2.165	5	36-38	Chip Surfer T21	1.181	1.3
47DE1215TWRQ25	1.250	0.250 R	1.500	2.165	5	36-38	Chip Surfer T21	1.181	0.7
47DE1215TWRQ37	1.250	0.375 R	1.500	2.165	5	36-38	Chip Surfer T21	1.181	0.5

When assembling, be sure tip is seated firmly on shank with no gap. Tightening Torque: T21=970in/lbs.
No lubricant on adaption. Wrenches sold seperately.

CHIPSURFER™ 47D_RQ HARDWARE



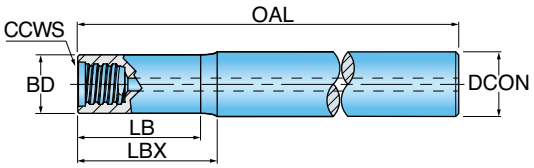
	Torque Wrench Head*	
47DE1215TWRQ06	DT-24	
47DE1215TWRQ12	DT-24	
47DE1215TWRQ25	DT-24	
47DE1215TWRQ37	DT-24	

24mm opening: 14x18mm drive.
Fits most third party adjustable torque wrench handles that can be set to 970 in/lbs.

CHIPSURFER™ SERIES S*T*SA

STEEL SHANK, NECKED





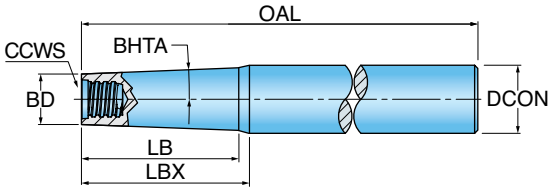
Part Number	CCWS Connection Code	LB Body Length 1	LBX Body Length Max.	OAL Overall Lengh	BD Body Dia.	DCON Shank Dia.	BMC Body Material Code
S125T21SA-12	Chip Surfer T21	1.200	1.320	4.000	1.181	1.250	Steel
S125T21SA-15	Chip Surfer T21	1.500	1.630	6.000	1.181	1.250	Steel

When assembling, be sure tip is seated firmly on shank with no gap. Tightening Torque: T21=970in/lbs.
No lubricant on adaption. Wrenches sold seperately.

CHIPSURFER™ SERIES S*T*SK

STEEL SHANK, CONE NECK





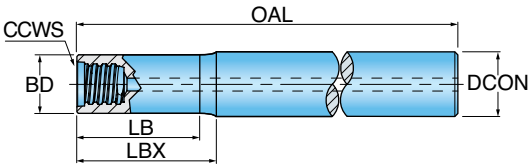
Part Number	CCWS Connection Code	LB Body Length 1	OAL Overall Lengh	BD Body Dia.	BHTA Body Half Taper Angle	DCON Shank Dia.	BMC Body Material Code
S150T21SK-18	Chip Surfer T21	1.820	6.000	1.181	5.0	1.500	Steel

When assembling, be sure tip is seated firmly on shank with no gap. Tightening Torque: T21=970in/lbs.
No lubricant on adaption. Wrenches sold seperately.

CHIPSURFER™ SERIES S*T*CA

CARBIDE SHANK, NECKED





Part Number	CCWS Connection Code	LB Body Length 1	LBX Body Length Max.	OAL Overall Lengh	BD Body Dia.	DCON Shank Dia.	BMC Body Material Code
S125T21CA-25	Chip Surfer T21	2.500	2.630	5.000	1.181	1.250	Carbide
S125T21CA-40	Chip Surfer T21	4.000	4.130	7.000	1.181	1.250	Carbide
S125T21CA-80	Chip Surfer T21	8.000	8.130	11.000	1.181	1.250	Carbide

When assembling, be sure tip is seated firmly on shank with no gap. Tightening Torque: T21=970in/lbs.
No lubricant on adaption. Wrenches sold seperately.

QUICK-CHANGE INTERCHANGEABLE SOLID CARBIDE HEADS FOR SLOTTING, FACING AND THREADING

- .970-1.560" slotters with .125"-.375" width range and 6-10 flutes
- 24-39mm facing heads with 6-10 flutes; Ideal for stubby applications
- 55° and 60° partial profile threading heads
- Cylindrical shanks with strong tri-lobe-drive and screw connection
- Steel shanks with various neck configurations and coolant options

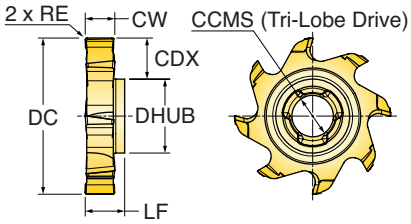
MULTISURFER™ SERIES 18T, 19T

T-SLOT TIP


Slotting


T-Slotting





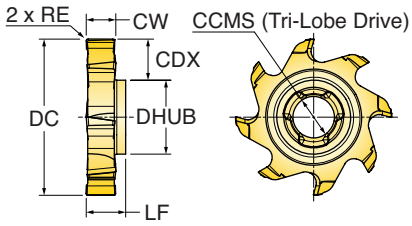
Part Number	DC Cutting Diameter	RE Corner Radius	CW Cutting Width	CDX Cutting Depth Max.	LF Functional Length	ZEFF Eff. Teeth	CCMS Connection Code	DHUB Hub Diameter
18T-9712LPRN01	0.970	0.015	0.125	0.210	0.315	6	Multi-Surfer LP	0.510
18T-9715LPRN01	0.970	0.015	0.156	0.210	0.315	6	Multi-Surfer LP	0.510
18T-9718LPRN01	0.970	0.015	0.187	0.210	0.315	6	Multi-Surfer LP	0.510
18T-9721LPRN01	0.970	0.015	0.218	0.210	0.315	6	Multi-Surfer LP	0.510
18T-9725LPRN01	0.970	0.015	0.250	0.210	0.315	6	Multi-Surfer LP	0.510
18T-9728LPRN01	0.970	0.015	0.281	0.210	0.315	6	Multi-Surfer LP	0.510
18T-9731LPRN01	0.970	0.015	0.312	0.210	0.315	6	Multi-Surfer LP	0.510
19T-1212LQRN01	1.250	0.015	0.125	0.310	0.315	8	Multi-Surfer LQ	0.590
19T-1215LQRN01	1.250	0.015	0.156	0.310	0.315	8	Multi-Surfer LQ	0.590
19T-1218LQRN01	1.250	0.015	0.187	0.310	0.315	8	Multi-Surfer LQ	0.590
19T-1221LQRN01	1.250	0.015	0.218	0.310	0.315	8	Multi-Surfer LQ	0.590
19T-1225LQRN01	1.250	0.015	0.250	0.310	0.315	8	Multi-Surfer LQ	0.590
19T-1228LQRN01	1.250	0.015	0.281	0.310	0.315	8	Multi-Surfer LQ	0.590
19T-1231LQRN01	1.250	0.015	0.312	0.310	0.315	8	Multi-Surfer LQ	0.590
19T-1515LRRN01	1.562	0.015	0.156	0.430	0.394	10	Multi-Surfer LR	0.670
19T-1518LRRN01	1.562	0.015	0.187	0.430	0.394	10	Multi-Surfer LR	0.670
19T-1521LRRN01	1.562	0.015	0.218	0.430	0.394	10	Multi-Surfer LR	0.670
19T-1525LRRN01	1.562	0.015	0.250	0.430	0.394	10	Multi-Surfer LR	0.670
19T-1528LRRN01	1.562	0.015	0.281	0.430	0.394	10	Multi-Surfer LR	0.670
19T-1531LRRN01	1.562	0.015	0.312	0.430	0.394	10	Multi-Surfer LR	0.670
19T-1537LRRN01	1.562	0.015	0.375	0.430	0.394	10	Multi-Surfer LR	0.670

MULTISURFER™ SERIES 18T, 19T (METRIC)

T-SLOT TIP

Slotting T-Slotting





Part Number	DC Cutting Diameter	RE Corner Radius	CW Cutting Width	CDX Cutting Depth Max.	LF Functional Length	ZEFF Eff. Teeth	CCMS Connection Code	DHUB Hub Diameter
18T24730LPRN04	24.70 mm	0.400	3.00 mm	5.50 mm	8.00 mm	6	Multi-Surfer LP	13.00 mm
18T24740LPRN04	24.70 mm	0.400	4.00 mm	5.50 mm	8.00 mm	6	Multi-Surfer LP	13.00 mm
18T24750LPRN04	24.70 mm	0.400	5.00 mm	5.50 mm	8.00 mm	6	Multi-Surfer LP	13.00 mm
18T24760LPRN04	24.70 mm	0.400	6.00 mm	5.50 mm	8.00 mm	6	Multi-Surfer LP	13.00 mm
18T24770LPRN04	24.70 mm	0.400	7.00 mm	5.50 mm	8.00 mm	6	Multi-Surfer LP	13.00 mm
18T24780LPRN04	24.70 mm	0.400	8.00 mm	5.50 mm	8.00 mm	6	Multi-Surfer LP	13.00 mm
19T31730LQRN04	31.70 mm	0.400	3.00 mm	8.00 mm	8.00 mm	8	Multi-Surfer LQ	15.00 mm
19T31740LQRN04	31.70 mm	0.400	4.00 mm	8.00 mm	8.00 mm	8	Multi-Surfer LQ	15.00 mm
19T31750LQRN04	31.70 mm	0.400	5.00 mm	8.00 mm	8.00 mm	8	Multi-Surfer LQ	15.00 mm
19T31760LQRN04	31.70 mm	0.400	6.00 mm	8.00 mm	8.00 mm	8	Multi-Surfer LQ	15.00 mm
19T31770LQRN04	31.70 mm	0.400	7.00 mm	8.00 mm	8.00 mm	8	Multi-Surfer LQ	15.00 mm
19T31780LQRN04	31.70 mm	0.400	8.00 mm	8.00 mm	8.00 mm	8	Multi-Surfer LQ	15.00 mm
19T39740LRRN04	39.70 mm	0.400	4.00 mm	11.00 mm	10.00 mm	10	Multi-Surfer LR	17.00 mm
19T39750LRRN04	39.70 mm	0.400	5.00 mm	11.00 mm	10.00 mm	10	Multi-Surfer LR	17.00 mm
19T39760LRRN04	39.70 mm	0.400	6.00 mm	11.00 mm	10.00 mm	10	Multi-Surfer LR	17.00 mm
19T39770LRRN04	39.70 mm	0.400	7.00 mm	11.00 mm	10.00 mm	10	Multi-Surfer LR	17.00 mm
19T39780LRRN04	39.70 mm	0.400	8.00 mm	11.00 mm	10.00 mm	10	Multi-Surfer LR	17.00 mm
19T39790LRRN04	39.70 mm	0.400	9.00 mm	11.00 mm	10.00 mm	10	Multi-Surfer LR	17.00 mm
19T39799LRRN04	39.70 mm	0.400	10.00 mm	11.00 mm	10.00 mm	10	Multi-Surfer LR	17.00 mm

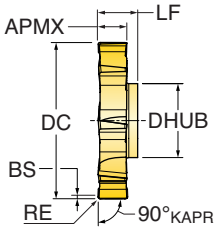
MULTISURFER™ SERIES 18F, 19F (METRIC)

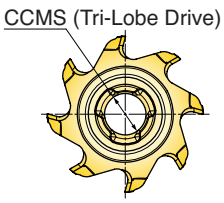
90° FACE MILL TIP


Shoulder


Facing







Part Number	DC Cutting Diameter	RE Corner Radius	BS Wiper Length	APMX Depth of Cut Max.	LF Functional Length	ZEFF Eff. Teeth	CCMS Connection Code	DHUB Hub Diameter
18F24280LPRA04	25.00 mm	0.400	3.60 mm	8.00 mm	8.0 mm	8	Multi-Surfer LP	13.0 mm
19F31280LQRA04	32.00 mm	0.400	3.60 mm	8.00 mm	8.0 mm	8	Multi-Surfer LQ	15.0 mm
19F39210LRRA04	40.00 mm	0.400	3.60 mm	10.00 mm	10.0 mm	10	Multi-Surfer LR	17.0 mm

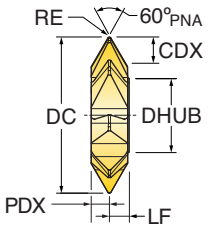
MULTISURFER™ SERIES 18Y_60, 19Y_60

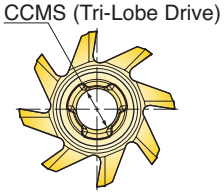
THREAD MILL TIP


Internal Thread


External Thread





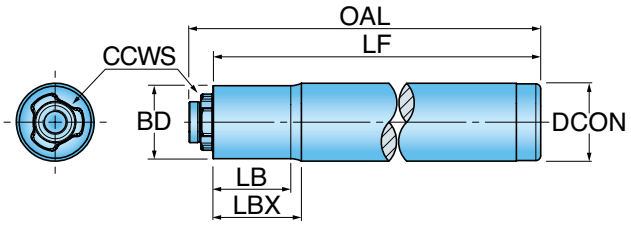


Part Number	DC Cutting Diameter	TPN Thread Pitch Min.	TPX Thread Pitch Max.	TPIN Thread Pitch Inch Min.	TPIX Thread Pitch Inch Max.	PNA Profile Included Angle	RE Corner Radius	PDX Profile Distance Ex.	CDX Cutting Depth Max.	LF Functional Length.	DWN Workpiece Dia. Min.	ZEFF Eff. Flutes	CCMS Connection Code	DHUB Hub Diameter
18Y24730LPRP60	24.70 mm	3.0	5.0	8	5	60	0.20mm	2.2mm	3.50mm	5.50mm	36.0 mm	6	Multi-Surfer LP	13.0mm
19Y31740LQRP60	31.70 mm	4.0	6.0	6	4	60	0.30mm	3.7mm	4.70mm	4.00mm	46.0 mm	8	Multi-Surfer LQ	15.0mm
19Y39760LRRP60	39.70 mm	6.0	8.0	4	3	60	0.40mm	4.5mm	6.20mm	5.00mm	57.0 mm	10	Multi-Surfer LR	17.0mm

MULTISURFER™ SERIES S*L*SA

STEEL SHANK, NECKED





Part Number	CCWS Connection Code	LB Body Length 1	LBX Body Length Max.	LF Functional Length	OAL Overall Length	BD Body Diameter	DCON Shank Diameter	BMC Body Material Code
INCH								
S062LPSA-05	Multi-Surfer LP	0.600	0.650	4.000	4.170	0.510	0.625	Steel
S062LQSA-06	Multi-Surfer LQ	0.700	0.720	4.000	4.190	0.590	0.625	Steel
S062LQSA-07	Multi-Surfer LQ	0.780	0.800	5.000	5.190	0.590	0.625	Steel
S075LRSA-08	Multi-Surfer LR	0.900	0.940	5.500	5.730	0.670	0.750	Steel
METRIC								
S016LPSA-16	Multi-Surfer LP	13.00 mm	16.60 mm	100.00 mm	104.35 mm	13.00 mm	16.00 mm	Steel
S016LQSA-18	Multi-Surfer LQ	16.00 mm	18.20 mm	100.00 mm	104.90 mm	15.00 mm	16.00 mm	Steel
S016LQSA-19	Multi-Surfer LQ	16.00 mm	18.20 mm	130.00 mm	134.90 mm	15.00 mm	16.00 mm	Steel
S020LRSA-23	Multi-Surfer LR	20.20 mm	23.80 mm	140.00 mm	146.00 mm	17.00 mm	20.00 mm	Steel

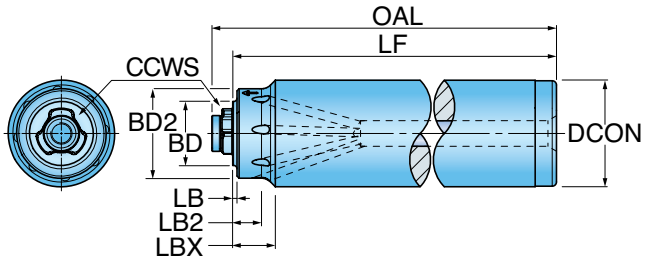
Shank modifications can be made by cutting off the back to desired length or turning back the neck for more usable length.

MULTISURFER™ SERIES S*L*SA

STEEL SHANK

Coolant





Part Number	CCWS Connection Code	LB Body Length 1	LB2 Body Length 2	LBX Body Length Max.	LF Functional Length	OAL Overall Length	BD Body Dia.	BD2 Body Dia. 2	DCON Shank Dia.	CNSC Coolant Entry Style Code	CXSC Coolant Exit Style Code	BMC Body Mat'l Code
INCH												
S075LPSA-03	Multi-Surfer LP	0.030	0.300	0.380	4.250	4.420	0.510	0.625	0.750	1	1, 3	Steel
S100LQSA-03	Multi-Surfer LQ	0.030	0.300	0.380	4.250	4.440	0.590	0.812	1.000	1	1, 3	Steel
S125LRSA-03	Multi-Surfer LR	0.030	0.300	0.380	5.750	5.980	0.670	1.125	1.250	1	1, 3	Steel
METRIC												
S020LPSA-10	Multi-Surfer LP	0.76 mm	7.60 mm	10.00 mm	100.00 mm	104.35 mm	13.00 mm	16.00 mm	20.00 mm	1	1, 3	Steel
S025LQSA-10	Multi-Surfer LQ	0.76 mm	7.60 mm	10.00 mm	100.00 mm	104.90 mm	15.00 mm	21.00 mm	25.00 mm	1	1, 3	Steel
S032LRSA-10	Multi-Surfer LR	0.76 mm	7.60 mm	10.00 mm	140.00 mm	146.00 mm	17.00 mm	28.00 mm	32.00 mm	1	1, 3	Steel

Shank modifications can be made by cutting off the back to desired length.

MULTISURFER™ HARDWARE

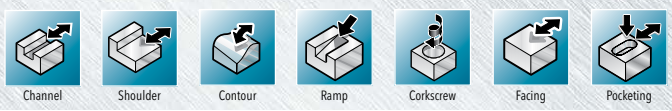
	 Screw	 Driver Handle	 Torx Bit	
S062LPSA-05	TS40T098/HG-P	DS-A00T	DS-TP156B	
S062LQSA-06	TS50T110/HG-P	DS-A00T	DS-TP206B	
S062LQSA-07	TS50T110/HG-P	DS-A00T	DS-TP206B	
S075LRSA-08	TS60T130/HG-P	DS-A00T	DS-TP206B	
S016LPSA-16	TS40T098/HG-P	DS-A00T	DS-TP156B	
S016LQSA-18	TS50T110/HG-P	DS-A00T	DS-TP206B	
S016LQSA-19	TS50T110/HG-P	DS-A00T	DS-TP206B	
S020LRSA-23	TS60T130/HG-P	DS-A00T	DS-TP206B	
S075LPSA-03	TS40T098/HG-P	DS-A00T	DS-TP156B	
S100LQSA-03	TS50T110/HG-P	DS-A00T	DS-TP206B	
S125LRSA-03	TS60T130/HG-P	DS-A00T	DS-TP206B	
S020LPSA-10	TS40T098/HG-P	DS-A00T	DS-TP156B	
S025LQSA-10	TS50T110/HG-P	DS-A00T	DS-TP206B	
S032LRSA-10	TS60T130/HG-P	DS-A00T	DS-TP206B	

NEW CERASFEED OFFERS EXCEPTIONAL PRODUCTIVITY GAINS!

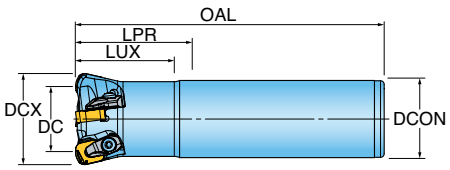
- Cutter body options include: End Mill and Face Mill
- Cutter diameter range, 1.000" up to 3.000"
- Higher insert densities for super productivity!
- New SiAlON grade IN76N will SFEEDUP demanding milling processes!
- SFM up to 33 times greater than solid carbide (60-90 SFM Carbide versus 3000 SFM Ceramic)!
- Max. Depth of cut (DOC) capability from 1.5mm (.060) to 2.5mm (.098)
- Two unique and optimally designed high-feed insert geometries, double-sided
- Inserts offer 4 or 6 cutting edges for cost-effective machining and economy!
- Super strong insert clamping system ensures stable milling performance
- Lower cutting forces promote efficient and higher productivity milling!

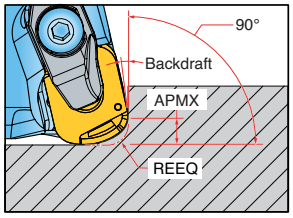
CERASFEED™ 09 SERIES 1ZG3F (CYLINDRICAL SHANK)

END MILL, 09MM IC INSERT SERIES





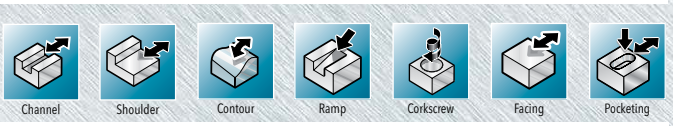




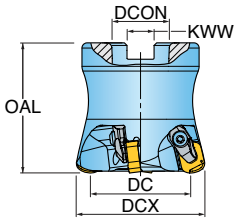
Part Number	DCX Cutting Dia. Max.	DC Cutting Dia.	APMX Depth of Cut Max.	OAL Overall Length	ZEFF Eff. Teeth	REEQ Program Radius Equivalent	DCON Shank Dia.	LUX Usable Length Max.	LPR Protruding Length	CSP Coolant	RMPX Ramp Angle Max.
1ZG3F-10040S1R01	1.000	0.600	.060 (1.5mm)	4.000	2	0.134	1.000	1.600	1.76	Air	.7
1ZG3F-10040S1R02	1.000	0.600	.060 (1.5mm)	4.000	3	0.134	1.000	1.600	1.76	Air	.7
1ZG3F-12050S1R01	1.250	0.838	.060 (1.5mm)	5.000	3	0.134	1.250	1.600	2.72	Air	.6
1ZG3F-15050S1R01	1.500	1.084	.060 (1.5mm)	5.000	4	0.134	1.250	1.600	2.72	Air	.65

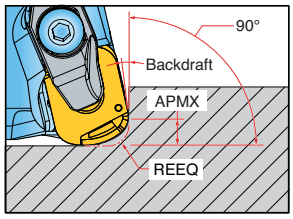
CERASFEED™ 09 SERIES TG1Q, TG2Q

FACE MILL, 09MM IC INSERT SERIES







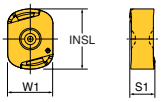


Part Number	DCX Cutting Dia. Max.	DC Cutting Dia.	APMX Depth of Cut Max.	OAL Overall Length	ZEFF Eff. Teeth	REEQ Program Radius Equivalent	DCON Bore Dia.	KWW Keyway	CSP Coolant	RMPX Ramp Angle Max.
TG1Q-20R01	2.000	1.583	.060 (1.5mm)	1.570	5	0.134	0.750	0.312	Air	.55
TG2Q-20R01	2.000	1.583	.060 (1.5mm)	1.570	4	0.134	0.750	0.312	Air	.55

CERASFEED™ 09 INSERT

LNXF09



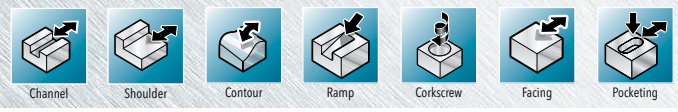


Suggested Operating Parameters		
AP Depth of Cut	**FZ** Feed Per Tooth (in)	**Grade**
.020 ----> .040	.006 ----> .014	IN76N

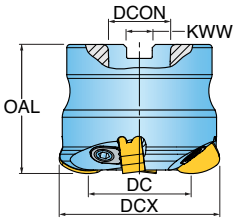
Part Number	Application	REEQ Program Radius Equivalent	INSL Insert Length	W1 Insert Width	IC Inscribed Circle Dia.	S1 Thickness Overall	NOI Number of Indexes	IH Insert Hand	Grade IN76N
LNXF0905R01	Multi-Purpose	.134	.472	.165	.354	.197	4	Right	•

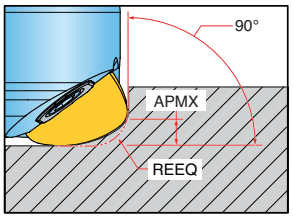
CERASFEED™ 12 SERIES DG1H, DG2H

FACE MILL, 12MM IC INSERT SERIES







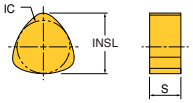


Part Number	DCX Cutting Dia. Max.	DC Cutting Dia.	APMX Depth of Cut Max.	OAL Overall Length	ZEFF Eff. Teeth	REEQ Program Radius Equivalent	DCON Bore Dia.	KWW Keyway	CSP Coolant	RMPX Ramp Angle Max.
DG1H-20R01	2.000	1.320	.098 (2.5mm)	1.575	5	0.177	0.750	0.312	Air	.6
DG2H-20R01	2.000	1.320	.098 (2.5mm)	1.575	4	0.177	0.750	0.312	Air	.6
DG1H-25R01	2.500	1.820	.098 (2.5mm)	1.575	7	0.177	0.750	0.312	Air	.5
DG2H-25R01	2.500	1.820	.098 (2.5mm)	1.575	6	0.177	0.750	0.312	Air	.5
DG1H-30R01	3.000	2.315	.098 (2.5mm)	1.575	8	0.177	1.000	0.375	Air	.45
DG2H-30R01	3.000	2.315	.098 (2.5mm)	1.575	7	0.177	1.000	0.375	Air	.45

CERASFEED™ 12 INSERT

TNXN12





Suggested Operating Parameters		
AP Depth of Cut	**FZ** Feed Per Tooth (in)	**Grade**
.040 ----> .080	.006 ----> .014	IN76N

Part Number	Application	REEQ Program Radius Equivalent	INSL Insert Length	IC Inscribed Circle Dia.	S Thickness Overall	NOI Number of Indexes	IH Insert Hand	Grade IN76N
TNXN1207N01	Multi-Purpose	.177	.535	.472	.276	6	Right	•

CERASFEED™ 09/12 HARDWARE

	 Clamp	 Wrench	 Wedge	 Wedge Screw	 Driver	
1ZG3F-10040S1R01	CCL-3S-ASSY	L-W2	-	-	-	
1ZG3F-10040S1R02	CCL-3S-ASSY	L-W2	-	-	-	
1ZG3F-12050S1R01	CCL-3S-ASSY	L-W2	-	-	-	
1ZG3F-15050S1R01	CCL-3S-ASSY	L-W2	-	-	-	
TG1Q-16R01	CCL-3S-ASSY	L-W2	-	-	-	
TG1Q-20R01	CCL-3S-ASSY	L-W2	-	-	-	
TG2Q-20R01	CCL-3S-ASSY	L-W2	-	-	-	
DG1H-20R01	-	-	WFZ6-C	WS6	DS-H03T	
DG2H-20R01	-	-	WFZ6-C	WS6	DS-H03T	
DG1H-25R01	-	-	WFZ6-C	WS6	DS-H03T	
DG2H-25R01	-	-	WFZ6-C	WS6	DS-H03T	
DG1H-30R01	-	-	WFZ6-C	WS6	DS-H03T	
DG2H-30R01	-	-	WFZ6-C	WS6	DS-H03T	

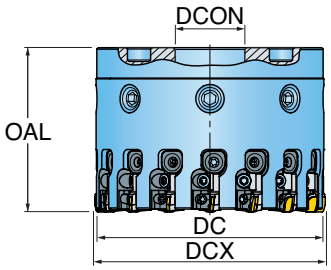


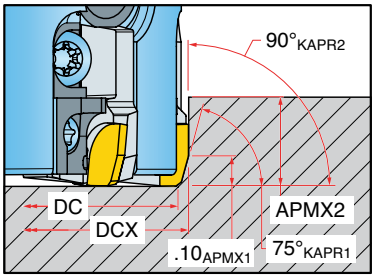


HIGH NUMBER OF PCD CUTTING EDGES FOR HIGH PRODUCTIVITY!

- High rigidity double clamping system to support High-Feed machining
- Up to .016" total axial adjustment to ensure an excellent surface finish
- Multiple cutting edge geometries to cover any application, including 90° and 75° lead angle
- 1.5" (40mm) available in cylindrical shank
- 2.0-5.0" (50mm-125mm) range in shell mill or monoblock bodies
- DOC capability of .157" (4mm)
- Ability to re-tip cartridges

TEDISFEED™ SHELL MILL WITH AXIAL ADJUSTMENT

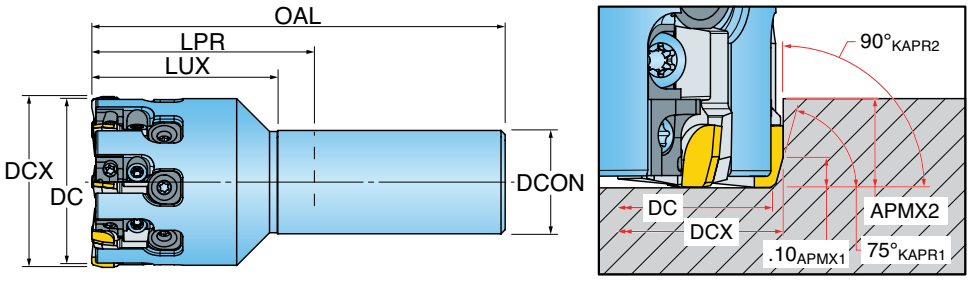




	Part Number[1]	DC (75°) Cutting Diameter	DC (90°) Cutting Diameter	DCX (75°) Cutting Diameter Max.	OAL Overall Length	ZEFF Eff. Teeth	Holder Shape	DCON Shank Diameter	BMC Body Material Code	Item
INCH	TXGSM22I020-10-00	1.94	2	2	2.17	10	A	22 mm	Steel	2742926
	TXGSM22I025-13-00	2.44	2.5	2.5	2.17	13	B	22 mm	Steel	2742927
	TXGSM27I030-16-00	2.94	3	3	2.28	16	A	27 mm	Steel	2742928
	TXGSM32I040-22-00	3.94	4	4	2.28	22	A	32 mm	Aluminum & Steel	2742929
	TXGSM40I050-28-00	4.94	5	5	2.28	28	A	40 mm	Aluminum & Steel	2742930
METRIC	TXGSM22D050-10-00	48.6	50	50	55	10	B	22 mm	Steel	2742926
	TXGSM22D063U13-00	61.6	63	63	55	13	A	22 mm	Steel	2747098
	TXGSM27D080U16-00	78.6	80	80	58	16	A	27 mm	Steel	2747099
	TXGSM32D100U22-00	98.6	100	100	58	22	A	32 mm	Aluminum & Steel	2747100
	TXGSM40D125U28-00	123.6	125	125	58	28	A	40 mm	Aluminum & Steel	2747101

Minimum diameter guaranteed with standard inserts. Refer to related table of available cutting geometry for more detail.
[1] Part number refers to body only, without inserts.

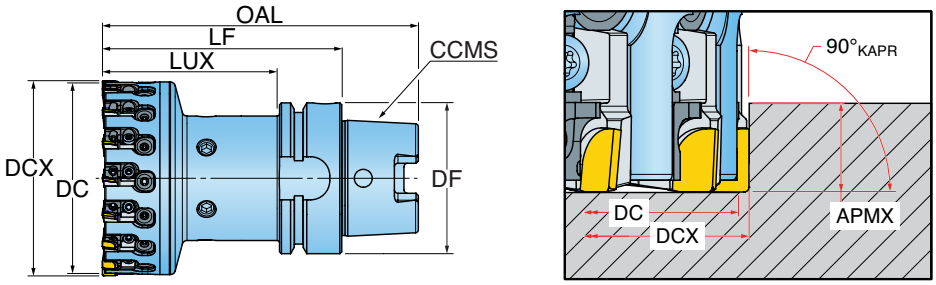
TEDISFEED™ CYLINDRICAL SHANK END MILL WITH AXIAL ADJUSTMENT



	Part Number[1]	DC (75°) Cutting Diameter	DC (90°) Cutting Diameter	DCX (75°) Cutting Diameter Max.	OAL Overall Length	ZEFF Eff. Teeth	Holder Shape	DCON Shank Diameter	BMC Body Material Code	Item
INCH	TXGSC01I015-07-00	1.44	1.5	1.5	3.94	7	Cylindrical	1.00	Steel	2742931
METRIC	TXGSC25D040U07-00	38.6	40	40	100	7	Cylindrical	25 mm	Steel	2747102

Minimum diameter guaranteed with standard inserts. Refer to related table of available cutting geometry for more detail.
[1] Part number refers to body only, without inserts.

TEDISFEED™ MONOBLOCK MILL WITH AXIAL ADJUSTMENT



	Part Number[1]	DC (75°) Cutting Diameter	DC (90°) Cutting Diameter	DCX (75°) Cutting Diameter Max.	OAL Overall Length	ZEFF Eff. Teeth	Holder Shape	DCON Shank Diameter	BMC Body Material Code	Item
METRIC	TXGHA63D063-13-00	63	64.4	64.4	100	13	HSK 63 A	52	Steel	2748906
	TXGHA63D080-16-00	80	81.4	81.4	100	16	HSK 63 A	52	Steel	2748905
	TXGHA63D100-22-00	100	101.4	101.4	100	22	HSK 63 A	52	Steel	2748907

Minimum diameter guaranteed with standard inserts. Refer to related table of available cutting geometry for more detail.
[1] Part number refers to body only, without inserts.
Monoblock mills available upon request.

TEDISFEED™ PCD INSERTS



Part Number	Availability	Geometry	Rotation	Grade*	Item
TXGPA01RPJ	Stock	01	R	PB	2717188
TXGPA02RPJ	Stock	02	R	PB	2717189
TXGPA05RPJ	Stock	05	R	PB	2717190
TXGPA45RPJ	Stock	45	R	PB	2747053
TXGPA07RPJ	Stock	07	R	PB	2717191
TXGPA09RPJ	Stock	09	R	PB	2724019

Alternative grades available. Please contact IT.TE.DI. for choosing the best grade.



PREMIUM HOLE MACHINING WITH TPC SELF-CENTERING TIPS

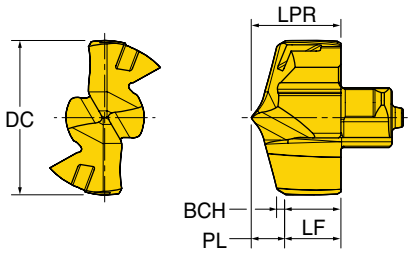
- Unique geometry eliminates need for a pilot hole
- Excellent surface finish, hole cylindricity and straightness
- Fully compatible with existing GoldTwist drill bodies
- Diameter range: .236"- 1.020" (D6.0-25.9mm)
- For steel and cast iron applications

GOLDTWIST™ SERIES TPC

SELF-CENTERING DRILL TIPS

Drilling Coolant





Part Number	DC Cutting Diameter		SSC Seat Size Code	PL Point Length	LPR Projection Length	LF Functional Length	BCH Chamfer Length	Grade
	(inch)	(mm)						IN2505
TPC0600R01	0.2362	6.00	6	0.057	0.157	0.100	0.020	•
TPC0635R01	0.2500	6.35	6	0.059	0.169	0.108	0.020	•
TPC0650R01	0.2559	6.50	6.5	0.061	0.169	0.108	0.020	•
TPC0680R01	0.2677	6.80	6.5	0.063	0.169	0.107	0.020	•
TPC0700R01	0.2756	7.00	7	0.065	0.181	0.117	0.020	•
TPC0750R01	0.2953	7.50	7	0.067	0.181	0.114	0.020	•
TPC0790R01	0.3110	7.90	7	0.069	0.181	0.112	0.020	•
TPC0800R01	0.3150	8.00	8	0.071	0.213	0.141	0.020	•
TPC0850R01	0.3346	8.50	8	0.074	0.213	0.139	0.020	•
TPC0860R01	0.3386	8.60	8	0.074	0.213	0.138	0.020	•
TPC0870R01	0.3425	8.70	8	0.075	0.213	0.138	0.020	•
TPC0900R01	0.3543	9.00	9	0.078	0.228	0.150	0.020	•
TPC0950R01	0.3740	9.50	9	0.081	0.228	0.148	0.020	•
TPC0990R01	0.3898	9.90	9	0.083	0.228	0.146	0.020	•
TPC1000R01	0.3937	10.00	10	0.092	0.244	0.152	0.028	•
TPC1020R01	0.4016	10.20	10	0.093	0.244	0.151	0.028	•
TPC1030R01	0.4055	10.30	10	0.093	0.244	0.151	0.028	•
TPC1050R01	0.4134	10.50	10	0.094	0.244	0.150	0.028	•
TPC1070R01	0.4213	10.70	10	0.095	0.244	0.149	0.028	•
TPC1080R01	0.4252	10.80	10	0.096	0.244	0.148	0.028	•
TPC1090R01	0.4291	10.90	10	0.096	0.244	0.148	0.028	•
TPC1100R01	0.4331	11.00	11	0.098	0.260	0.161	0.028	•
TPC1111R01	0.4374	11.11	11	0.099	0.260	0.161	0.028	•
TPC1120R01	0.4409	11.20	11	0.100	0.260	0.160	0.028	•
TPC1150R01	0.4528	11.50	11	0.101	0.260	0.159	0.028	•
TPC1180R01	0.4646	11.80	11	0.103	0.260	0.157	0.028	•
TPC1190R01	0.4685	11.90	11	0.103	0.260	0.157	0.028	•
TPC1200R01	0.4724	12.00	12	0.105	0.276	0.170	0.028	•
TPC1230R01	0.4843	12.30	12	0.107	0.276	0.169	0.028	•

• : Standard items

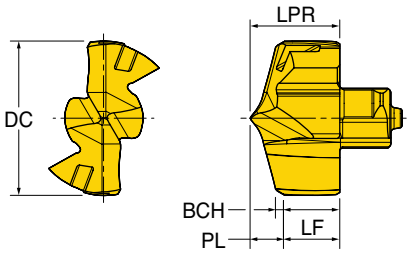
GOLDTWIST™ SERIES TPC

SELF-CENTERING DRILL TIPS

Drilling

Coolant





Part Number	DC Cutting Diameter		SSC Seat Size Code	PL Point Length	LPR Projection Length	LF Functional Length	BCH Chamfer Length	Grade
	(inch)	(mm)						IN2505
TPC1250R01	0.4921	12.50	12	0.108	0.276	0.168	0.028	•
TPC1260R01	0.4961	12.60	12	0.108	0.276	0.167	0.028	•
TPC1270R01	0.5000	12.70	12	0.109	0.276	0.167	0.028	•
TPC1300R01	0.5118	13.00	13	0.112	0.299	0.187	0.028	•
TPC1350R01	0.5315	13.50	13	0.115	0.299	0.184	0.028	•
TPC1380R01	0.5433	13.80	13	0.117	0.299	0.183	0.028	•
TPC1400R01	0.5512	14.00	14	0.119	0.321	0.202	0.028	•
TPC1410R01	0.5551	14.10	14	0.119	0.321	0.202	0.028	•
TPC1420R01	0.5591	14.20	14	0.120	0.321	0.201	0.028	•
TPC1430R01	0.5630	14.30	14	0.120	0.321	0.200	0.028	•
TPC1450R01	0.5709	14.50	14	0.122	0.321	0.199	0.028	•
TPC1460R01	0.5748	14.60	14	0.122	0.321	0.199	0.028	•
TPC1470R01	0.5787	14.70	14	0.122	0.321	0.198	0.028	•
TPC1480R01	0.5827	14.80	14	0.123	0.321	0.198	0.028	•
TPC1500R01	0.5906	15.00	15	0.126	0.344	0.218	0.028	•
TPC1510R01	0.5945	15.10	15	0.126	0.344	0.218	0.028	•
TPC1520R01	0.5984	15.20	15	0.127	0.344	0.217	0.028	•
TPC1550R01	0.6102	15.50	15	0.128	0.344	0.215	0.028	•
TPC1590R01	0.6260	15.90	15	0.130	0.344	0.213	0.028	•
TPC1600R01	0.6299	16.00	16	0.136	0.366	0.230	0.031	•
TPC1610R01	0.6339	16.10	16	0.137	0.366	0.229	0.031	•
TPC1620R01	0.6378	16.20	16	0.137	0.366	0.229	0.031	•
TPC1630R01	0.6417	16.30	16	0.138	0.366	0.228	0.031	•
TPC1640R01	0.6457	16.40	16	0.138	0.366	0.228	0.031	•
TPC1650R01	0.6496	16.50	16	0.139	0.366	0.227	0.031	•
TPC1670R01	0.6575	16.70	16	0.140	0.366	0.226	0.031	•
TPC1680R01	0.6614	16.80	16	0.141	0.366	0.226	0.031	•
TPC1700R01	0.6693	17.00	17	0.143	0.390	0.247	0.031	•
TPC1710R01	0.6732	17.10	17	0.143	0.390	0.246	0.031	•
TPC1730R01	0.6811	17.30	17	0.144	0.390	0.245	0.031	•
TPC1740R01	0.6850	17.40	17	0.145	0.390	0.245	0.031	•
TPC1750R01	0.6890	17.50	17	0.146	0.390	0.244	0.031	•

• : Standard items

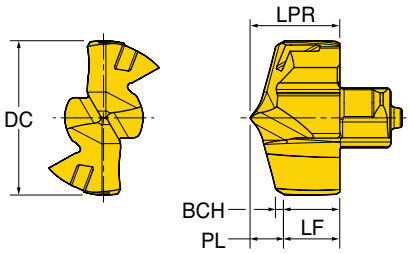
GOLDTWIST™ SERIES TPC

SELF-CENTERING DRILL TIPS

Drilling

Coolant



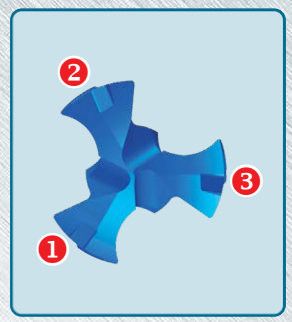


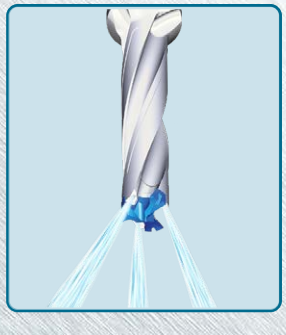
Part Number	DC Cutting Diameter		SSC Seat Size Code	PL Point Length	LPR Projection Length	LF Functional Length	BCH Chamfer Length	Grade
	(inch)	(mm)						IN2505
TPC1800R01	0.7087	18.00	18	0.150	0.413	0.263	0.031	•
TPC1830R01	0.7205	18.30	18	0.152	0.413	0.262	0.031	•
TPC1850R01	0.7283	18.50	18	0.153	0.413	0.261	0.031	•
TPC1860R01	0.7323	18.60	18	0.153	0.413	0.260	0.031	•
TPC1900R01	0.7480	19.00	19	0.157	0.433	0.276	0.031	•
TPC1905R01	0.7500	19.05	19	0.157	0.433	0.276	0.031	•
TPC1920R01	0.7559	19.20	19	0.158	0.433	0.275	0.031	•
TPC1930R01	0.7598	19.30	19	0.158	0.433	0.275	0.031	•
TPC1940R01	0.7638	19.40	19	0.159	0.433	0.274	0.031	•
TPC1950R01	0.7677	19.50	19	0.159	0.433	0.274	0.031	•
TPC1980R01	0.7795	19.80	19	0.161	0.433	0.272	0.031	•
TPC1990R01	0.7835	19.90	19	0.161	0.433	0.272	0.031	•
TPC2000R01	0.7874	20.00	20	0.163	0.457	0.293	0.031	•
TPC2020R01	0.7953	20.20	20	0.164	0.457	0.293	0.031	•
TPC2050R01	0.8071	20.50	20	0.166	0.457	0.291	0.031	•
TPC2060R01	0.8110	20.60	20	0.167	0.457	0.290	0.031	•
TPC2100R01	0.8268	21.00	21	0.170	0.480	0.309	0.031	•
TPC2140R01	0.8425	21.40	21	0.172	0.480	0.307	0.031	•
TPC2150R01	0.8465	21.50	21	0.173	0.480	0.307	0.031	•
TPC2200R01	0.8661	22.00	22	0.177	0.502	0.325	0.031	•
TPC2222R01	0.8748	22.22	22	0.178	0.502	0.324	0.031	•
TPC2250R01	0.8858	22.50	22	0.180	0.502	0.322	0.031	•
TPC2300R01	0.9055	23.00	23	0.184	0.525	0.341	0.031	•
TPC2350R01	0.9252	23.50	23	0.187	0.525	0.338	0.031	•
TPC2380R01	0.9370	23.80	23	0.188	0.525	0.337	0.031	•
TPC2400R01	0.9449	24.00	24	0.191	0.547	0.357	0.031	•
TPC2450R01	0.9646	24.50	24	0.193	0.547	0.354	0.031	•
TPC2500R01	0.9843	25.00	25	0.197	0.571	0.374	0.031	•
TPC2540R01	1.0000	25.40	25	0.199	0.571	0.372	0.031	•
TPC2550R01	1.0039	25.50	25	0.200	0.571	0.371	0.031	•
TPC2560R01	1.0078	25.60	25	0.201	0.571	0.370	0.031	•
TPC2590R01	1.0197	25.90	25	0.202	0.571	0.369	0.031	•

• : Standard items

3-FLUTE QUICK CHANGE DRILLS FOR INCREASED PRODUCTIVITY!

- 3-Flute geometry allows for increased productivity by more than 50%
- Diameter range: .6299"-.8228" (D16.0-D20.9mm)
- Can accommodate 3xD and 5xD applications
- Self-Centering geometry
  - Eliminates the need for piloting pre hole
  - Excellent hole precision and finish
  - Reduced spindle loads
- Multiple diameters accommodated with one, single body
- Coolant through for excellent chip evacuation
- New IN2205 grade for excellent tool life in steel and cast iron applications
- Simplified tip replacement provides reduced downtime



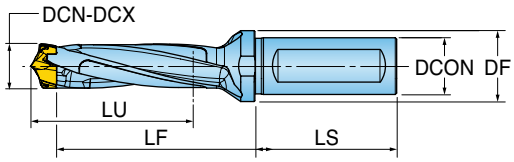




TWISTSFEED™ SERIES FD (UNIVERSAL FLAT SHANK)

3XD UNIVERSAL FLAT SHANKS

Drilling Coolant





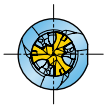
Part Number	DCN Cutting Dia. Min.	DCX Cutting Dia. Max.	SSC Seat Size Code	LU Usable Length	LF Functional Length	LS Shank Length	DCON Shank Diameter	DF Flange Diameter	Key
FD160004818R01	0.6299 (16.00 mm)	0.6654 (16.90 mm)	16	2.05	2.76	1.97	0.750	0.98	KFD16-17
FD170005118R01	0.6693 (17.00 mm)	0.7047 (17.90 mm)	17	2.17	2.94	1.97	0.750	0.98	KFD16-17
FD1800054C8R01	0.7087 (18.00 mm)	0.7441 (18.90 mm)	18	2.28	3.15	2.20	1.000	1.26	KFD18-19
FD1900057C8R01	0.7480 (19.00 mm)	0.7835 (19.90 mm)	19	2.40	3.31	2.20	1.000	1.26	KFD18-19
FD2000060C8R01	0.7874 (20.00 mm)	0.8228 (20.90 mm)	20	2.52	3.47	2.20	1.000	1.26	KFD20-21

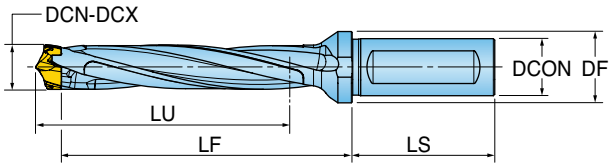
TWISTSFEED™ SERIES FD (UNIVERSAL FLAT SHANK)

5XD UNIVERSAL FLAT SHANKS

Drilling Coolant







Part Number	DCN Cutting Dia. Min.	DCX Cutting Dia. Max.	SSC Seat Size Code	LU Usable Length	LF Functional Length	LS Shank Length	DCON Shank Diameter	DF Flange Diameter	Key
FD160008018R01	0.6299 (16.00 mm)	0.6654 (16.90 mm)	16	3.31	4.02	1.97	0.750	0.98	KFD16-17
FD170008518R01	0.6693 (17.00 mm)	0.6693 (17.90 mm)	17	3.50	4.28	1.97	0.750	0.98	KFD16-17
FD1800090C8R01	0.7087 (18.00 mm)	0.7441 (18.90 mm)	18	3.70	4.56	2.20	1.000	1.26	KFD18-19
FD1900095C8R01	0.7480 (19.00 mm)	0.7835 (19.90 mm)	19	3.90	4.80	2.20	1.000	1.26	KFD18-19
FD2000100C8R01	0.7874 (20.00 mm)	0.8228 (20.90 mm)	20	4.09	5.04	2.20	1.000	1.26	KFD20-21

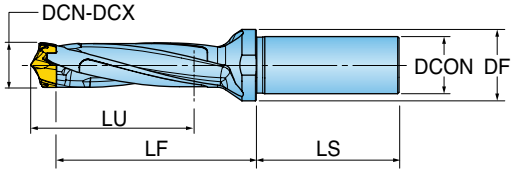
TWISTSFEED™ SERIES FD (CYLINDRICAL SHANK)

3XD CYLINDRICAL SHANKS

Drilling Coolant







Part Number	DCN Cutting Dia. Min.	DCX Cutting Dia. Max.	SSC Seat Size Code	LU Usable Length	LF Functional Length	LS Shank Length	DCON Shank Diameter	DF Flange Diameter	Key
FD1600048S7R01	0.6299 (16.00 mm)	0.6654 (16.90 mm)	16	2.05	2.76	1.97	0.750	0.98	KFD16-17
FD1700051S7R01	0.6693 (17.00 mm)	0.6693 (17.90 mm)	17	2.17	2.94	1.97	0.750	0.98	KFD16-17
FD1800054S1R01	0.7087 (18.00 mm)	0.7441 (18.90 mm)	18	2.28	3.15	2.20	1.000	1.26	KFD18-19
FD1900057S1R01	0.7480 (19.00 mm)	0.7835 (19.90 mm)	19	2.40	3.31	2.20	1.000	1.26	KFD18-19
FD2000060S1R01	0.7874 (20.00 mm)	0.8228 (20.90 mm)	20	2.52	3.47	2.20	1.000	1.26	KFD20-21

TWISTSFEED™ SERIES FD (CYLINDRICAL SHANK)

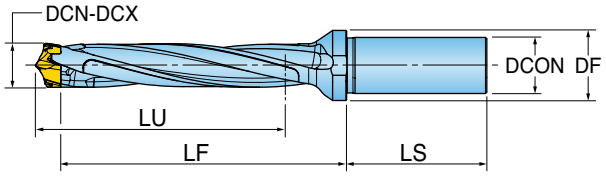
5XD CYLINDRICAL SHANKS

Drilling

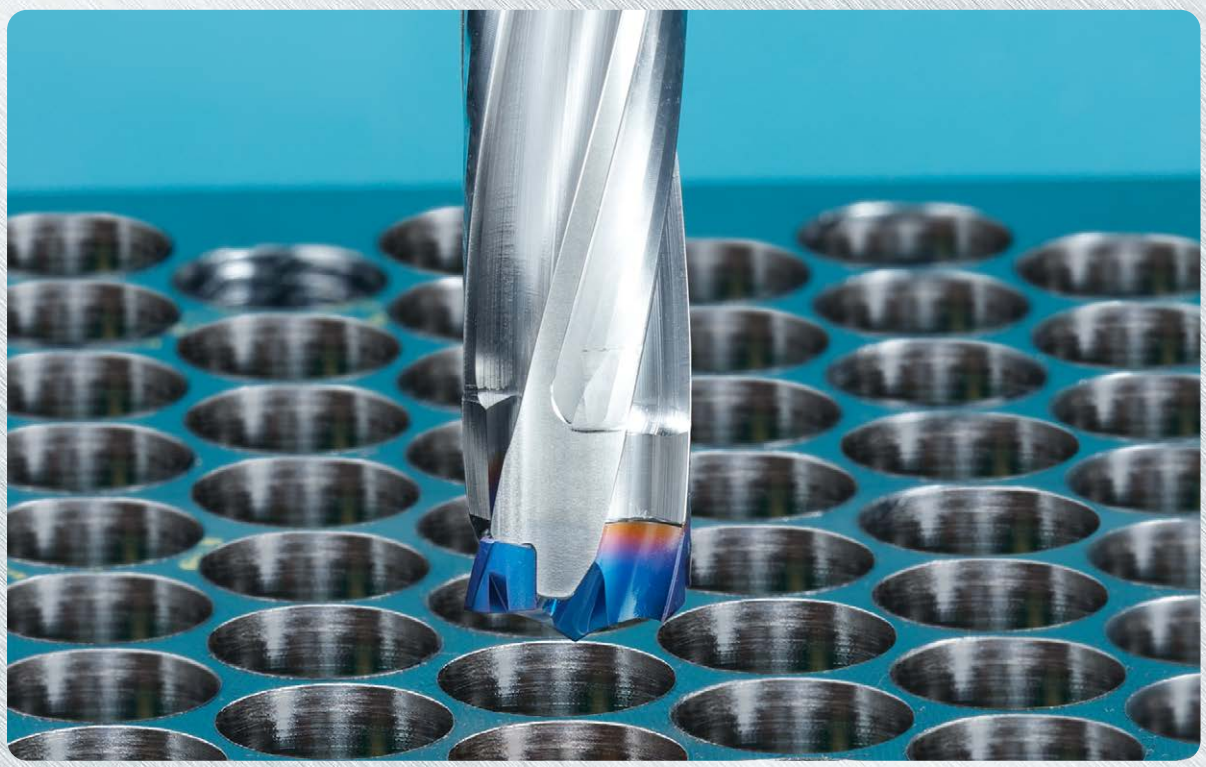
Coolant







Part Number	DCN Cutting Dia. Min.	DCX Cutting Dia. Max.	SSC Seat Size Code	LU Usable Length	LF Functional Length	LS Shank Length	DCON Shank Diameter	DF Flange Diameter	Key
FD1600080S7R01	0.6299 (16.00 mm)	0.6654 (16.90 mm)	16	3.31	4.02	1.97	0.750	0.98	KFD16-17
FD1700085S7R01	0.6693 (17.00 mm)	0.6693 (17.90 mm)	17	3.50	4.28	1.97	0.750	0.98	KFD16-17
FD1800090S1R01	0.7087 (18.00 mm)	0.7441 (18.90 mm)	18	3.70	4.56	2.20	1.000	1.26	KFD18-19
FD1900095S1R01	0.7480 (19.00 mm)	0.7835 (19.90 mm)	19	3.90	4.80	2.20	1.000	1.26	KFD18-19
FD2000100S1R01	0.7874 (20.00 mm)	0.8228 (20.90 mm)	20	4.09	5.04	2.20	1.000	1.26	KFD20-21



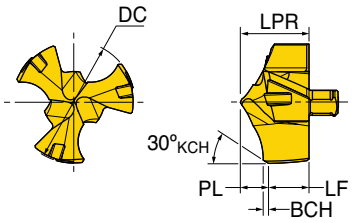
TWISTSFEED™ SERIES FPC

3-FLUTE DRILL TIPS

Drilling

Coolant





Part Number	DC Cutting Diameter	SSC Seat Size Code	PL Point Length	LPR Projection Length	LF Functional Length	BCH Chamfer Length	Grade IN2205
FPC1600R01	0.6299 (16.00 mm)	16	0.146	0.354	0.208	0.028	•
FPC1650R01	0.6496 (16.50 mm)	16	0.146	0.354	0.208	0.028	•
FPC1670R01	0.6575 (16.70 mm)	16	0.146	0.354	0.208	0.028	•
FPC1700R01	0.6693 (17.00 mm)	17	0.154	0.374	0.221	0.028	•
FPC1750R01	0.6890 (17.50 mm)	17	0.153	0.374	0.221	0.028	•
FPC1800R01	0.7087 (18.00 mm)	18	0.160	0.398	0.237	0.028	•
FPC1850R01	0.7283 (18.50 mm)	18	0.161	0.398	0.237	0.028	•
FPC1900R01	0.7480 (19.00 mm)	19	0.168	0.421	0.254	0.028	•
FPC1905R01	0.7500 (19.05 mm)	19	0.168	0.421	0.254	0.028	•
FPC1950R01	0.7677 (19.50 mm)	19	0.168	0.421	0.253	0.028	•
FPC2000R01	0.7874 (20.00 mm)	20	0.175	0.445	0.270	0.028	•
FPC2020R01	0.7952 (20.20 mm)	20	0.175	0.445	0.270	0.028	•
FPC2050R01	0.8071 (20.50 mm)	20	0.175	0.445	0.270	0.028	•

• : Standard items

NEW 3-FLUTE SOLID CARBIDE DRILL FOR 50% HIGHER FEED RATES!

- 3-flute geometry increases productivity by at least 50%
- Self-centering geometry provides precise and accurate holes
- Very high stability in the cut due to its specially designed edge geometry
  - Reinforced cutting edge
  - Side geometry that minimizes heat and reduces cutting forces
- 3 coolant outlet holes to maximum flow and evacuate chips
- New PVD-coated grade IN2205, blue in color for easy identification
- Suitable for steel and cast iron drilling

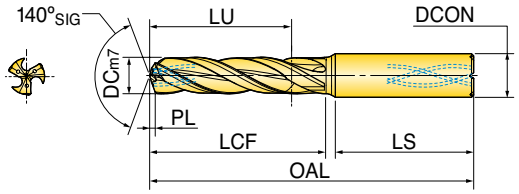
SOLIDDRILL3™ SERIES FR (3XD)

3-FLUTE SOLID CARBIDE DRILLS WITH COOLANT HOLES

Drilling

Coolant





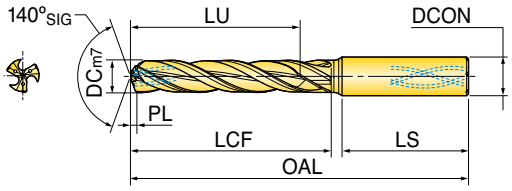
Part Number	DC Cutting Dia. (mm)	DC Cutting Dia. (inch)	DC Cutting Dia. (fraction)	PL Point Length (mm)	LU Usable Length (mm)	LCF Chip Flute Length (mm)	LS Shank Length (mm)	OAL Overall Length (mm)	DCON Shank Diameter (mm)	Grade	IN2505
FR0397017T7R01	3.97	0.1563	5/32"	0.80	17	25	35	66	6		•
FR0400017T7R01	4.00	0.1575	-	0.82	17	25	35	66	6		•
FR0450017T7R01	4.50	0.1772	-	0.88	17	25	35	66	6		•
FR0476017T7R01	4.76	0.1875	3/16"	0.90	17	25	35	66	6		•
FR0500020T7R01	5.00	0.1969	-	0.96	20	29	36	66	6		•
FR0510020T7R01	5.10	0.2008	-	0.98	20	29	36	66	6		•
FR0550020T7R01	5.50	0.2165	-	1.08	20	29	36	66	6		•
FR0556020T7R01	5.56	0.2188	7/32"	1.09	20	29	36	66	6		•
FR0600020T7R01	6.00	0.2362	-	1.17	20	29	36	66	6		•
FR0635024T0R01	6.35	0.2500	1/4"	1.20	24	35	36	79	8		•
FR0650024T0R01	6.50	0.2559	-	1.26	24	35	36	79	8		•
FR0680024T0R01	6.80	0.2677	-	1.29	24	35	36	79	8		•
FR0700024T0R01	7.00	0.2756	-	1.35	24	35	36	79	8		•
FR0714024T0R01	7.14	0.2813	9/32"	1.38	29	42	36	79	8		•
FR0750029T0R01	7.50	0.2953	-	1.40	29	42	36	79	8		•
FR0794029T0R01	7.94	0.3126	5/16"	1.48	29	42	36	79	8		•
FR0800029T0R01	8.00	0.3150	-	1.49	29	42	36	79	8		•
FR0850035T1R01	8.50	0.3346	-	1.63	35	48	40	89	10		•
FR0860035T1R01	8.60	0.3386	-	1.64	35	48	40	89	10		•
FR0873035T1R01	8.73	0.3438	11/32"	1.65	35	48	40	89	10		•
FR0900035T1R01	9.00	0.3543	-	1.72	35	48	40	89	10		•
FR0950035T1R01	9.50	0.3740	-	1.75	35	48	40	89	10		•
FR0953035T1R01	9.53	0.3752	3/8"	1.76	35	48	40	89	10		•
FR1000035T1R01	10.00	0.3937	-	1.85	35	48	40	89	10		•
FR1030040T2R01	10.30	0.4063	13/32"	1.88	40	55	45	102	12		•
FR1050040T2R01	10.50	0.4134	-	1.98	40	55	45	102	12		•
FR1100040T2R01	11.00	0.4331	-	2.07	40	55	45	102	12		•
FR1111040T2R01	11.11	0.4375	7/16"	2.08	40	56	45	102	12		•
FR1150040T2R01	11.50	0.4528	-	2.12	40	56	45	102	12		•
FR1191040T2R01	11.91	0.4688	15/32"	2.20	40	56	45	102	12		•
FR1200040T2R01	12.00	0.4724	-	2.21	40	56	45	102	12		•

SOLIDDRILL3™ SERIES FR (5XD)

3-FLUTE SOLID CARBIDE DRILLS WITH COOLANT HOLES

Drilling Coolant





Part Number	DC Cutting Dia. (mm)	DC Cutting Dia. (inch)	DC Cutting Dia. (fraction)	PL Point Length (mm)	LU Usable Length (mm)	LCF Chip Flute Length (mm)	LS Shank Length (mm)	OAL Overall Length (mm)	DCON Shank Diameter (mm)	Grade	IN2505
FR0397029T7R01	3.97	0.1563	5/32"	0.80	29	37	35	74	6		•
FR0400029T7R01	4.00	0.1575	-	0.82	29	37	35	74	6		•
FR0450029T7R01	4.50	0.1772	-	0.88	29	37	35	74	6		•
FR0476029T7R01	4.76	0.1875	3/16"	0.90	29	37	35	74	6		•
FR0500035T7R01	5.00	0.1969	-	0.96	35	45	36	82	6		•
FR0510035T7R01	5.10	0.2008	-	0.98	35	45	36	82	6		•
FR0550035T7R01	5.50	0.2165	-	1.08	35	45	36	82	6		•
FR0556035T7R01	5.56	0.2188	7/32"	1.09	35	45	36	82	6		•
FR0600035T7R01	6.00	0.2362	-	1.17	35	45	36	82	6		•
FR0635043T0R01	6.35	0.2500	1/4"	1.20	43	54	36	91	8		•
FR0650043T0R01	6.50	0.2559	-	1.26	43	54	36	91	8		•
FR0680043T0R01	6.80	0.2677	-	1.29	43	54	36	91	8		•
FR0700043T0R01	7.00	0.2756	-	1.35	43	54	36	91	8		•
FR0714043T0R01	7.14	0.2813	9/32"	1.38	43	54	36	91	8		•
FR0750043T0R01	7.50	0.2953	-	1.40	43	54	36	91	8		•
FR0794043T0R01	7.94	0.3126	5/16"	1.48	43	54	36	91	8		•
FR0800043T0R01	8.00	0.3150	-	1.49	43	54	36	91	8		•
FR0850049T1R01	8.50	0.3346	-	1.63	49	62	40	103	10		•
FR0860049T1R01	8.60	0.3386	-	1.64	49	62	40	103	10		•
FR0873049T1R01	8.73	0.3438	11/32"	1.65	49	62	40	103	10		•
FR0900049T1R01	9.00	0.3543	-	1.72	49	62	40	103	10		•
FR0950049T1R01	9.50	0.3740	-	1.75	49	62	40	103	10		•
FR0953049T1R01	9.53	0.3752	3/8"	1.76	49	62	40	103	10		•
FR1000049T1R01	10.00	0.3937	-	1.85	49	62	40	103	10		•
FR1030056T2R01	10.30	0.4063	13/32"	1.88	56	71	45	118	12		•
FR1050056T2R01	10.50	0.4134	-	1.98	56	71	45	118	12		•
FR1100056T2R01	11.00	0.4331	-	2.07	56	71	45	118	12		•
FR1111056T2R01	11.11	0.4375	7/16"	2.08	56	72	45	118	12		•
FR1150056T2R01	11.50	0.4528	-	2.12	56	72	45	118	12		•
FR1191056T2R01	11.91	0.4688	15/32"	2.20	56	72	45	118	12		•
FR1200056T2R01	12.00	0.4724	-	2.21	56	72	45	118	12		•

7XD AND 10XD ANTI-VIBRATION BORING BARS WITH EXCHANGEABLE HEADS

- Internal boring and threading with L/D ratios of 7xD and 10xD
- Significantly reduce and in some cases completely eliminate vibration
- Unique damping mechanism located inside the body of the bar
- Serrated coupling design for robust tightening
- Internal coolant supply improves chip control & evacuation
- Multiple head designs for different shape positive & negative inserts

TABSORBER™ SERIES DTA (INCH)



Fig. 1

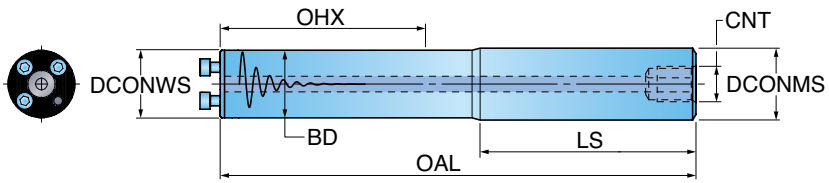
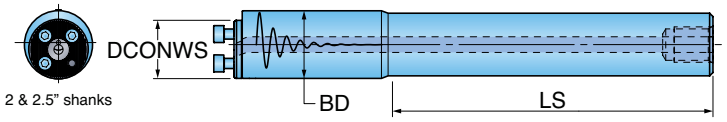


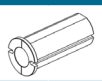
Fig. 2



Part Number	Dimension (inch)						CNT Coolant Entry Thread Size	BMC [3] Body Material Code	Figure
	DCONMS Connection Dia. Machine Side	DCONWS [1] Connection Dia. Workpiece Side	BD Body Dia.	OAL [2] Overall Length	LS Shank Length	OHX Max. Overhang			
DTA-D.625-7D-C	0.625	0.630	0.630	6.14	3.60	3.50	G1/8	S	1
DTA-D.625-10D-E	0.625	0.630	0.630	8.03	5.22	5.50	-	H	1
DTA-D.750-7D-C	0.750	0.787	0.787	7.87	4.94	4.40	G1/4	S	1
DTA-D.750-10D-E	0.750	0.787	0.787	10.24	6.77	7.00	-	H	1
DTA-D1.00-7D-C	1.000	0.984	0.984	10.20	6.83	6.20	G1/4	S	1
DTA-D1.00-10D-C	1.000	0.984	0.984	13.21	8.65	9.20	G1/4	S	1
DTA-D1.25-7D-C	1.250	1.260	1.260	12.48	7.37	7.50	G3/8	S	1
DTA-D1.25-10D-C	1.250	1.260	1.260	16.24	9.67	11.20	G3/8	S	1
DTA-D1.50-7D-C	1.500	1.575	1.575	15.26	9.13	9.20	G1/2	S	1
DTA-D1.50-10D-C	1.500	1.575	1.575	19.80	13.35	13.70	G1/2	S	1
DTA-D2.00-7D-C	2.000	1.575	2.000	20.74	-	12.70	G1/2	S	2
DTA-D2.00-10D-C	2.000	1.575	2.000	26.73	-	18.70	G1/2	S	2
DTA-D2.50-7D-C	2.500	1.575	2.500	26.20	-	16.20	G3/4	S	2
DTA-D2.50-10D-C	2.500	1.575	2.500	33.72	-	23.70	G3/4	S	2

[1] DCONWS dimension of bar must match DCONMS dimension of head.
[2] See New Product Announcement for details on cutting bars to shorter lengths.
[3] S-steel body, H-solid carbide body.

Spare Parts

Part Number	Screw	Wrench	Sleeves (Refer to page 133 for detailed dimensions)			
			1.25" OD 	1.50" OD	2.00" OD	2.50" OD
DTA-D.625…	SHM3X0.5X10	L-W2.5	QSL31.8-15.9-L66	QSL38.1-15.9-L106	-	-
DTA-D.750…	SRM3.5XL10-D5.5	L-W2.5	QSL31.8-19-L66	QSL38.1-19-L106	QSL50.8-19-L126	-
DTA-D1.00…	SHM4X0.7X12	L-W3	QSL31.8-25.4-L66	QSL38.1-25.4-L106	QSL50.8-25.4-L126	-
DTA-D1.25…	SHM5X0.8X12	L-W4	-	QSL38.1-31.8-L106	QSL50.8-31.8-L126	QSL63.5-31.8-L156
DTA-D1.50…	SHM6X1X16	L-W5	-	-	QSL50.8-38.1-L126	QSL63.5-38.1-L156
DTA-D2.00…	SHM6X1X16	L-W5	-	-	-	QSL63.5-50.8-L156
DTA-D2.50…	SHM6X1X16	L-W5	-	-	-	-

TABSORBER™ SERIES DTA (METRIC)



Fig. 1



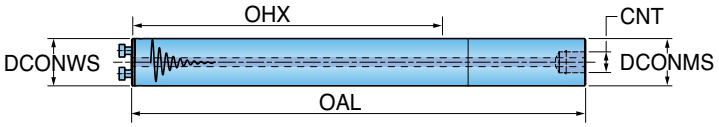
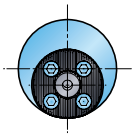
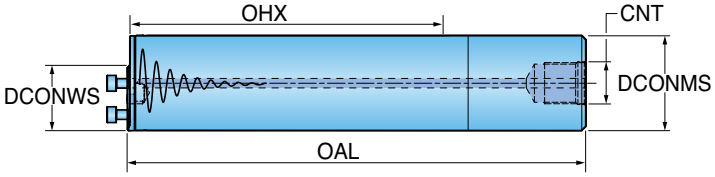


Fig. 2





Part Number	Dimension (inch)				CNT Coolant Entry Thread Size	BMC [3] Body Material Code	Figure
	DCONMS Connection Dia. Machine Side	DCONWS [1] Connection Dia. Workpiece Side	OAL [2] Overall Length	OHX Max. Overhang			
DTA-D16-7D-C	16	16	156	3.50	G1/8	S	1
DTA-D16-10D-E	16	16	204	5.50	-	H	1
DTA-D20-7D-C	20	20	200	4.40	G1/4	S	1
DTA-D20-10D-E	20	20	260	7.00	-	H	1
DTA-D25-7D-C	25	25	258	6.20	G1/4	S	1
DTA-D25-10D-C	25	25	333	9.20	G1/4	S	1
DTA-D32-7D-C	32	32	323	7.50	G3/8	S	1
DTA-D32-10D-C	32	32	419	11.20	G3/8	S	1
DTA-D40-7D-C	40	40	411	9.20	G1/2	S	1
DTA-D40-10D-C	40	40	531	13.70	G1/2	S	1
DTA-D50-7D-C	50	40	523	12.70	G1/2	S	2
DTA-D50-10D-C	50	40	673	18.70	G1/2	S	2
DTA-D60-7D-C	60	40	633	16.20	G3/4	S	2
DTA-D60-10D-C	60	40	813	23.70	G3/4	S	2

(1) DCONWS dimension of bar must match DCONMS dimension of head.
(2) See New Product Announcement for details on cutting bars to shorter lengths.
(3) S-steel body, H-solid carbide body.

Spare Parts

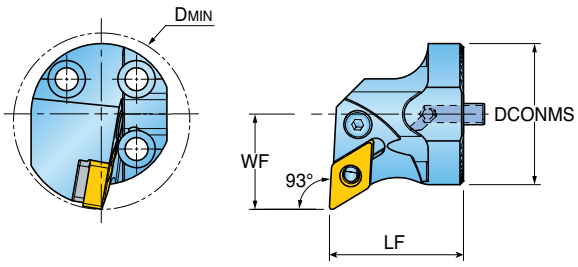
Part Number	Screw	Wrench	Sleeves (Refer to page 134 for detailed dimensions)			
			32mm OD	 40mm OD	50mm OD	60mm OD
DTA-D16…	SHM3X0.5X10	L-W2.5	QSL32-16-L66	QSL40-16-L106	-	-
DTA-D20…	SRM3.5XL10-D5.5	L-W2.5	QSL32-20-L66	QSL40-20-L106	QSL50-20-L126	-
DTA-D25…	SHM4X0.7X12	L-W3	QSL32-25-L66	QSL40-25-L106	QSL50-25-L126	-
DTA-D32…	SHM5X0.8X12	L-W4	-	QSL40-32-L106	QSL50-32-L126	QSL60-32-L156
DTA-D40…	SHM6X1X16	L-W5	-	-	QSL50-40-L126	QSL60-40-L156
DTA-D50…	SHM6X1X16	L-W5	-	-	-	QSL60-50-L156
DTA-D60…	SHM6X1X16	L-W5	-	-	-	-

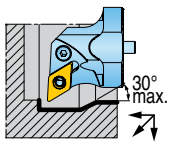
TABSORBER™ SERIES DTC-HDUNR/L

HOOK LEVER TYPE BORING HEADS (DNMG INSERTS)

Coolant





Approach angle	Part Number	Dimension (inch)				Coolant	Insert
		DCONMS Connection Dia. Machine Side	LF Functional Length	WF Functional Width	DMIN Min. Bore Dia.		
93° 	✓DTC-D40-HDUNR/L-1305	1.575	1.496	1.063	1.968	Yes	DN_G 3.53.5...

✓ Marked: For RhinoTurn insert

Spare Parts

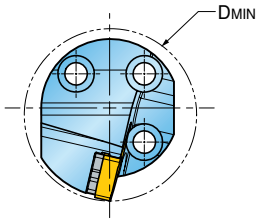
Part Number	Lever	Lever Screw	Shim		Shim Pin	Wrench	
							
HDUNR/L-1305	LCL 11-NX	LCS 4S	LSD 3.52B	-	LSP 4	L-W 3	

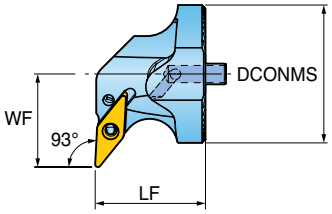
TABSORBER™ SERIES DTC-HVUNR/L

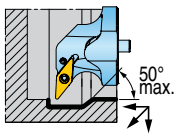
HOOK LEVER TYPE BORING HEADS (VNMX INSERTS)

Coolant







Approach angle	Part Number	Dimension (inch)				Coolant	Insert
		DCONMS Connection Dia. Machine Side	LF Functional Length	WF Functional Width	DMIN Min. Bore Dia.		
93° 	✓DTC-D40-HVUNR/L-1304	1.575	1.256	1.063	1.968	Yes	VN_X 2.53...

✓ Marked: For RhinoTurn insert

Spare Parts

Part Number	Lever	Lever Screw	Shim		Shim Pin	Wrench	
							
HVUNR/L-1304	LCL 08-NX	LCS 4-DH	-	LSV 2.51.8H	LSP 3B	L-W 2.5	

TABSORBER™ SERIES DTC-SCLCR/L

SCREW TYPE BORING HEADS (CCMT INSERTS)

Coolant



Fig. 1

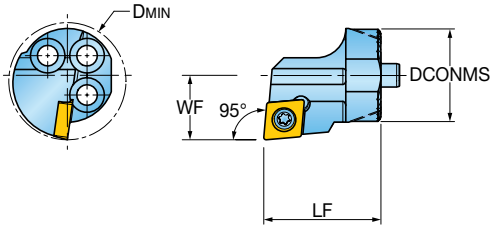
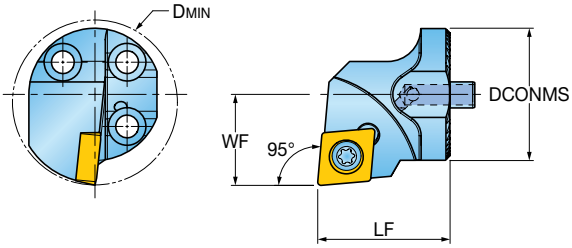
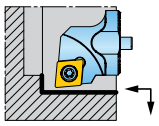


Fig. 2



Approach angle	Part Number	Dimension (inch)				Coolant	Fig.	Insert
		DCONMS Connection Dia. Machine Side	LF Functional Length	WF Functional Width	DMIN Min. Bore Dia.			
95° 	DTC-D16-SCLCR/L-06	.630	.787	.433	.787	Yes	1	CC_T 21.5...
	DTC-D20-SCLCR/L-09	.787	.787	.512	.984	Yes	2	CC_T 32.5...
	DTC-D25-SCLCR/L-09	.984	.787	.664	1.260	Yes	2	
	DTC-D32-SCLCR/L-12	1.260	1.260	.866	1.575	Yes	2	CC_T 43...
	DTC-D40-SCLCR/L-12	1.575	1.496	1.063	1.968	Yes	2	

Spare Parts

Part Number	Screw	Shim	Shim Screw	Wrench		
						
DTC16	SO 25065I	-	-	T 7	-	
DTC20, DTC25	SO 35080I	-	-	T 15	-	
DTC32	SO 45100I	-	-	T 20	-	
DTC40	SO 45130I	SSC 43N	SO 60105S	T 20	L-W 5	

TABSORBER™ SERIES DTC-SCLNR/L

SCREW TYPE BORING HEADS (CNMX INSERTS)

Coolant



Fig. 1

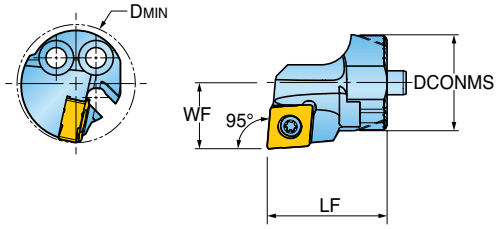
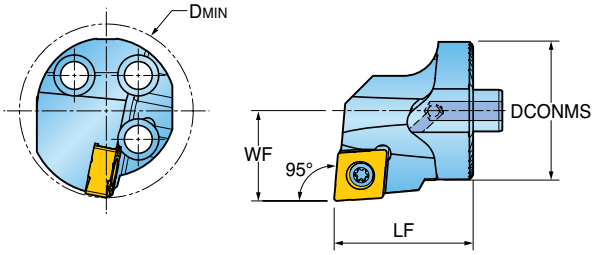
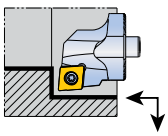


Fig. 2



Approach angle	Part Number	Dimension (inch)				Coolant	Fig.	Insert
		DCONMS Connection Dia. Machine Side	LF Functional Length	WF Functional Width	DMIN Min. Bore Dia.			
95° 	*DTC-D16-SCLNR/L-0703	.630	.787	.433	.787	Yes	1	CN_X 2.22…
	*DTC-D20-SCLNR/L-0703	.787	.787	.512	.984	Yes	2	

* Marked: For RhinoTurnM insert

Spare Parts

Part Number	Screw	Wrench	
			
DTC-D16...	SM25-060-90	T 7P	
DTC-20...	SM25-060-90	T 7P	

TABSORBER™ SERIES DTC-SDUCR/L

SCREW TYPE BORING HEADS (DCMT INSERTS)

Coolant



Fig. 1

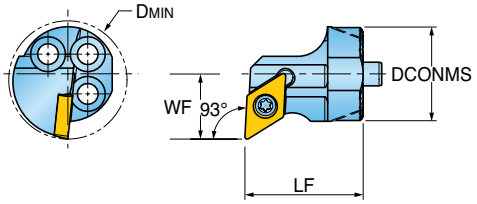
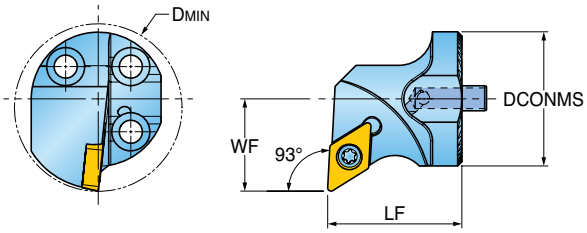
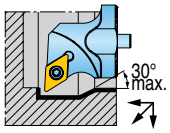


Fig. 2



Approach angle	Part Number	Dimension (inch)				Coolant	Fig.	Insert
		DCONMS Connection Dia. Machine Side	LF Functional Length	WF Functional Width	DMIN Min. Bore Dia.			
93° 	DTC-D16-SDUCR/L-07	.630	.787	.433	.787	Yes	1	DC_T 21.5...
	DTC-D20-SDUCR/L-11	.787	.787	.512	.984	Yes	2	DC_T 32.5...
	DTC-D25-SDUCR/L-11	.984	.787	.668	1.260	Yes	2	
	DTC-D32-SDUCR/L-11	1.260	1.260	.866	1.575	Yes	2	
	DTC-D40-SDUCR/L-11	1.575	1.496	1.063	1.968	Yes	2	

Spare Parts

Part Number	Screw	Shim	Shim Screw	Wrench		
						
DTC16	SO 25065I	-	-	T 7	-	
DTC20, 25, 32	SO 35080I	-	-	T 15	-	
DTC40	SO 35124I	SSD 32	SO 50090S	T 15	L-W 3.5	

TABSORBER™ SERIES DTC-SDUNR/L

SCREW TYPE BORING HEADS (DNMX & DNMG INSERTS)

Coolant



Fig. 1

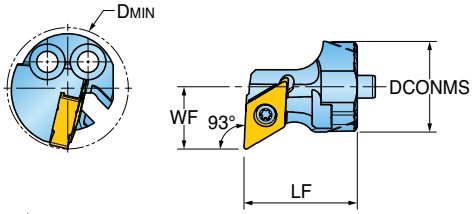
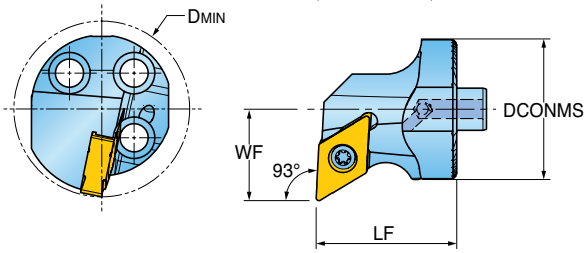
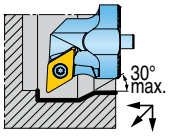


Fig. 2



Approach angle	Part Number	Dimension (inch)				Coolant	Fig.	Insert
		DCONMS Connection Dia. Machine Side	**LF** Functional Length	**WF** Functional Width	**DMIN** Min. Bore Dia.			
95° 	✶**DTC-D16-SDUNR/L-0803**	.630	.787	.433	.787	Yes	1	DN_X 2.22…
	✶**DTC-D20-SDUNR/L-0803**	.787	.787	.512	.984	Yes	2	
	✓**DTC-D32-SDUNR/L-1305**	1.260	1.260	.866	1.575	Yes	2	DN_G 3.53.5…

✶ Marked: For RhinoTurnM insert
✓ Marked: For RhinoTurn insert

Spare Parts

Part Number	Screw	Wrench	
			
DTC-D16, D20	SM25-060-90	T 7P	
DTC-32	SM40-110-00	T 15	

TABSORBER™ SERIES DTC-SVUBR/L

SCREW TYPE BORING HEADS (VBMT INSERTS)

Coolant



Fig. 1

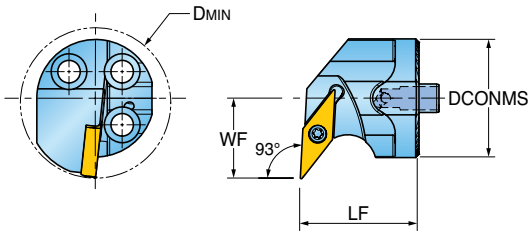
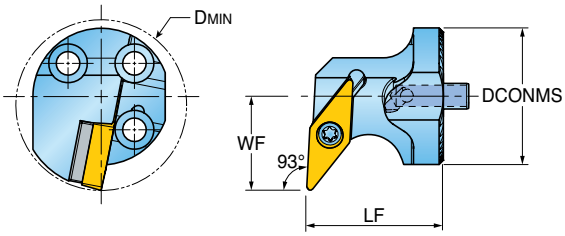
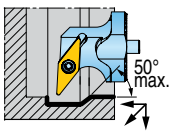


Fig. 2



Approach angle	Part Number	Dimension (inch)				Coolant	Fig.	Insert
		DCONMS Connection Dia. Machine Side	LF Functional Length	WF Functional Width	DMIN Min. Bore Dia.			
93° 	DTC-D20-SVUBR/L-11	.787	.787	.630	1.063	Yes	1	VB_T 22...
	DTC-D25-SVUBR/L-11	.984	.984	.670	1.220	Yes	1	
	DTC-D32-SVUBR/L-16	1.260	1.260	.866	1.575	Yes	2	VB_T 33...
	DTC-D40-SVUBR/L-16	1.575	1.260	1.063	1.968	Yes	2	

Spare Parts

Part Number	Screw	Shim	Shim Screw	Wrench		
						
DTC-D...SVUBR/L-11	SO 25065I	-	-	T 7	-	
DTC-D...SVUBR/L-16	SO 35124I	SSV 32	SO 50090S	T 15	L-W 3.5	

TABSORBER™ SERIES DTC-SWLNR/L

SCREW TYPE BORING HEADS (WNMX INSERTS)

Coolant



Fig. 1

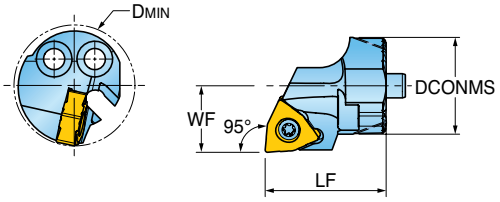
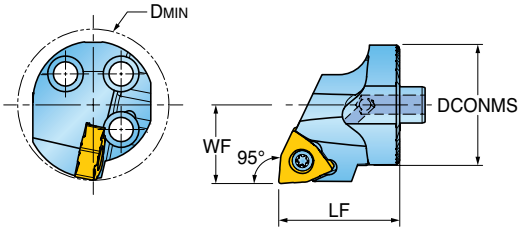
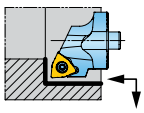


Fig. 2



Approach angle	Part Number	Dimension (inch)				Coolant	Fig.	Insert
		DCONMS Connection Dia. Machine Side	LF Functional Length	WF Functional Width	DMIN Min. Bore Dia.			
95° 	*DTC-D16-SWLNR/L-0403	.630	.787	.433	.787	Yes	1	WN_X 2.22...
	*DTC-D20-SWLNR/L-0403	.787	.787	.512	.984	Yes	2	

* Marked: For RhinoTurnM insert

Spare Parts

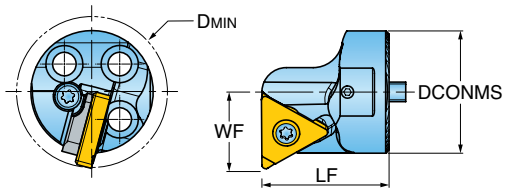
Part Number	Screw	Wrench	
			
DTC-D...	SM25-060-90	T 7P	

TABSORBER™ SERIES DTC-SIR/L

SCREW TYPE BORING HEADS (LAYDOWN THREADING INSERTS)

Coolant





Part Number	Dimension (inch)				Coolant	Insert
	DCONMS Connection Dia. Machine Side	LF Functional Length	WF Functional Width	DMIN Min. Bore Dia.		
DTC-D25-SIR/L-16	.984	1.024	.638	1.142	Yes	16IR/L
DTC-D32-SIR/L-16	1.260	1.063	.776	1.417	Yes	16IR/L
DTC-D40-SIR/L-16	1.575	1.181	.433	1.733	Yes	16IR/L
DTC-D32-SIR/L-22	1.260	1.260	.850	1.417	Yes	22IR/L
DTC-D40-SIR/L-22	1.575	1.496	1.008	1.811	Yes	22IR/L

Spare Parts

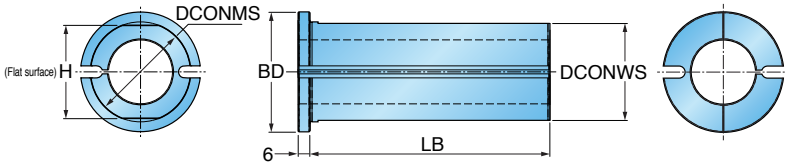
Part Number	Anvil Ext.L/Int.R	Anvil Ext.R/Int.L	Anvil Screw	Wrench	Screw	
						
DTC-D25-SIL-16	-	AE16	A16	T-10/5	S16	
DTC-D25-SIR-16	AI16	-	A16	T-10/5	S16	
DTC-D32-SIL-16	-	AE16	A16	T-10/5	S16	
DTC-D32-SIR-16	AI16	-	A16	T-10/5	S16	
DTC-D40-SIL-16	-	AE16	A16	T-10/5	S16	
DTC-D40-SIR-16	AI16	-	A16	T-10/5	S16	
DTC-D32-SIL-22	-	AE22	A22	T-20/5	S22	
DTC-D32-SIR-22	AI22	-	A22	T-20/5	S22	
DTC-D40-SIL-22	-	AE22	A22	T-20/5	S22	
DTC-D40-SIR-22	AI22	-	A22	T-20/5	S22	

TABSORBER™ SERIES QSL (INCH)

INCH SLEEVES

Coolant





Part Number	Dimension (inch)				
	DCONMS Connection Dia. Machine Side	DCONWS Connection Dia. Work Piece Side	BD Body Diameter	LB Body Length	H Height
QSL31.8-15.9-L66	1.250	0.625	1.654	2.362	1.210
QSL31.8-19-L66	1.250	0.750	1.654	2.362	1.210
QSL31.8-25.4-L66	1.250	1.000	1.654	2.362	1.210
QSL38.1-15.9-L106	1.500	0.625	1.969	3.937	1.461
QSL38.1-19-L106	1.500	0.750	1.969	3.937	1.461
QSL38.1-25.4-L106	1.500	1.000	1.969	3.937	1.461
QSL38.1-31.8-L106	1.500	1.250	1.969	3.937	1.461
QSL50.8-19-L126	2.000	0.750	2.362	4.724	1.941
QSL50.8-25.4-L126	2.000	1.000	2.362	4.724	1.941
QSL50.8-31.8-L126	2.000	1.250	2.362	4.724	1.941
QSL50.8-38.1-L126	2.000	1.500	2.362	4.724	1.941
QSL63.5-31.8-L156	2.500	1.250	2.756	5.906	2.441
QSL63.5-38.1-L156	2.500	1.500	2.756	5.906	2.441
QSL63.5-50.8-L156	2.500	2.000	2.756	5.906	2.441

Additional Holder Options Available Upon Request:

VDI



TOOL BLOCKS



POWER CHUCKS

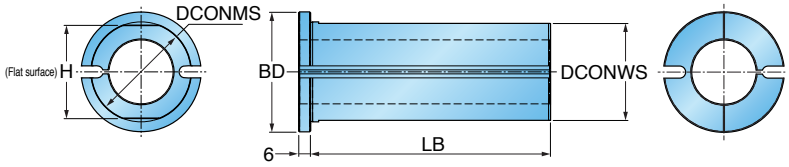


TABSORBER™ SERIES QSL (METRIC)

METRIC SLEEVES

Coolant





Part Number	Dimension (mm)				
	DCONMS Connection Dia. Machine Side	DCONWS Connection Dia. Work Piece Side	BD Body Diameter	LB Body Length	H Height
QSL32-16-L66	32	16	42	60	30.5
QSL32-20-L66	32	20	42	60	30.5
QSL32-25-L66	32	25	42	60	30.5
QSL40-16-L106	40	16	50	100	38.5
QSL40-20-L106	40	20	50	100	38.5
QSL40-25-L106	40	25	50	100	38.5
QSL40-32-L106	40	32	50	100	38.5
QSL50-20-L126	50	20	60	120	48.5
QSL50-25-L126	50	25	60	120	48.5
QSL50-32-L126	50	32	60	120	48.5
QSL50-40-L126	50	40	60	120	48.5
QSL60-32-L156	60	32	70	150	58.5
QSL60-40-L156	60	40	70	150	58.5
QSL60-50-L156	60	50	70	150	58.5

Additional Holder Options Available Upon Request:

VDI



TOOL BLOCKS



POWER CHUCKS

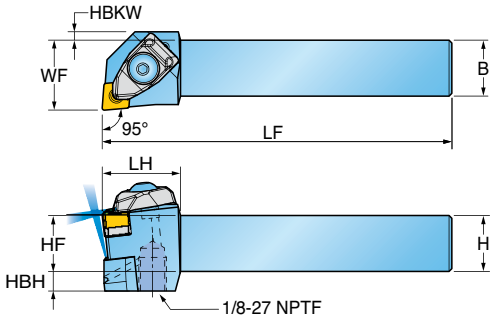


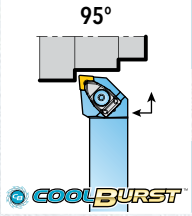
THRU-COOLANT HOLDERS

- Pinpoint coolant delivery from top clamp (for cooling) and bottom of holder (for chip breaking)
- T-Type holding system with multi-directional clamping force provides 40% more stability over conventional lever lock holders, plus simple & fast indexing. No additional components required.
- Up to 50% increase in tool life under the same machining conditions
- 20% increase in cutting speed capability in difficult-to-cut materials
- Increased productivity in high-speed machining of titanium and super alloys
- Excellent chip control
- Coolant pressure: Recommend 1000 psi for best results. Capable of 2000 psi.
- Efficient cooling of the insert cutting edge at two different locations

RHINOTURN™ TCLNR/L-TB T-HOLDERS WITH HIGH-PRESSURE COOLANT (CN_ _33X INSERTS)





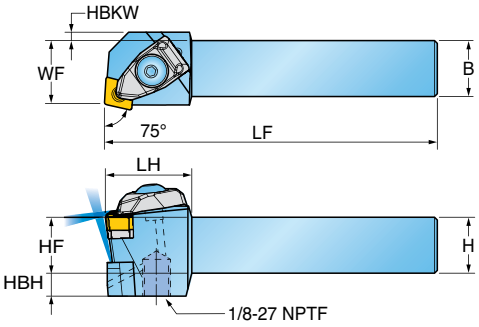
Approach angle	Part Number	Dimension (inch)								Insert
		H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	WF Functional Width	LH Head Length	HBH Head Bottom Offset Height	HBKW Head Back Offset Width	
	TCLNR/L 12-33B-TB	.750	.750	.750	4.5	1.000	1.10	.31	.12	CN... 33...
	TCLNR/L 16-33D-TB	1.000	1.000	1.000	6.0	1.250	1.10	.25	-	
	TCLNR/L 20-33D-TB	1.250	1.250	1.250	6.0	1.500	1.10	-	-	

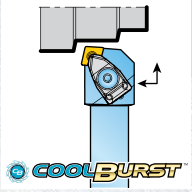
Spare Parts

Part Number	Clamp	Clamp Screw	Spring	Upper O-ring	Lower O-ring	Shim	Shim Screw	Wrench	
									
TCLNR/L-TB TCRNR/L-TB	DLM 3-NX-TB	BH M4x0.7x 16-TB	DSP 3	O-RING ID4.47x 1.78	O-RING ID6.07x 1.78	LSC 32A	SO 40085I	L-W 3	T 15

RHINOTURN™ TCRNR/L-TB T-HOLDERS WITH HIGH-PRESSURE COOLANT (CN_ _33X INSERTS)





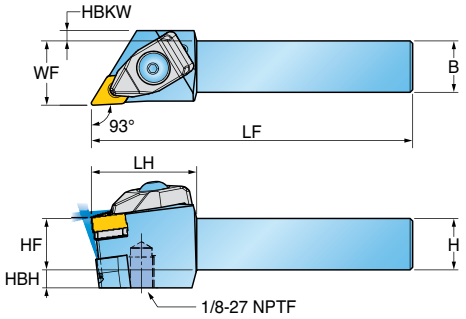
Approach angle	Part Number	Dimension (inch)								Insert
		H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	WF Functional Width	LH Head Length	HBH Head Bottom Offset Height	HBKW Head Back Offset Width	
75° 	TCRNR/L 12-33B-TB	.750	.750	.750	4.5	.855	1.18	.31	.12	CN... 33...
	TCRNR/L 16-33D-TB	1.000	1.000	1.000	6.0	1.048	1.18	.25	-	

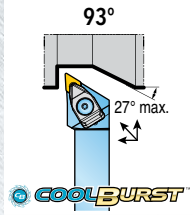
Spare Parts

Part Number	Clamp	Clamp Screw	Spring	Upper O-ring	Lower O-ring	Shim	Shim Screw	Wrench	
									
TCLNR/L-TB TCRNR/L-TB	DLM 3-NX-TB	BH M4x0.7x 16-TB	DSP 3	O-RING ID4.47x 1.78	O-RING ID6.07x 1.78	LSC 32A	SO 40085I	L-W 3	T 15

RHINOTURN™ TDJNR/L-TB T-HOLDERS WITH HIGH-PRESSURE COOLANT (DN_ _3.53.5X INSERTS)





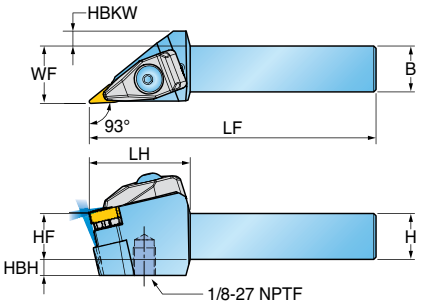
Approach angle	Part Number	Dimension (inch)								Insert
		H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	WF Functional Width	LH Head Length	HBH Head Bottom Offset Height	HBKW Head Back Offset Width	
93° 	TDJNR/L 12-3.53.5B-TB	.750	.750	.750	4.5	1.000	1.61	.31	.16	DN... 3.53...
	TDJNR/L 16-3.53.5D-TB	1.000	1.000	1.000	6.0	1.250	1.61	.25	-	
	TDJNR/L 20-3.53.5D-TB	1.250	1.250	1.250	6.0	1.500	1.61	-	-	

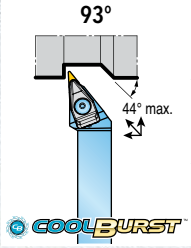
Spare Parts

Part Number	Clamp	Clamp Screw	Spring	Upper O-ring	Lower O-ring	Shim	Shim Screw	Wrench	
									
12-3.53.5...-TB	DLM 3.5-NX-TB	BH M5x0.8x 21-MO-TB	DSP 4	O-RING ID5.28x 1.78	O-RING ID7.59x 2.62	LSD 3.52	SO 50090I-MO	L-W 3	T 20
16-3.53.5...-TB 20-3.53.5...-TB	DLM 3.5-NX-TB	BH M5x0.8x 21-MO-TB	DSP 4	O-RING ID5.28x 1.78	O-RING ID7.59x 2.62	LSD 3.52	SO 50090I	L-W 3	T 20

RHINOTURN™ TVJNR/L-TB T-HOLDERS WITH HIGH-PRESSURE COOLANT (VN_ X2.53X INSERT)





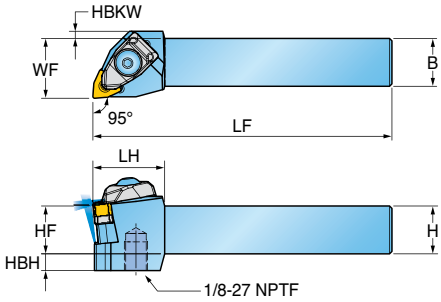
Approach angle	Part Number	Dimension (inch)								Insert
		H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	WF Functional Width	LH Head Length	HBH Head Bottom Offset Height	HBKW Head Back Offset Width	
93° 	**TVJNR/L 12-2.53B-TB**	.750	.750	.750	4.5	1.000	1.73	.31	.256	VN... X2.53...
	TVJNR/L 16-2.53D-TB	1.000	1.000	1.000	6.0	1.250	1.73	.25	-	
	TVJNR/L 20-2.53D-TB	1.250	1.250	1.250	6.0	1.500	1.73	-	-	

Spare Parts

Part Number	Clamp	Clamp Screw	Spring	Upper O-ring	Lower O-ring	Shim	Shim Screw	Wrench	
									
TVJNR/L-TB	DLM 2.5V-NX-TB	BH M5x0.8x 25-TB	DSP 4	O-RING ID5.28x 1.78	O-RING ID7.59x 2.62	MSVI 2.522	SO 40085I	L-W 3	T 15

RHINOTURN™ TWLNR/L-TB T-HOLDERS WITH HIGH-PRESSURE COOLANT (WN_ _33X INSERT)





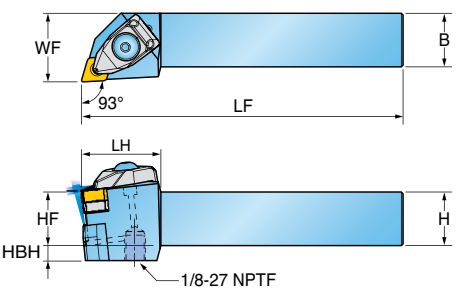
Approach angle	Part Number	Dimension (inch)								Insert
		H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	WF Functional Width	LH Head Length	HBH Head Bottom Offset Height	HBKW Head Back Offset Width	
95°	TWLNR/L 12-33B-TB	.750	.750	.750	4.5	1.000	1.18	.31	.10	WN... X33...
	TWLNR/L 16-33D-TB	1.000	1.000	1.000	6.0	1.250	1.18	.25	-	
	TWLNR/L 20-33D-TB	1.250	1.250	1.250	6.0	1.500	1.18	-	-	

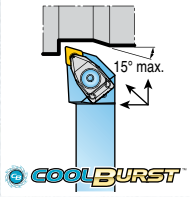
Spare Parts

Part Number	Clamp	Clamp Screw	Spring	Upper O-ring	Lower O-ring	Shim	Shim Screw	Wrench	
TWLNR/L-TB	DLM 3-NX-TB	BH M4x0.7x 16-TB	DSP 3	O-RING ID4.47x 1.78	O-RING ID6.07x 1.78	LSW 32A	SO 40085I	L-W 3	T 15

RHINOTURN™ TXJNR/L-TB T-HOLDERS WITH HIGH-PRESSURE COOLANT (XNMG INSERT)





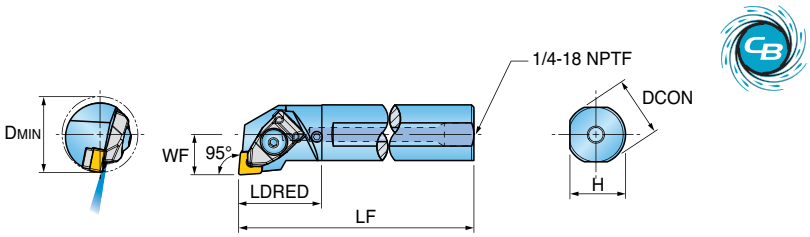
Approach angle	Part Number	Dimension (inch)								Insert
		H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	WF Functional Width	LH Head Length	HBH Head Bottom Offset Height	HBKW Head Back Offset Width	
93° 	TXJNR/L 16-2.7D-TB	1.000	1.000	1.000	6.0	1.250	1.18	.25	XNMG... 2.7...	XNMG... 2.7...
	TXJNR/L 16-3.5D-TB	1.000	1.000	1.000	6.0	1.250	1.18	.25	XNMG... 3.5...	XNMG... 3.5...

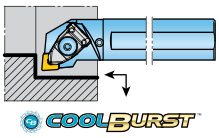
Spare Parts

Part Number	Clamp	Clamp Screw	Spring	Upper O-ring	Lower O-ring	Shim	Shim Screw	Wrench	
									
TXJNR/L 2.7...	DLM 3-NX-TB	BH M4x0.7x 16-TB	DSP 3	O-RING ID4.47x 1.78	O-RING ID6.07x 1.78	TSX 2.73	SO 40085I	L-W 3	T 15
TXJNR/L 3.5...	DLM 3.5-NX-TB	BH M5x0.8x 21-MO-TB	DSP 4	O-RING ID5.28x 1.78	O-RING ID7.59x 2.62	TSX 3.53	SO 50090I	L-W 3	T 20

RHINOTURN™ A-TCLNR/L-TB T-HOLDER TYPE BORING BARS WITH HIGH-PRESSURE COOLANT (CN_ _33X INSERT)





Approach angle	Part Number	Dimension (inch)						Insert
		DCON Shank Diameter	DMIN Min. Bore Diameter	LF Functional Length	WF Functional Width	LDRED Reduced Body Dia. Length	H Shank Height	
95° 	A16T-TCLNR/L-33-TB	1.000	1.250	12.0	.64	1.38	.92	CN... 33...
	A20U-TCLNR/L-33-TB	1.250	1.500	14.0	.77	1.38	1.17	

Spare Parts

Part Number	Clamp	Clamp screw	Spring	Upper O-ring	Lower O-ring	Shim	Shim screw	Wrench	
									
A-TCLNR/L-TB	DLM 3-NX-TB	BH M4x0.7x 16-TB	DSP 3	O-RING ID4.47x 1.78	O-RING ID6.07x 1.78	LSC 32	SO 40073I	L-W 3	T 15

COOLBURST™ CONNECTORS

Fig.1 - STRAIGHT MALE CONNECTOR

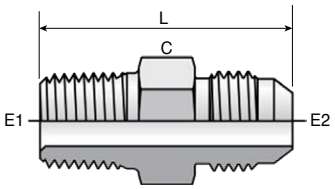


Fig.2 - ELBOW MALE CONNECTOR

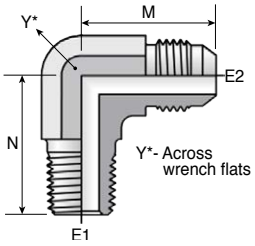
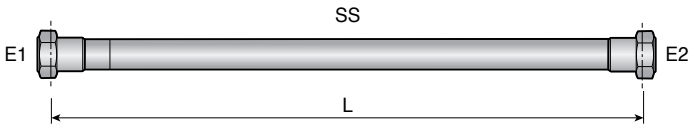


Fig.	Part Number	End Size		C (hex)	L	Max Pressure (psi)
		E1	E2			
1	TB-4-FTX-S	1/8-27 NPTF	1/4 (37° Flare)	1/2"	1.22"	6000

Fig.	Part Number	End Size		Y	M	N	Max Pressure (psi)
		E1	E2				
2	TB-4-CTX-S	1/8-27 NPTF	1/4 (37° Flare)	7/16"	0.89"	0.78"	6000

All connectors ordered separately.

COOLBURST™ FLEXIBLE HIGH-PRESSURE HOSES



Part Number	Dimension (inch)			Max Pressure (psi)
	L	E1	E2	
TB-HOSE-7/16-7/16-8.0SS	8.0 inch	1/4 (37° Flare)	1/4 (37° Flare)	3000
TB-HOSE-7/16-7/16-10.0SS	10.0 inch	1/4 (37° Flare)	1/4 (37° Flare)	3000

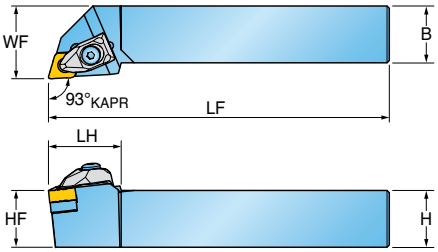
All hoses ordered separately.

A NEW SERIES OF ECONOMICAL DOUBLE-SIDED INSERTS FEATURING A 70° INCLUDED ANGLE

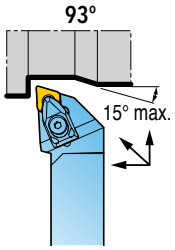
- 70° included angle XNMG insert can replace CNMG and DNMG inserts with a single solution
- Suitable for multiple applications including internal and external turning, face turning and profile turning
- Thick insert with wide face contact provides excellent rigidity and stability in the pocket
- Optimally designed for automotive parts such as bearings due to its wide cutting range and excellent chip control in medium to finishing turning & boring
- Compared to CNMG inserts:
  - Smaller included angle provides lower cutting forces, better chip control and improved surface finish
  - Profiling capability with ramping angle up to 15°
  - Deeper approach capability on live center (tail stock) end of work piece
- Compared to DNMG inserts:
  - Larger included angle provides more strength
  - Stronger lead angle in face turning allows higher feed rates and better chip control
- Optional COOLBURST thru-coolant external holders

RHINOTURNX™ TXJNR/L T-HOLDERS





TXJNR

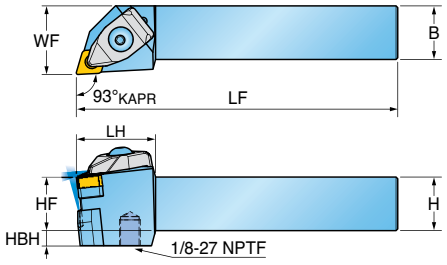
Approach angle	Part Number	Dimension (inch)						Insert
		H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	WF Functional Width	LH Head Length	
	TXJNR/L 12-2.7B	.750	.750	.750	4.5	1.00	.98	XNMG 2.73_
	TXJNR/L 16-2.7D	1.000	1.000	1.000	6.0	1.25	.98	
	TXJNR/L 12-3.5D	.750	.750	.750	6.0	1.00	1.26	XNMG 3.53.5
	TXJNR/L 16-3.5D	1.000	1.000	1.000	6.0	1.25	1.26	

Spare Parts

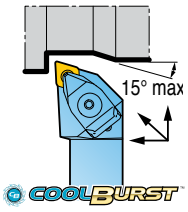
Part Number	Clamp	Clamp Screw	Spring	Shim	Shim Screw	Wrench	
							
2.73_	DLM 2.5-NX	DLS 3	DSP 3	TSX 2.73	SO 40085I	L-W 2.5	T 15
3.53.5_	DLM 3.5-NX	DLS 4	DSP 4	TSX 3.53	SM 50-122-50	L-W 3	T 20

RHINOTURNX™ TXJNR/L-TB T-HOLDERS WITH HIGH-PRESSURE COOLANT





TXJNR-TB

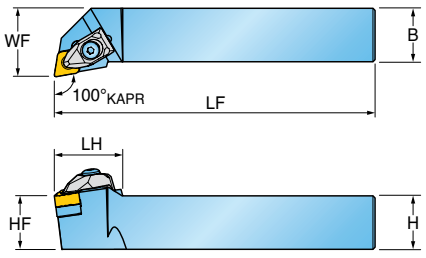
Approach angle	Part Number	Dimension (inch)							Insert
		H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	WF Functional Width	LH Head Length	HBH Head Bottom Offset Height	
93° 	TXJNR/L 16-2.7D-TB	1.000	1.000	1.000	6.0	1.250	1.25	.28	XNMG 2.73
	TXJNR/L 16-3.5D-TB	1.000	1.000	1.000	6.0	1.250	1.25	.28	XNMG 3.53.5

Spare Parts

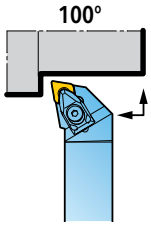
Part Number	Clamp	Clamp Screw	Spring	Upper O-ring	Lower O-ring	Shim	Shim Screw	Wrench	
									
2.73_	DLM 3-NX-TB	BH M4x0.7x 16-TB	DSP 3	O-RING ID4.47x 1.78	O-RING ID6.07x 1.78	TSX 2.73	SO 40085I	L-W 3	T 15
3.53.5_	DLM 3.5-NX-TB	BH M5x0.8x 21-MO-TB	DSP 4	O-RING ID5.28x 1.78	O-RING ID7.59x 2.62	TSX 3.53	SO 50090I	L-W 3	T 20

RHINOTURNX™ TXQNR/L T-HOLDERS





TXQNR

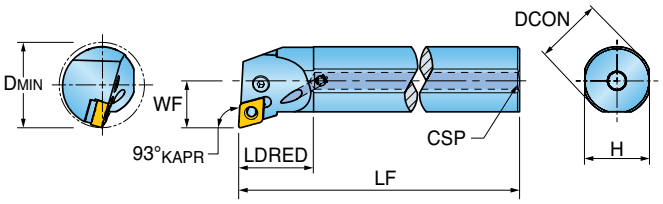
Approach angle	Part Number	Dimension (inch)						Insert
		H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	WF Functional Width	LH Head Length	
	TXQNR/L 12-2.7B	.750	.750	.750	4.5	1.00	.98	XNMG 2.73
	TXQNR/L 16-2.7D	1.000	1.000	1.000	6.0	1.25	.98	
	TXQNR/L 12-3.5B	.750	.750	.750	4.5	1.00	1.26	XNMG 3.53.5
	TXQNR/L 16-3.5D	1.000	1.000	1.000	6.0	1.25	1.26	

Spare Parts

Part Number	Clamp	Clamp Screw	Spring	Shim	Shim Screw	Wrench	
							
2.73_	DLM 2.5-NX	DLS 3	DSP 3	TSX 2.73	SO 40085I	L-W 2.5	T 15
3.53.5_	DLM 3.5-NX	DLS 4	DSP 4	TSX 3.53	SM 50-122-50	L-W 3	T 20

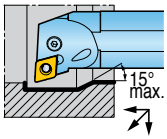
RHINOTURNX™ A-HXUNR/L HOOK LEVER TYPE BORING BAR WITH THRU COOLANT





Coolant

A-HXUNR

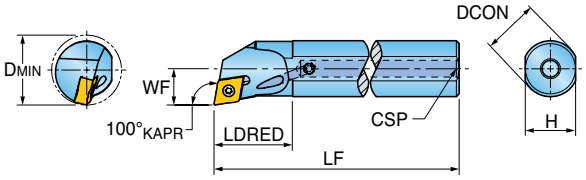
Approach angle	Part Number	Dimension (inch)						Insert
		DCON Shank Diameter	DMIN Min. Bore Diameter	LF Functional Length	WF Functional Width	LDRED Reduced Body Dia. Length	H Shank Height	
93° 	A20U-HXUNR/L-3.5	1.250	1.500	14.0	.861	1.38	1.17	XNMG 3.53.5_

Spare Parts

Part Number	Lever	Lever screw	Shim	Shim pin	Wrench
					
3.53.5_	LCL 11-NX	LCS 4S	LSX 3.52B	LSP 4	L-W 3

RHINOTURNX™ A-SXQNR/L, A-SXUNR/L SCREW TYPE BORING BARS WITH THRU COOLANT

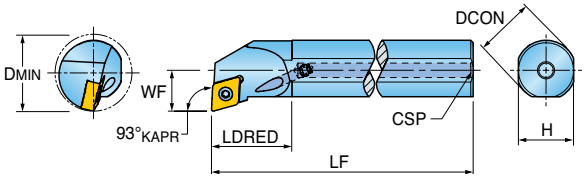




Coolant

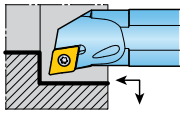
A-SXQNR

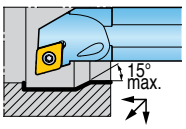




Coolant

A-SXUNR

Approach angle	Part Number	Dimension (inch)						Insert
		DCON Shank Diameter	DMIN Min. Bore Diameter	LF Functional Length	WF Functional Width	LDRED Reduced Body Dia. Length	H Shank Height	
100° 	A10R-SXQNR/L-2.7	.625	.787	8.0	.431	.97	.46	XNMG 2.73_
	A12S-SXQNR/L-2.7	.750	.980	10.0	.493	1.10	.58	
	A12S-SXQNR/L-3.5	.750	.980	10.0	.493	1.10	.58	XNMG 3.53.5_

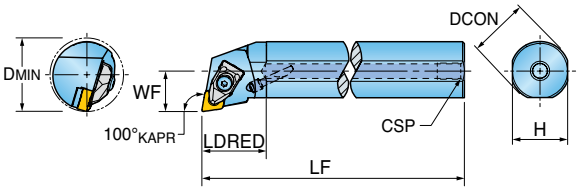
Approach angle	Part Number	Dimension (inch)						Insert
		DCON Shank Diameter	DMIN Min. Bore Diameter	LF Functional Length	WF Functional Width	LDRED Reduced Body Dia. Length	H Shank Height	
93° 	A16T-SXUNR/L-3.5	1.000	1.250	12.0	.677	1.32	.92	XNMG 3.53.5_

Spare Parts

Part Number	Screw	Wrench	
			
2.73_	TS 30080I/HG	T 9	
3.53.5_	TS 40G110I	T 15	

RHINOTURNX™ A-TXQNR/L, A-TXUNR/L T-HOLDER TYPE BORING BARS WITH THRU COOLANT

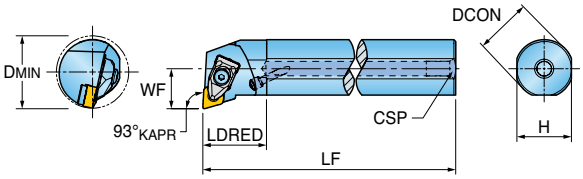




Coolant

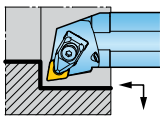
A-TXQNR

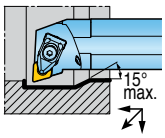




Coolant

A-TXUNR

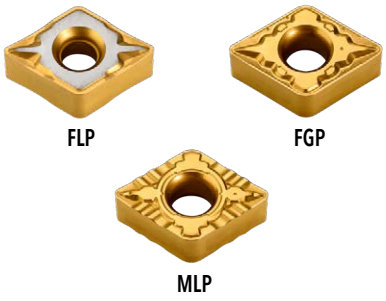
Approach angle	Part Number	Dimension (inch)						Insert
		DCON Shank Diameter	DMIN Min. Bore Diameter	LF Functional Length	WF Functional Width	LDRED Reduced Body Dia. Length	H Shank Height	
100° 	**A16T-TXQNR/L-3.5**	1.000	1.250	12.0	.677	1.32	.92	XNMG 3.53.5_
	A20U-TXQNR/L-3.5	1.250	1.500	14.0	.861	1.38	1.17	

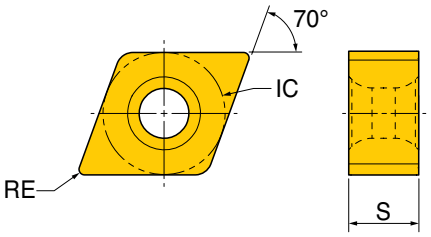
Approach angle	Part Number	Dimension (inch)						Insert
		DCON Shank Diameter	DMIN Min. Bore Diameter	LF Functional Length	WF Functional Width	LDRED Reduced Body Dia. Length	H Shank Height	
93° 	**A20U-TXUNR/L-3.5**	1.250	1.500	14.0	.861	1.38	1.17	XNMG 3.53.5_

Spare Parts

Part Number	Clamp	Clamp Screw	Spring	Shim	Shim Screw	Nozzle	Wrench	
								
A16T…3.5…	DLM 3.5-NX	DLS 4	DSP 4	-	-	NZ 62	L-W 3	-
A20U…3.5…	DLM 3.5-NX	DLS 4	DSP 4	LSX 3.52B	SM 50-107-10	NZ 62	L-W 3	T 20

RHINOTURNX™ XNMG NEGATIVE 70° RHOMBIC INSERTS

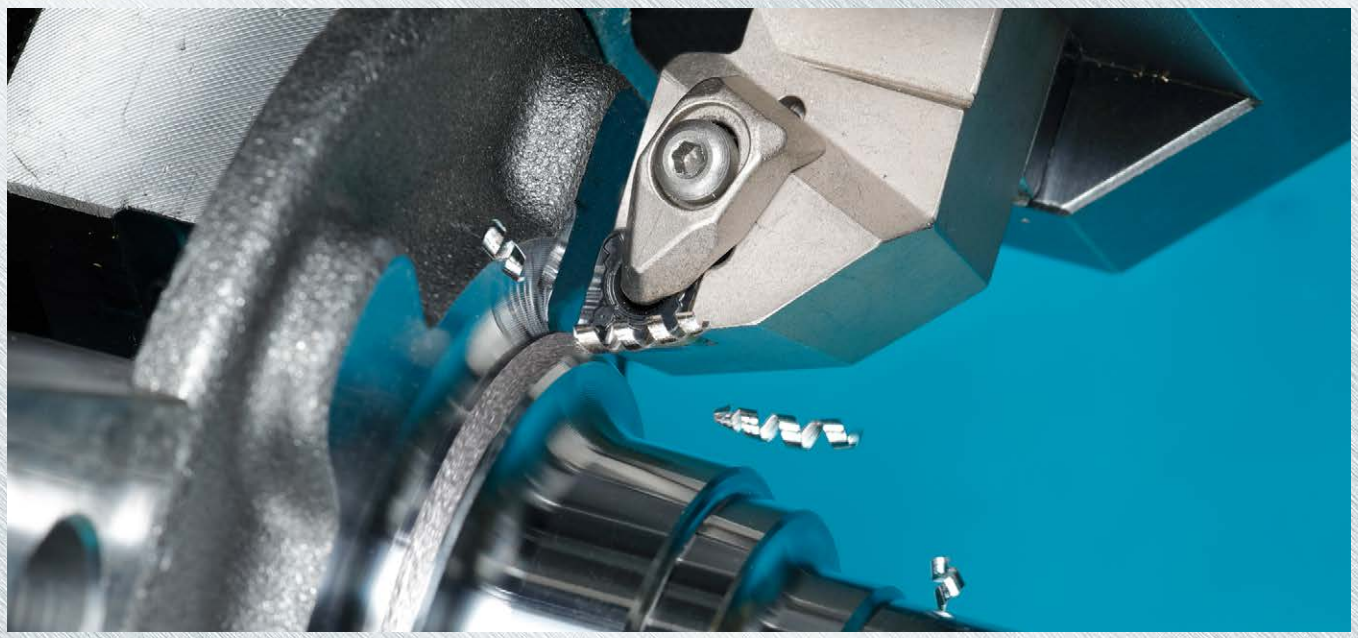




Size	Dimensions (inch)		
	IC Inscribed Circle Dia.	S Thickness	RE Corner Radius
2.731	.343	.187	.016
3.53.51	.437	.219	.016
3.53.52	.437	.219	.031
3.53.53	.437	.219	.047

Part Number ANSI (ISO)	ap (inch)	Feed (ipr)	CVD Coated		
			TT8105B	TT8115B	TT8125B
XNMG 2.731 (090404) FLP	.008-.060	.003-.009	•	•	•
XNMG 3.53.51 (110504) FGP	.010-.080	.003-.009	•	•	•
XNMG 3.53.52 (110508) FGP	.012-.080	.004-.014	•	•	•
XNMG 3.53.53 (110512) FGP	.014-.080	.006-.016	•	•	
XNMG 3.53.52 (110508) MLP	.020-.138	.004-.016	•	•	•
XNMG 3.53.53 (110512) MLP	.024-.138	.006-.020	•	•	•

•: Standard items

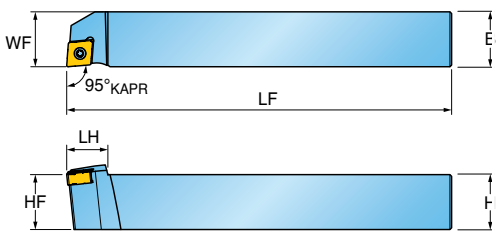


A NEW DOUBLE-SIDED MINI-SIZE INSERT AND HOLDER LINE, AN ECONOMICAL ALTERNATIVE TO STANDARD POSITIVE TURNING AND BORING INSERTS

- Double-sided miniature inserts (7mm IC)
- Optimized turning for low depths of cut (up to 2mm)
- Inserts feature the same cutting edge angle as standard positive inserts (zero degrees)
- Low cutting forces promotes very good surface finish
- Excellent chip control at lower depths of cut
- Stable screw clamping
- Suitable for general purpose machining of small parts, especially on Swiss type automatic lathes

RHINOTURN™ SCLNR/L-SH, SCLNR/L SCREW TYPE HOLDERS (CNMX INSERT)

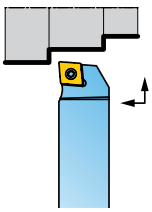


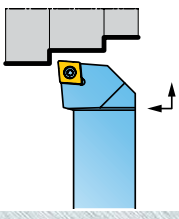


SCLNR-SH



SCLNR

Approach angle	Part Number	Dimension (inch)						Insert
		H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	WF Functional Width	LH Head Length	
95° 	SCLNR/L 08-2.2C-SH	.500	.500	.500	5.0	.500	.47	CNMX 2.22_
	SCLNR/L 10-2.2C-SH	.625	.625	.625	5.0	.625	.47	

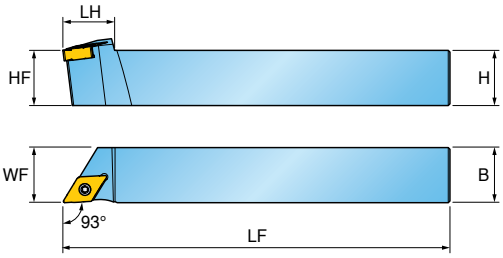
Approach angle	Part Number	Dimension (inch)						Insert
		H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	WF Functional Width	LH Head Length	
95° 	SCLNR/L 10-2.2B	.625	.625	.625	4.5	.750	.63	CNMX 2.22_
	SCLNR/L 12-2.2B	.750	.750	.750	4.5	1.000	.78	

Spare Parts

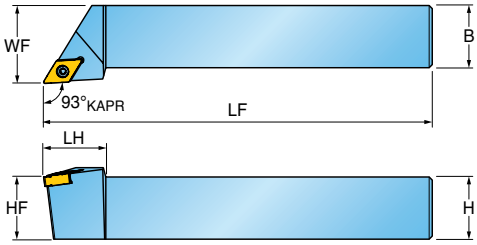
Part Number	Shim Screw	Wrench	Recommended Torque	
				
SCLNR/L	SM25-060-90	T 7P	8 in-lbs	

RHINOTURN™ SDJNR/L-SH, SDJNR/L SCREW TYPE HOLDERS (DN_X INSERT)

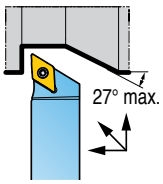


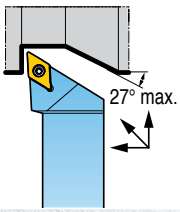


SDJNR-SH



SDJNR

Approach angle	Part Number	Dimension (inch)						Insert
		H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	WF Functional Width	LH Head Length	
93° 	SDJNR/L 08-2.2C-SH	.500	.500	.500	5.0	.500	.59	DN...X 2.22_
	SDJNR/L 10-2.2C-SH	.625	.625	.625	5.0	.625	.59	

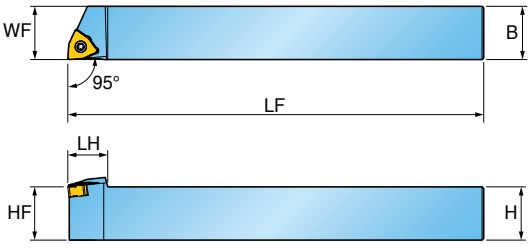
Approach angle	Part Number	Dimension (inch)						Insert
		H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	WF Functional Width	LH Head Length	
93° 	SDJNR/L 10-2.2B	.625	.625	.625	4.5	.750	.63	DN...X 2.22_
	SDJNR/L 12-2.2B	.750	.750	.750	4.5	1.000	.78	

Spare Parts

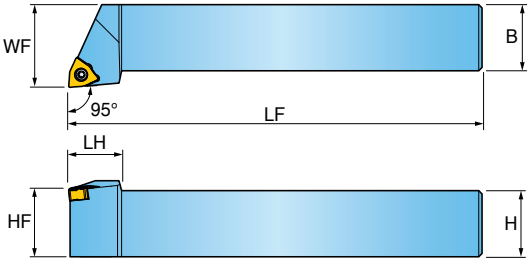
Part Number	Shim Screw	Wrench	Recommended Torque	
				
SDJNR/L	SM25-060-90	T 7P	8 in-lbs	

RHINOTURN™ SWLNR/L-SH, SWLNR/L SCREW TYPE HOLDERS (WNMX INSERT)

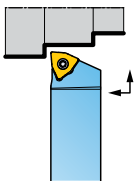


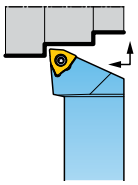


SWLNR-SH



SWLNR

Approach angle	Part Number	Dimension (inch)						Insert
		H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	WF Functional Width	LH Head Length	
95° 	SWLNR/L 08-2.2C-SH	.500	.500	.500	5.0	.500	.47	WNMX 2.22_
	SWLNR/L 10-2.2C-SH	.625	.625	.625	5.0	.625	.47	

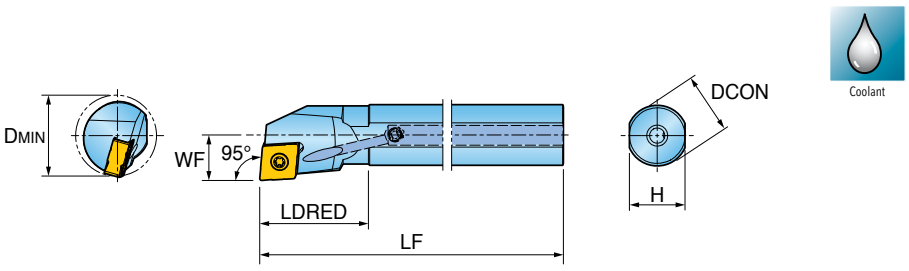
Approach angle	Part Number	Dimension (inch)						Insert
		H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	WF Functional Width	LH Head Length	
95° 	SWLNR/L 10-2.2B	.625	.625	.625	4.5	.750	.63	WNMX 2.22_
	SWLNR/L 12-2.2B	.750	.750	.750	4.5	1.000	.63	

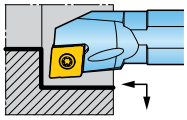
Spare Parts

Part Number	Shim Screw	Wrench	Recommended Torque	
				
SWLNR/L	SM25-060-90	T 7P	8 in-lbs	

RHINOTURN™ A-SCLNR/L SCREW TYPE BORING BARS WITH THRU COOLANT (CNMX INSERT)





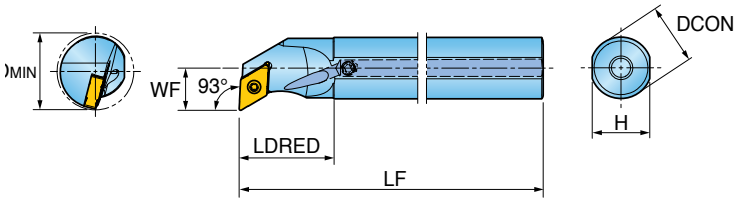
Approach angle	Part Number	Dimension (inch)						Insert
		DCON Shank Diameter	DMIN Min. Bore Diameter	LF Functional Length	WF Functional Width	LDRED Reduced Body Dia. Length	H Shank Height	
95° 	A08M-SCLNR/L-2.2	.500	.63	6.00	.312	.84	.46	CNMX 2.22
	A10R-SCLNR/L-2.2	.625	.81	8.00	.406	.96	.58	

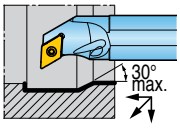
Spare Parts

Part Number	Shim Screw	Wrench	Recommended Torque	
				
A-SCLNR/L	SM25-060-90	T7P	8 in-lbs	

RHINOTURNM™ A-SDUNR/L SCREW TYPE BORING BARS WITH THRU COOLANT (DN_X INSERT)





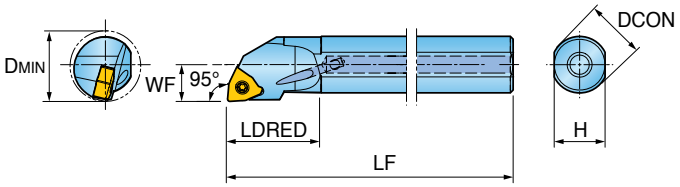
Approach angle	Part Number	Dimension (inch)						Insert
		DCON Shank Diameter	DMIN Min. Bore Diameter	LF Functional Length	WF Functional Width	LDRED Reduced Body Dia. Length	H Shank Height	
93° 	A08M-SDUNR/L-2.2	.500	.63	6.00	.312	.84	.46	DN_X 2.22
	A10R-SDUNR/L-2.2	.625	.81	8.00	.406	.96	.58	

Spare Parts

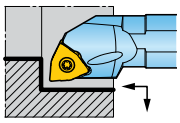
Part Number	Shim Screw	Wrench	Recommended Torque	
				
A-SDUNR/L	SM25-060-90	T7P	8 in-lbs	

RHINOTURN™ A-SWLNR/L SCREW TYPE BORING BARS WITH THRU COOLANT (WNMX INSERT)





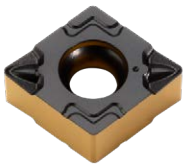
Coolant

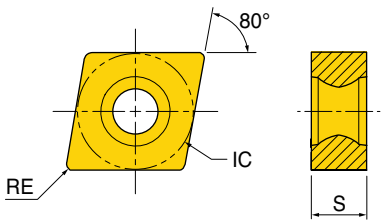
Approach angle	Part Number	Dimension (inch)						Insert
		DCON Shank Diameter	DMIN Min. Bore Diameter	LF Functional Length	WF Functional Width	LDRED Reduced Body Dia. Length	H Shank Height	
95° 	A08M-SWLNR/L-2.2	.500	.75	6.00	.375	.84	.46	WNMX 2.22
	A10R-SWLNR/L-2.2	.625	.85	8.00	.438	.96	.58	

Spare Parts

Part Number	Shim Screw	Wrench	Recommended Torque	
				
A-SWLNR/L	SM25-060-90	T7P	8 in-lbs	

RHINOTURN™ CNMX NEGATIVE 80° RHOMBIC INSERTS





Size	Dimensions (inch)		
	IC Inscribed Circle Dia.	S Thickness	RE Corner Radius
2.2	.276	.125	.016

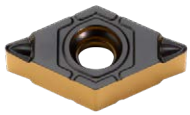
Part Number ANSI (ISO)	ap (inch)	Feed (ipr)	Cermet	CVD Coated		PVD Coated
			PV3010	TT8115B	TT8125B	TT5080
CNMX 2.221 (070304) FGP	.012-.080	.002-.010	•	•	•	•

•: Standard items

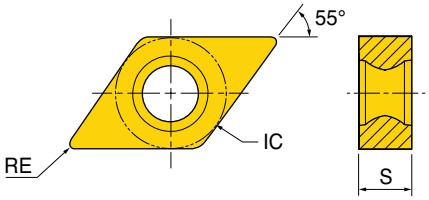
RHINOTURNM™ DNGX/DNMX NEGATIVE 55° RHOMBIC INSERTS



DNGX



DNMX



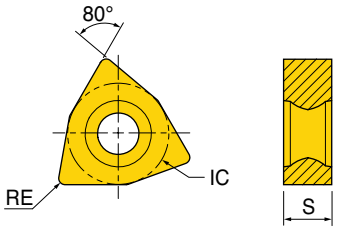
Size	Dimensions (inch)		
	IC Inscribed Circle Dia.	S Thickness	RE Corner Radius
2.2	.276	.125	.008-.016

Part Number ANSI (ISO)	ap (inch)	Feed (ipr)	Cermet	CVD Coated		PVD Coated	
			PV3010	TT8115B	TT8125B	TT5080	TT9020
DNGX 2.220.5 (080302) M-SM-F	.008-.047	.0008-.005					•
DNMX 2.221 (080304) FGP	.012-.080	.002-.010	•	•	•	•	

•: Standard items

RHINOTURNM™ WNMX NEGATIVE 80° TRIGON INSERTS



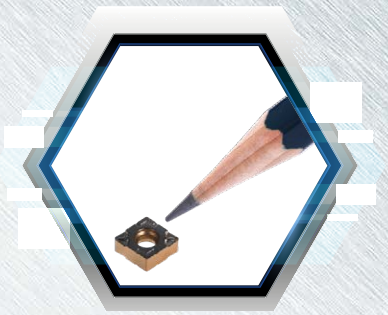


Size	Dimensions (inch)		
	IC Inscribed Circle Dia.	S Thickness	RE Corner Radius
2.2	.276	.125	.016

Part Number ANSI (ISO)	ap (inch)	Feed (ipr)	Cermet	CVD Coated		PVD Coated
			PV3010	TT8115B	TT8125B	TT5080
WNMX 2.221 (040304) FGP	.012-.080	.002-.010	•	•	•	•

•: Standard items



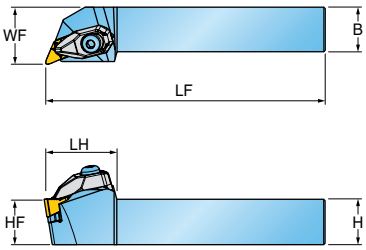


4-EDGE INSERTS AND HOLDERS FOR ALL-DIRECTIONAL TURNING INCLUDING HIGH-FEED BACKWARD TURNING

- Multi-directional turning capabilities that include forward longitudinal turning, high feed backward turning, face turning, profiling and undercutting all with the same tool
- Double-sided ZNMV inserts provide 4 cutting edges
- Insert/holder system uses the same axial and radial rake angle as comparable positive inserts, resulting in low cutting forces
- Serrated cutting edge provides excellent chip control at a variety of cutting depths
- Much higher productivity due to reduced downtime, fewer tool changes and optimized tool paths
- 1.00" and 1.25" holders feature rigid T-Type clamping and optional COOLBURST™ internal coolant supply

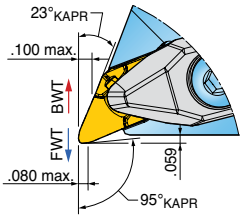
SUPERTURNZ™ SERIES TZQNR/L T-HOLDERS FOR ZNMV INSERTS



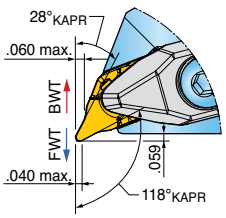


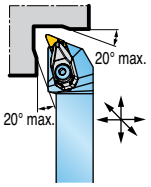
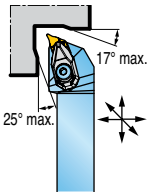
TZQNR

ZNMV



ZNMV Y



Approach Angle	Part Number	Dimension (inch)						Insert
		H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	LH Head Length	WF Functional Width	
ZNMV 23°(BWT) 95°(FWT) 	TZQNR/L 16-3.3D	1.000	1.000	1.000	6.0	1.57	1.25	ZNMV 3-36.32
ZNMV Y 28°(BWT) 118°(FWT) 	TZQNR/L 20-3.3D	1.250	1.250	1.250	6.0	1.57	1.50	

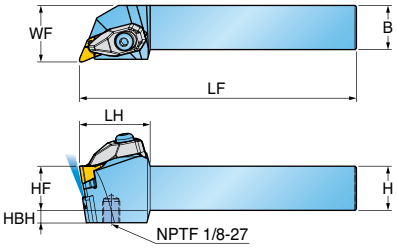
BWT: Backward turning
FWT: Forward turning

Spare Parts

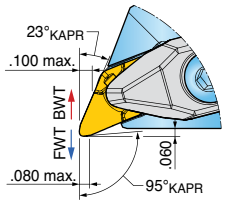
Part Number	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench	
							
TZQNR/L	DLM 3.3Z-NV	DLS 5	DSP 5	TSZ 140310	TS 35083I/HG	L-W 4	T 10

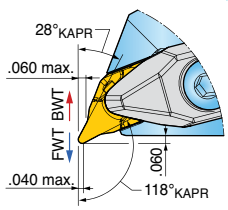
SUPERTURNZ™ SERIES TZQNR/L-TB T-HOLDERS FOR ZNMV INSERTS WITH HIGH PRESSURE COOLANT

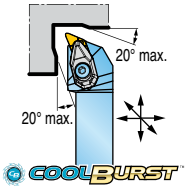
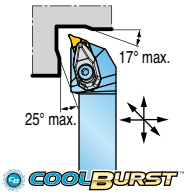




TZQNR-TB





Approach Angle	Part Number	Dimension (inch)							Insert
		H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	LH Head Length	WF Functional Width	HBH Head Bottom Offset Height	
ZNMV 23°(BWT) 95°(FWT) 	TZQNR/L 16-3.3D-TB	1.000	1.000	1.000	6.0	1.57	1.25	.28	ZNMV 3-36.32
ZNMV Y 28°(BWT) 118°(FWT) 	TZQNR/L 20-3.3D-TB	1.250	1.250	1.250	6.0	1.57	1.50	-	

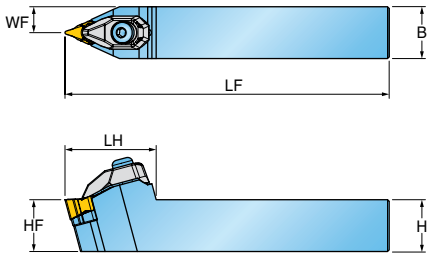
BWT: Backward turning
FWT: Forward turning

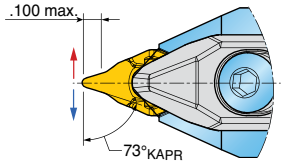
Spare Parts

Part Number	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench	
							
TZQNR/L	DLM 3.3Z-NV	DLS 5	DSP 5	TSZ 140310	TS 35083I/HG	L-W 4	T 10

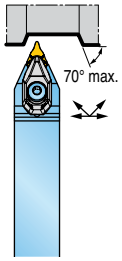
SUPERTURNZ™ SERIES TZXNN T-HOLDERS FOR ZNMV Y INSERTS







TZXNN

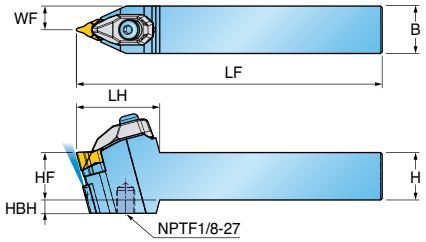
Approach Angle	Part Number	Dimension (inch)						Insert
		H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	LH Head Length	WF Functional Width	
73° 	TZXNN 16-3.3D	1.000	1.000	1.000	6.0	1.73	.500	ZNMV 3-36.32Y-BF
	TZXNN 20-3.3D	1.250	1.250	1.250	6.0	1.73	.625	

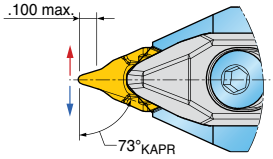
Spare Parts

Part Number	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench	
							
TZXNN	DLM 3.3Z-NV	DLS 5	DSP 5	TSZ 140310	TS 35083I/HG	L-W 4	T 10

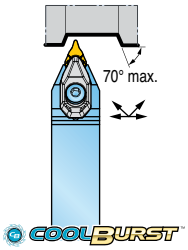
SUPERTURNZ™ SERIES TZXNN-TB T-HOLDERS FOR ZNMV Y INSERTS WITH HIGH PRESSURE COOLANT







TZXNN-TB

Approach Angle	Part Number	Dimension (inch)							Insert
		H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	LH Head Length	WF Functional Width	HBH Head Bottom Offset Height	
73° 	TZXNN 16-3.3D-TB	1.000	1.000	1.000	6.0	1.73	.500	.28	ZNMV 3.36.32Y-BF
	TZXNN 20-3.3D-TB	1.250	1.250	1.250	6.0	1.73	.625	-	

Spare Parts

Part Number	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench	
							
TZXNN-TB	DLM 3.3Z-NV	DLS 5	DSP 5	TSZ 140310	TS 35083I/HG	L-W 4	T 10

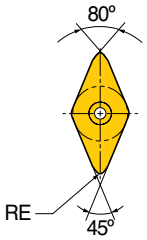
SUPERTURNZ™ SERIES ZNMV NEGATIVE RHOMBIC INSERTS WITH 80° CORNER ANGLE

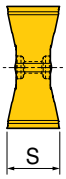


BM



BS





Size	Dimensions (inch)		
	IC Insert Size	S Thickness	RE Corner Radius
3.36.3	.413	.394	.031

Part Number	Backward Turning		Forward Turning		CVD Coated			PVD Coated	
	ap (inch)	Feed (ipr)	ap (inch)	Feed (ipr)	TT8015	TT8115	TT8125	TT3010	TT3020
ZNMV 3.36.32-BM	.020-.100	.016-.040	.020-.080	.008-.024	•	•	•		
ZNMV 3.36.32-BS	.020-.100	.020-.040	.040-.080	.008-.016				•	•

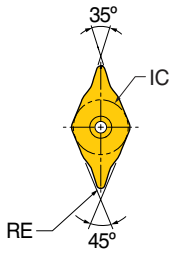
Refer to New Product Announcement for more detailed application guidelines.

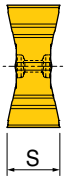
•: Standard items

TURNING

SUPERTURNZ™ SERIES ZNMV Y NEGATIVE RHOMBIC INSERTS WITH 35° CORNER ANGLE







Size	Dimensions (inch)		
	IC Insert Size	S Thickness	RE Corner Radius
3.36.3	.413	.394	.031

Part Number	Backward Turning		Forward Turning		CVD Coated		
	ap (inch)	Feed (ipr)	ap (inch)	Feed (ipr)	TT8015	TT8115	TT8125
ZNMV 3.36.32Y-BF	.010-.060	.008-.020	.010-.040	.008-.014	•	•	•

Refer to New Product Announcement for more detailed application guidelines.

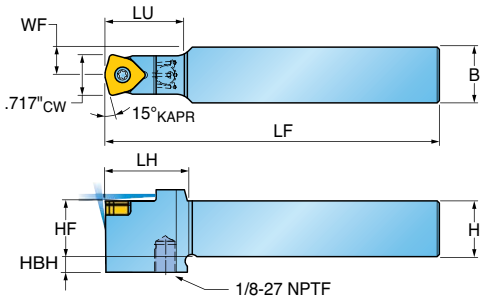
•: Standard items

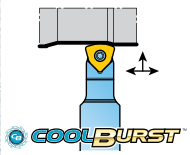
NEW HIGH-FEED TURNING PRODUCT LINE CAPABLE OF BI-DIRECTIONAL TURNING

- Productive, high feed turning with a maximum .120" (3mm) feed per revolution and up to .080" (2mm) depth of cut
- Positive, trigon-shaped insert with 6 cutting edges (3 indexes) and optimized chip breaker
- Bi-directional (left or right) continuous turning with one neutral holder.
  - Dramatically reduced cycle time
  - Less inventory of holders
- Anti-rotation groove design on the bottom of insert along with a special screw design provides very stable clamping & machining, even at incredibly high feed rates
- COOLBURST high-pressure through coolant from above and below insert enhances chip control and prolongs tool life
- TT8115B, TT8125B, TT8135B two-tone colored CVD-coated grades protect against heat and crater wear

TURNSFEEDF™ SERIES SFXCN SCREW TYPE HOLDERS WITH HIGH PRESSURE COOLANT



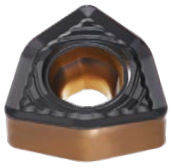


Approach angle	Part Number	Dimension (inch)								Insert
		H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	LU Usuable Length	WF Functional Width	LH Head Length	HBH Head Bottom Offset Height	
15° 	SFXCN 16-4.9D	1.000	1.000	1.000	6.0	1.26	.500	1.46	1.26	FCMX 4.944
	SFXCN 20-4.9D	1.250	1.250	1.250	6.0	1.26	.625	1.46	1.26	

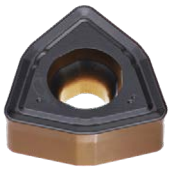
Spare Parts

Part Number	Insert Screw	Wrench	
			
SFXCN	SO 45130I	T 20	

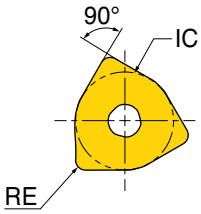
TURNSFEEDF™ SERIES FCMX POSITIVE HIGH FEED INSERTS

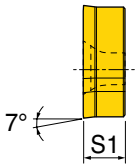


HFG



HFP





Size	Dimensions (inch)		
	IC Inscribed Circle Dia.	S1 Thickness	RE Corner Radius
4.9 (10)	.608	.256	.063

Part Number ANSI (ISO)	ap (inch)	Feed (ipr)	CVD Coated			
			TT8115B	TT8125B	TT8135B	TT9225
FCMX 4.944 (100616) HFG	.020-.080	.060-.120	•	•		•
FCMX 4.944 (100616) HFP	.020-.080	.040-.100	•	•	•	

•: Standard items



COOLBURST™ CONNECTORS

Fig.1 - STRAIGHT MALE CONNECTOR

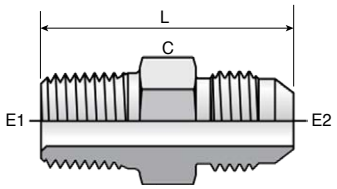


Fig.2 - ELBOW MALE CONNECTOR

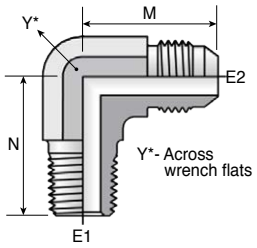
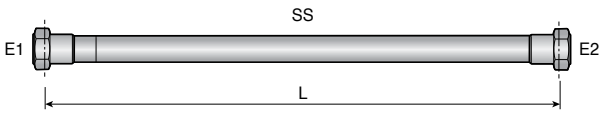


Fig.	Part Number	End Size		C (hex)	L	Max Pressure (psi)
		E1	E2			
1	TB-4-FTX-S	1/8-27 NPTF	1/4 (37° Flare)	1/2"	1.22"	6000

Fig.	Part Number	End Size		Y	M	N	Max Pressure (psi)
		E1	E2				
2	TB-4-CTX-S	1/8-27 NPTF	1/4 (37° Flare)	7/16"	0.89"	0.78"	6000

All connectors ordered separately.

COOLBURST™ FLEXIBLE HIGH-PRESSURE HOSES



Part Number	Dimensions			Max Pressure (psi)
	OAL	E1	E2	
TB-HOSE-7/16-7/16-8.0SS	8.0"	1/4 (37° Flare)	1/4 (37° Flare)	3000
TB-HOSE-7/16-7/16-10.0SS	10.0"	1/4 (37° Flare)	1/4 (37° Flare)	3000

Hoses ordered separately.

GROOVING FAMILY EXPANDS WITH NEW SERIES OF SMALLER SIZE INSERTS AND HOLDERS FOR SWISS-TYPE AUTOMATIC LATHES

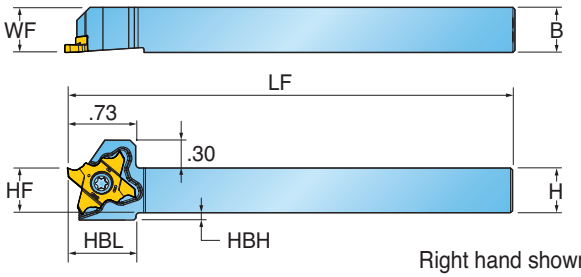
- 4-edge miniature insert for grooving, parting, turning, profiling and threading on Swiss-type lathes
- Inserts are handed so they can part or groove next to a square shoulder
- Grooving width range of .020" ~ .118" (0.5 to 3.0 mm)
- Grooving depth range of .087" ~ .197" (2.2 to 5.0 mm)
- Superior insert position repeatability and strong clamping force results in long tool life
- Holders available with or without COOLBURST high pressure internal coolant supply
- Inserts feature new PVD-coated grade TT4430 and a sharp cutting edge

GOLDFLEX™ SERIES TQHR/L-20

GROOVING AND TURNING HOLDERS FOR SWISS-TYPE AUTOMATIC LATHES







Right hand shown

Designation	Dimension (inch)							Insert
	H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	WF Functional Width	HBL Head Bottom Offset Length	HBH Head Bottom Offset Height	
TQHR/L 9.5-20	.375	.375	.375	5.0	.375	.73	0.16	TQS 20 TQJ 20
TQHR/L 12.7-20	.500	.500	.500	5.0	.500	.73	0.08	
TQHR/L 15.9-20	.625	.625	.625	5.0	.625	-	-	
TQHR/L 19-20	.750	.750	.750	5.0	.750	-	-	

Spare Parts

Designation	Screw	Wrench	
			
TQHR/L...20	TS 40A100L (1) TS 40A100 (2)	T-1508/5	

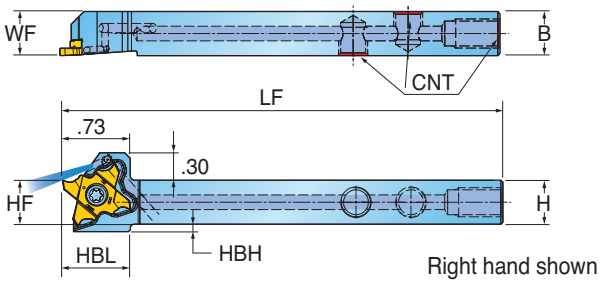
(1) For TQHR, (2) For TQHL

GOLDFLEX™ SERIES TQHR/L-20-TB

GROOVING AND TURNING HOLDERS WITH HIGH PRESSURE COOLANT FOR SWISS-TYPE AUTOMATIC LATHES



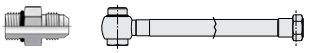




Designation	Dimension (inch)							CNT	Insert
	H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	WF Functional Width	HBL Head Bottom Offset Length	HBH Head Bottom Offset Height		
TQHR/L 12.7-20-TB	.500	.500	.500	5.0	.500	.73	0.08	UNF 5/16-24	TQS 20 TQJ 20
TQHR/L 15.9-20-TB	.625	.625	.625	5.0	.625	-	-	UNF 5/16-24	
TQHR/L 19-20-TB	.750	.750	.750	5.0	.750	-	-	1/8 27 NPTF	

Designation	1015 PSI Flow Rate (GPM)	1450 PSI Flow Rate (GPM)	2030 PSI Flow Rate (GPM)
TQHR/L...-TB	2.4-2.9	2.9-3.4	3.2-3.7

Spare Parts

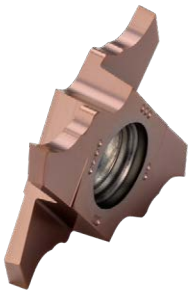
Designation	Screw	Wrench	Plug	Plug Wrench	Coolant Accessories (Fittings & Hoses)
					
TQHR/L 12.7/15.9-20-TB	TS 40A100L [1] TS 40A100 [2]	T-1508/5	PLG 5/16 UNF	L-W 4	Refer to Ingersoll Website
TQHR/L 19-20-TB	TS 40A100L [1] TS 40A100 [2]	T-1508/5	NPTF 1/8-TQ19	L-W 3/16	Refer to Ingersoll Website

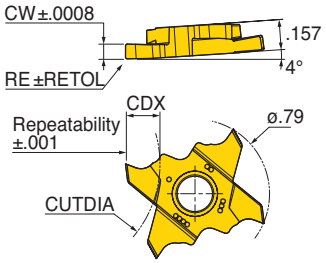
[1] For TQHR, [2] For TQHL

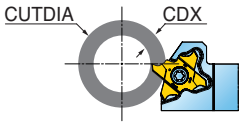
GOLDFLEX™ SERIES TQS 20

PARTING AND GROOVING – PRECISION INSERTS WITH GROUND CHIP BREAKER









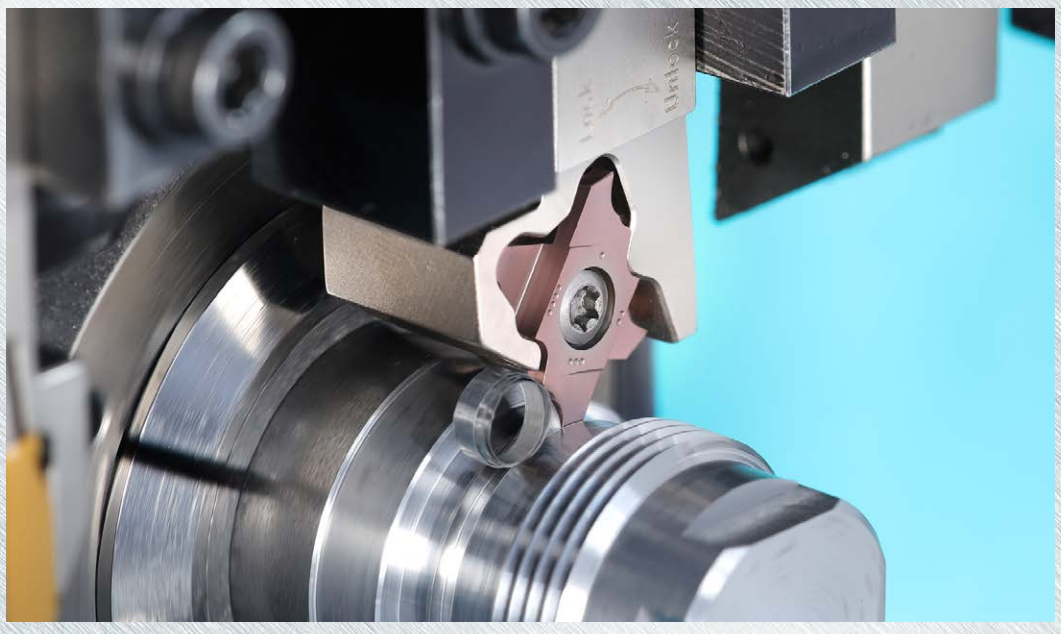
Right hand shown

RE	RETOL
RE ≤ .004	.0008
.004 < RE ≤ .016	.0012
RE > .016	.0020

Designation	Feed (ipr)		Dimension (inch)			CUTDIA (Cutting Diameter)						Grade
	Cutting Feed Min.	Cutting Feed Max.	CW Cutting Width	RE Corner Radius	CDX Cutting Depth Max.	CDX ≤ .087	CDX ≤ .106	CDX ≤ .138	CDX ≤ .157	CDX ≤ .177	CDX ≤ .197	TT4430
TQS20-0.50-0.05-R/L	.0010	.0030	0.020	0.002	0.087	N.L.	-	-	-	-	-	•
TQS20-1.00-0.10-R/L	.0010	.0030	0.039	0.004	0.106	N.L.	N.L.	-	-	-	-	•
TQS20-1.50-0.10-R/L	.0010	.0040	0.059	0.004	0.197	N.L.	N.L.	2.75	1.96	1.18	0.63	•
TQS20-2.00-0.10-R/L	.0010	.0040	0.079	0.004	0.197	N.L.	N.L.	2.75	1.96	1.18	0.63	•
TQS20-2.00-1.00-R/L*	.0015	.0055	0.079	0.039	0.197	N.L.	N.L.	2.75	1.96	1.18	0.63	•
TQS20-2.50-0.10-R/L	.0020	.0050	0.098	0.004	0.197	N.L.	N.L.	2.75	1.96	1.18	0.63	•
TQS20-3.00-0.10-R/L	.0015	.0060	0.118	0.004	0.197	N.L.	N.L.	2.75	1.96	1.18	0.63	•
TQS20-3.00-1.50-R/L*	.0015	.0060	0.118	0.059	0.197	N.L.	N.L.	2.75	1.96	1.18	0.63	•

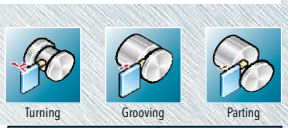
N.L. : No Limit
Full Radius Insert

•: Standard items



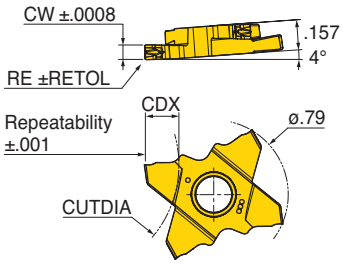
GOLDFLEX™ SERIES TQJ 20

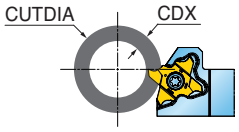
PARTING AND GROOVING – PRECISION INSERTS WITH GROUND CHIP BREAKER



RE	RETOL
RE ≤ .004	.0008
.004 < RE ≤ .016	.0012
RE > .016	.0020







Right hand shown

Designation	Feed (ipr)		Dimension (inch)			CUTDIA (Cutting Diameter)					Grade
	Cutting Feed Min.	Cutting Feed Max.	CW Cutting Width	RE Corner Radius	CDX Cutting Depth Max.	CDX ≤ .106	CDX ≤ .138	CDX ≤ .157	CDX ≤ .177	CDX ≤ .197	TT4430
TQJ20-1.00-0.10-R/L	.0010	.0030	0.039	0.004	0.106	N.L.	-	-	-	-	•
TQJ20-1.50-0.20-R/L	.0010	.0030	0.059	0.008	0.197	N.L.	2.75	1.96	1.18	0.63	•
TQJ20-2.00-0.20-R/L	.0015	.0040	0.079	0.008	0.197	N.L.	2.75	1.96	1.18	0.63	•

N.L. : No Limit

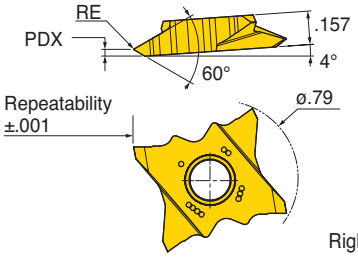
•: Standard items

GOLDFLEX™ SERIES TQS 20-MT

PARTIAL PROFILE 60° THREADING INSERTS







Right hand shown

Designation	Dimension (inch)						Grade
	TPN Thread Pitch Min. (mm)	TPX Thread Pitch Max. (mm)	TPIN Threads Per Inch Min.	TPIX Threads Per Inch Max.	RE Corner Radius	PDX Profile Distance Ex.	TT4430
TQS20-MT-0.05-R/L	0.30	1.75	48	14	.002	.031	•

•: Standard items

SMALL SIZE 4-CUTTING EDGE INSERT AND HOLDERS FOR INTERNAL GROOVING

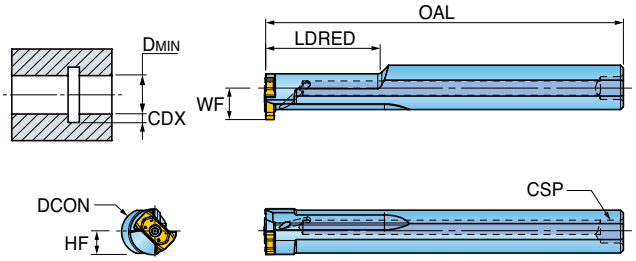
- Efficient 4-cutting edge insert for internal grooving
- 3-point contact design with strong screw clamping
- Stable machining and long tool life
- Positive chip breaker controls chips and generates a very good surface finish
- Minimum bore diameters as small as .650" (16.5mm)
- Same insert can be mounted to both left and right-hand holders, reducing inventory requirements
- Internal coolant supply

QUADFLEX™ SERIES TQHIR/L

INTERNAL GROOVING HOLDERS WITH COOLANT HOLE







Right hand shown

Part Number	Dimension (inch)						Insert
	DCON Shank Diameter	DMIN Min. Bore Diameter	WF Functional Width	LDRED Reduced Body Dia. Length	OAL Overall Length	HF Functional Height	
TQHIR/L 15.9-16.5-14	.625	.65	.433	1.57	5.0	.295	TQIS 14
TQHIR/L 19-16.5-14	.750	.65	.512	1.57	5.0	.354	

CDX: Refer to insert dimension

Spare Parts

Part Number	Screw	Wrench	Seal	
				
TQHIR/L 15.9	TS 25075I/HG	T 8	PL 062	
TQHIR/L 19	TS 25075I/HG	T 8	PL 075	

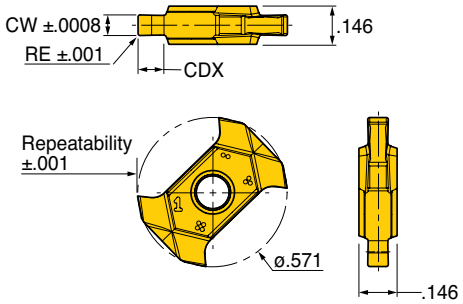
QUADFLEX™ SERIES TQIS 14

4 CUTTING EDGE INSERTS FOR INTERNAL SHALLOW GROOVING


ID Groove


ID Groove/Turn





Part Number	Feed (ipr)	Dimension (inch)			Grade
		CW Cutting Width	RE Corner Radius	CDX Cutting Depth Max.	TT9080
TQIS 14-1.50-0.10	.0008-.0025	.059	.004	.074	•
TQIS 14-2.00-0.10	.0010-.0030	.079	.004	.098	•
TQIS 14-2.00-0.20	.0010-.0030	.079	.008	.098	•
TQIS 14-2.50-0.20	.0010-.0035	.098	.008	.098	•
TQIS 14-3.00-0.20	.0010-.0040	.118	.008	.098	•

•: Standard items



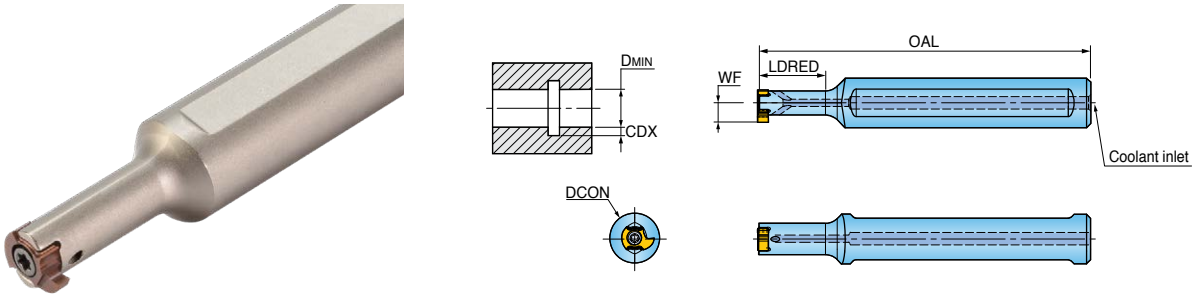
MINIATURE SIZE INSERTS AND HOLDERS FOR SHALLOW INTERNAL GROOVING

- Suitable for small diameter internal grooves with minimum bore diameter down to .315" (8mm)
- Robust, 3-point contact design with screw clamping prevents vibration and generates an excellent surface finish
- Neutral holder design allows inserts to be mounted in 4 different ways, eliminating the need for handed tools and allowing either CW or CCW spindle rotation
- Internal coolant supply for longer tool life
- Steel and carbide shank options
- Economical alternative to solid carbide grooving tools
- Inserts feature new PVD-coated grade TT4430 and a sharp cutting edge

MINIFLEX™ SERIES TMIHN

INTERNAL GROOVING HOLDER WITH COOLANT HOLES





Designation	Dimension (inch)					Coolant Inlet	Insert
	DCON Shank Diameter	DMin Min. Bore Diameter	WF Functional Width	LDRED Reduced Body Dia. Length	OAL Overall Length		
TMIHN 12.7-16-8	.500	.315	.185	.63	3.0	Ø.118	TMIS 8

CDX: Refer to insert dimension

Spare Parts

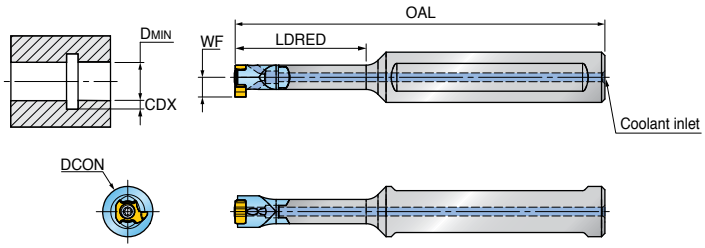
Designation	Screw	Wrench	
			
TMIHN	TS 22052I/HG	T 7	

MINIFLEX™ SERIES TMIHN-C

INTERNAL GROOVING CARBIDE HOLDERS WITH COOLANT HOLES







Designation	Dimension (inch)					Coolant Inlet	Insert
	DCON Shank Diameter	DMin Min. Bore Diameter	WF Functional Width	LDRED Reduced Body Dia. Length	OAL Overall Length		
TMIHN 12.7C-24-8	.500	.315	.185	.94	3.6	Ø.079	TMIS 8
TMIHN 12.7C-32-8	.500	.315	.185	1.26	4.0	Ø.079	

CDX: Refer to insert dimension

Spare Parts

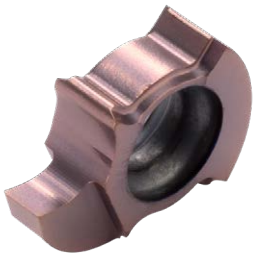
Designation	Screw	Wrench	
			
TMIHN-C	TS 22052I/HG	T 7	

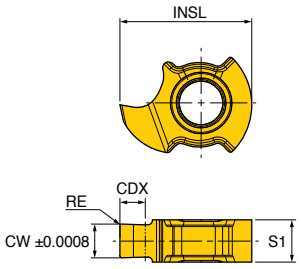
MINIFLEX™ SERIES TMIS 8

PRECISE INSERTS FOR INTERNAL SHALLOW GROOVING

ID Groove

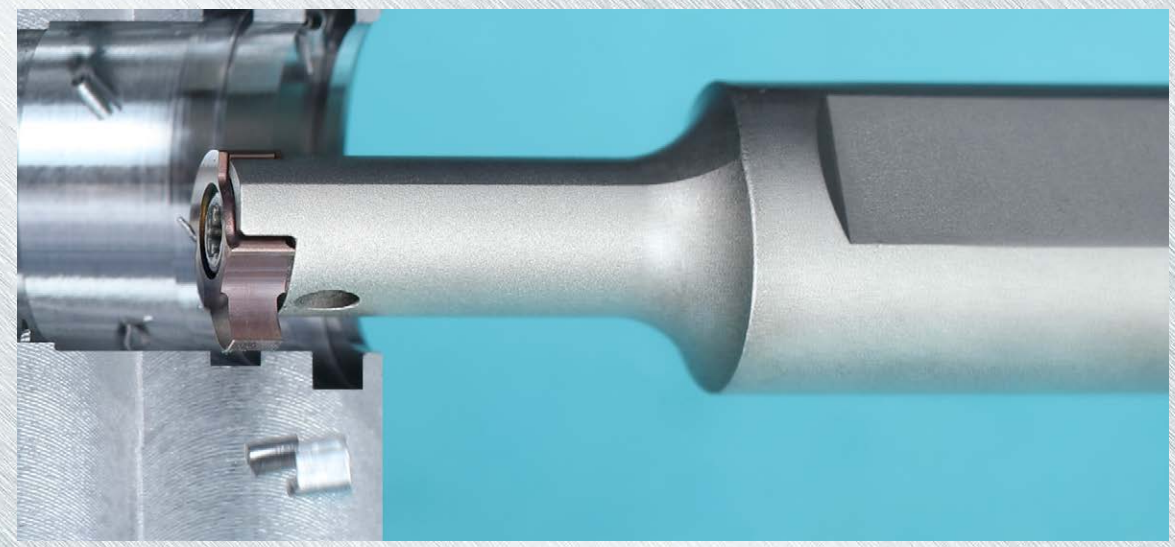
ID Groove/Turn





Designation	Feed (ipr)	Dimension (inch)					Grade
		CW Cutting Width	RE Corner Radius	CDX Cutting Depth Max.	INSL Insert Length	S1 Insert Thickness	TT4430
TMIS 8-0.50-0.00	.0004-.0012	.0197	.000	.028	.307	.098	•
TMIS 8-1.00-0.00	.0004-.0012	.0394	.000	.059	.307	.098	•
TMIS 8-1.50-0.05	.0004-.0012	.0591	.002	.059	.307	.098	•
TMIS 8-2.00-0.10	.0004-.0012	.0787	.004	.059	.307	.098	•

•: Standard items



FACE GROOVING, EXTERNAL GROOVING AND EXTERNAL THREADING SYSTEM WITH INNOVATIVE 2-EDGE INSERT

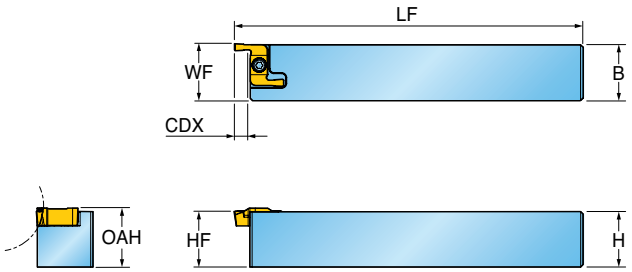
- Robust clamping includes anti-rotation triangular grooves on the bottom side of the insert along with a strong screw clamping design to eliminate movement in the pocket
- Thick insert design increases stiffness to protect against unpredictable breakage.
- In the event of an edge failure, the insert can be rotated 180° without impacting seating stability
- Holder is designed without a need for an upper or lower clamping jaw
  - Excellent chip evacuation without interference of an upper jaw
  - Holder breakage is eliminated due to absence of a lower jaw
  - One holder used for multiple insert widths
- Wide variety of applications including face grooving and turning, external grooving and turning and external threading
- Insert widths 3mm & 4mm (.118" & .157") and 60° partial profile threading
- 1.00" parallel and perpendicular style holders, left and right-hand
- Optional COOLBURST internal coolant supply for improved chip evacuation

FACEFLEX™ SERIES TXFR/L

HOLDERS FOR SHALLOW FACE GROOVING, TURNING & EXTERNAL THREADING







Right hand shown

Part Number	Dimension (inch)							Insert
	H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	OAH Overall Height	WF Functional Width	CDX Cutting Depth Max.	
TXFR 25.4	1.000	1.000	1.000	6.28	1.04	1.020	.236	TD_X ...R TD_X ...L
TXFL 25.4	1.000	1.000	1.000	6.28	1.04	1.020	.236	

Spare Parts

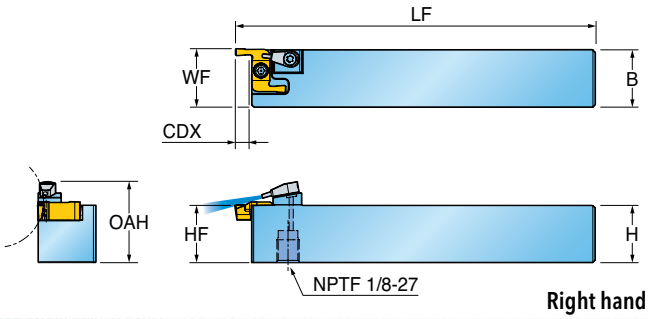
Part Number	Screw	Wrench	
			
TXFR 25.4	SM35-110-00	T 15	
TXFL 25.4	TS 35110IL	T 15	

FACEFLEX™ SERIES TXFR/L-TB

HOLDERS FOR SHALLOW FACE GROOVING, TURNING & EXTERNAL THREADING WITH HIGH-PRESSURE COOLANT







Right hand shown

Part Number	Dimension (inch)							Insert
	H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	OAH Overall Height	WF Functional Width	CDX Cutting Depth Max.	
TXFR 25.4-TB	1.000	1.000	1.000	6.28	1.04	1.020	.236	TD_X ...R TD_X ...L
TXFL 25.4-TB	1.000	1.000	1.000	6.28	1.04	1.020	.236	

Part Number	1000 psi flow rate (gpm)	1500 psi flow rate (gpm)	2000 psi flow rate (gpm)
TXFR 25.4-TB	19-26	26-34	30-38
TXFL 25.4-TB	19-26	26-34	30-38

Spare Parts

Part Number	Screw	Wrench	Cooling Unit	
				
TXFR 25.4-TB	SM35-110-00	T 15	S-CU-TB	
TXFL 25.4-TB	TS 35110IL	T 15	S-CU-TB	

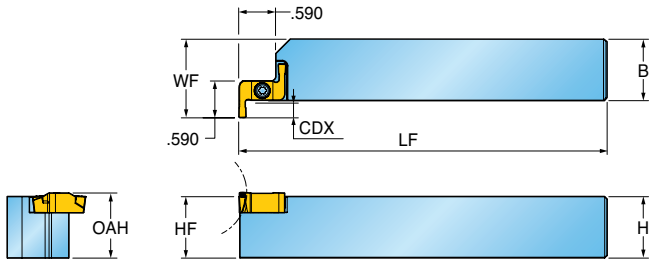
FACEFLEX™ SERIES TXFPR/L

PERPENDICULAR HOLDERS FOR SHALLOW FACE GROOVING & TURNING


Face Groove


Face Groove/Turn



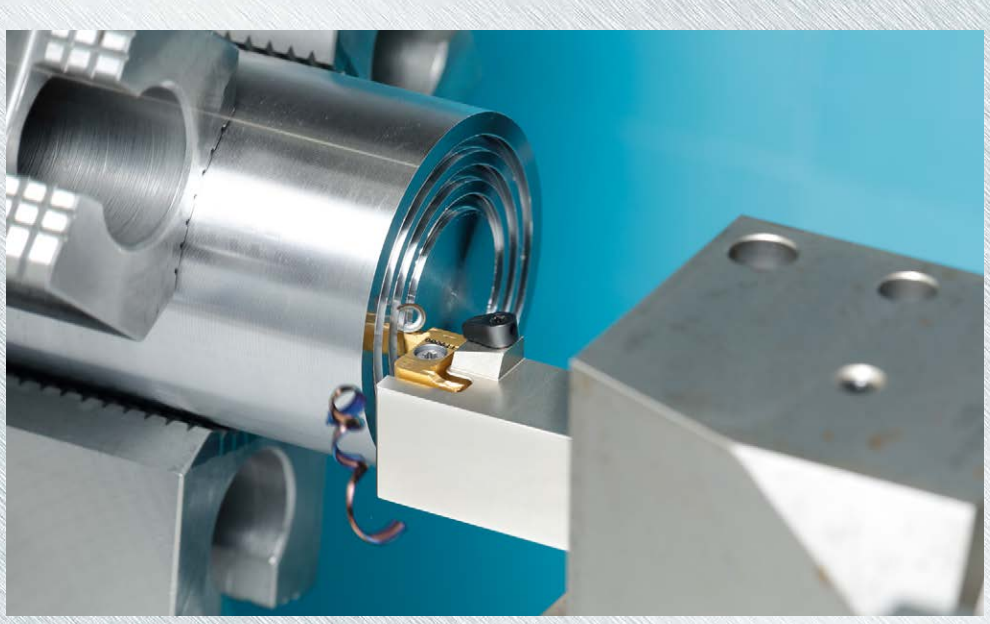


Right hand shown

Part Number	Dimension (inch)							Insert
	H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	OAH Overall Height	WF Functional Width	CDX Cutting Depth Max.	
TXFPR 25.4	1.000	1.000	1.000	6.0	1.04	1.275	.236	TDFX ...R TDFX ...L
TXFPL 25.4	1.000	1.000	1.000	6.0	1.04	1.275	.236	

Spare Parts

Part Number	Screw	Wrench	
			
TXFPR 25.4	SM35-110-00	T15	
TXFPL 25.4	TS 35110IL	T15	

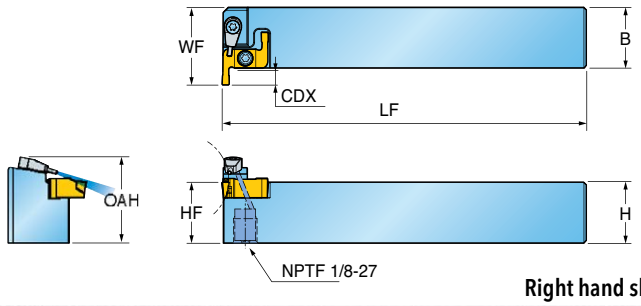


FACEFLEX™ SERIES TXFPR/L-TB

PERPENDICULAR HOLDERS FOR SHALLOW FACE GROOVING & TURNING WITH HIGH-PRESSURE COOLANT

Face Groove | Face Groove/Turn | HP Coolant





Right hand shown

Part Number	Dimension (inch)							Insert
	H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	OAH Overall Height	WF Functional Width	CDX Cutting Depth Max.	
TXFPR 25.4-TB	1.000	1.000	1.000	6.0	1.40	1.275	.236	TDFX ...R TDFX ...L
TXFPL 25.4-TB	1.000	1.000	1.000	6.0	1.40	1.275	.236	

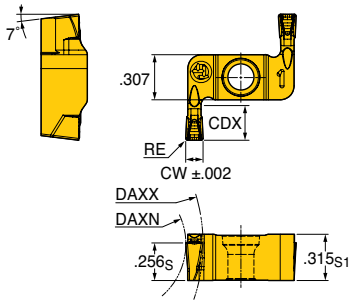
Part Number	1000 psi flow rate (gpm)	1500 psi flow rate (gpm)	2000 psi flow rate (gpm)
TXFPR 25.4-TB	19-26	26-34	30-38
TXFPL 25.4-TB	19-26	26-34	30-38

Spare Parts

Part Number	Screw	Wrench	Cooling Unit	
				
TXFPR-TB	SM35-110-00	T 15	S-CU-TB	
TXFPL-TB	TS 35110IL	T 15	S-CU-TB	

FACEFLEX™ SERIES TDFX DOUBLE-ENDED INSERTS FOR FACE GROOVING AND TURNING





Size	Dimensions (inch)				
	CW Cutting Width	RE Corner Radius	CDX Cutting Depth Max.	DAXN Axial Groove Outside Dia. Min.	DAXX Axial Groove Outside Dia. Max.
3	.118	.012	.236	.945	No Limit
4	.157	.016	.236	1.260	No Limit

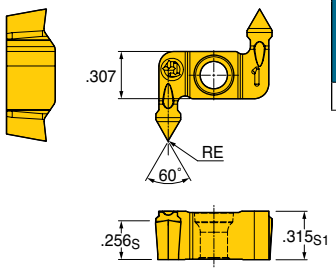
Right hand shown

Part Number	Turning		Grooving	Coated
	ap Depth of Cut (inch)	Feed (ipr)	Feed (ipr)	TT9080
TDFX 3E-0.3-D24R/L	.016-.071	.006-.008	.003-.008	•
TDFX 4E-0.4-D32R/L	.020-.095	.006-.010	.004-.010	•

•: Standard items

FACEFLEX™ SERIES TDGX DOUBLE-ENDED THREADING INSERTS WITH 60° PARTIAL PROFILE





Size	Dimensions				
	RE Corner Radius	TPN Thread Pitch Min. (mm)	TPX Thread Pitch Max. (mm)	TPIN Threads Per Inch Min.	TPIX Threads Per Inch Max.
4	0.05mm (.002")	0.45	3.5	8	56

Right hand shown

Part Number	Coated
	TT9080
TDGX 4MT-0.05-R/L	•

•: Standard items

HIGH-FEED CBN INSERTS FOR HARDENED MATERIALS

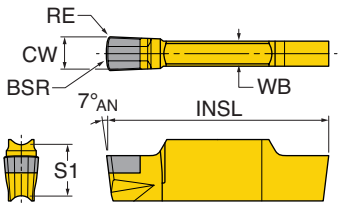
- T-Clamp CBN inserts for high feed turning of high-hardened workpiece materials
- Inclined chip breaker for good chip control at shallow depths of cut (Maximum .0047")
- Optimized cutting edge design for high feed bi-directional turning
- Excellent surface finish
- Significantly improved productivity with a maximum feed rate from .031-.047 ipr
- TB2015 CBN grade
  - Excellent combination of high hardness and moderate fracture toughness
  - Continuous and light interrupted machining of hardened steel

TCLAMP™ SERIES TSG-HF

CBN INSERTS FOR HIGH FEED TURNING

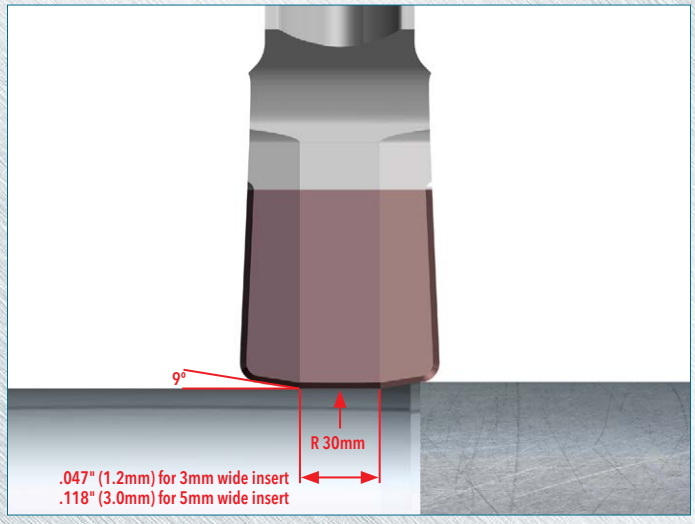
Turning

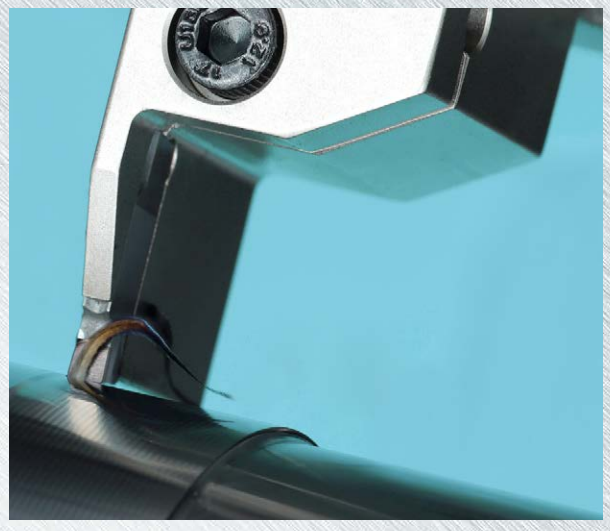




Part Number	SSC Insert Seat Size	Dimensions (inch)							CBN
		CW Cutting Width	RE Corner Radius	WB Body Width	INSL Insert Length	BSR Wiper Edge Radius	ap Depth of Cut (inch)	Feed (ipr)	TB2015
TSG 3.0-0.3-HF	3	.118 (3mm)	0.012	0.087	0.79	1.18	.016-.031	.003-.005	•
TSG 5.0-0.3-HF	5	.197 (5mm)	0.012	0.157	0.98	1.18	.016-.047	.003-.005	•

•: Standard items





T-Clamp CBN High Feed inserts feature 9-degree lead angles (left and right sides) along with a large radius on the end of the insert in order to reduce vibration. The presence of these features should be taken into consideration when programming the work piece.

SINGLE-ENDED RIGID INSERTS AND HOLDERS FOR PARTING AND DEEP GROOVING WITH UNIQUE ADAPTERS!

- Rigid clamping of the specialized 3-point contact area for excellent accuracy, repeatability and durability
- Insert's increased height enhances strength and prolongs tool life
- User-friendly insert clamping system
- High rigidity triangular blades and dedicated holders
  - Improved productivity due to high feed machining capability
  - Stable tool life and impressive cutting performance
- Blades for T-Clamp Ultra+ inserts are also available.
- System is capable of parting off up to 4.72" (120mm) work piece diameter
- Available with COOLBURST internal coolant supply for longer tool life and improved chip evacuation

CUTSFEED™ SERIES SFGB

BLADES FOR PARTING AND DEEP GROOVING


Parting


Grooving



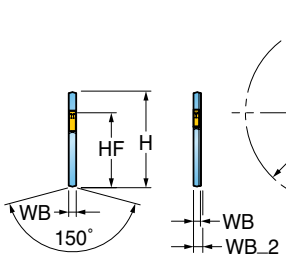


Fig.1

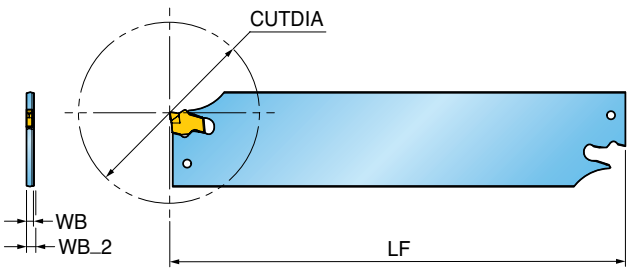


Fig.2

Part Number	Insert Seat Size	Dimension (inch)						Fig.	Block	Insert
		H Shank Height	HF Functional Height	LF Functional Length	WB Body Width	WB_2 Body Width	CUTDIA Cutting Diameter			
SFGB 32-1.6	1*	1.26	.97	5.9	.051	.098	1.496	2	TTBU	SFC SFJ
SFGB 32-2	2	1.26	.97	5.9	.071	.098	1.968	2		
SFGB 32-3	3	1.26	.97	5.9	.098	-	3.937	1		

*: SFC 1.6 insert only

Spare Parts

Part Number	Extractor	
		
SFGB	ETG 3-4	

Extractor sold separately.

CUTSFEED™ SERIES SFGB-TB

BLADES FOR PARTING & DEEP GROOVING WITH HIGH PRESSURE COOLANT

Parting | Grooving | HP Coolant



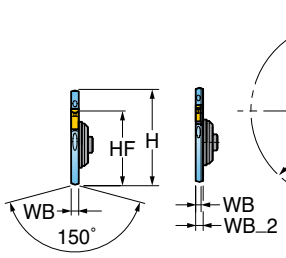


Fig.1

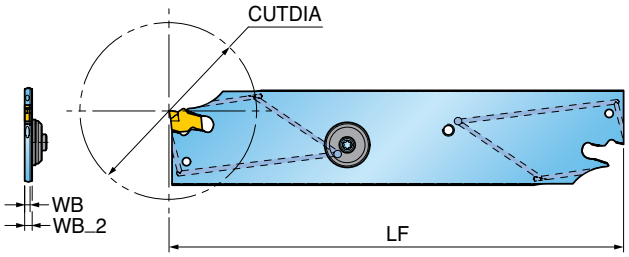


Fig.2

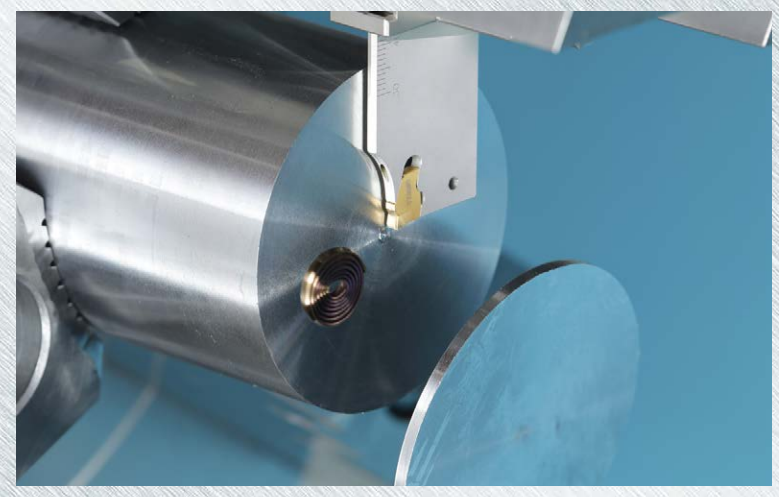
Part Number	Insert Seat Size	Dimension (inch)						CSP Coolant	Fig.	Block	Insert
		H Shank Height	HF Functional Height	LF Functional Length	WB Body Width	WB_2 Body Width	CUTDIA Cutting Diameter				
SFGB 32-2-TB	2	1.26	.97	5.9	.051	.098	1.968	Yes	2	TTBU..-TB	SF_2
SFGB 32-3-TB	3	1.26	.97	5.9	.071	-	3.937	Yes	1		SF_3

Part Number	1000 psi flow rate (gpm)	1500 psi flow rate (gpm)	2000 psi flow rate (gpm)
SFGB 32-2-TB	2.6-3.2	3.2-3.7	4.0-4.5
SFGB 32-3-TB	5.0-5.5	6.0-6.6	7.1-7.6

Spare Parts

Part Number	Sealing Screw Set	Extractor	
			
SFGB-TB	SGC 340	ETG 3-4	

Extractor sold separately.

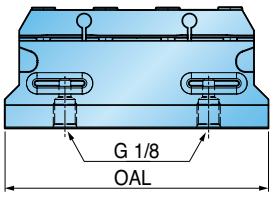


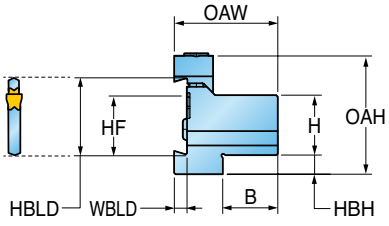
CUTSFEED™ SERIES TTBU-TB

BLOCKS FOR BLADES WITH HIGH-PRESSURE COOLANT

HP Coolant







Part Number	Dimension (inch)									CSP Coolant
	H Shank Height	HF Functional Height	HBLD Blade Height	B Shank Width	HBH Head Bottom Offset Height	OAH Overall Height	WBLD Blade Width	OAL Overall Length	OAW Overall Width	
TTBU 19-32-TB	.75	.75	1.26	.75	.625	2.02	.209	3.44	1.5	Yes
TTBU 25.4-32-TB	1.00	1.00	1.26	.91	.300	1.95	.209	4.33	1.7	Yes
TTBU 31.8-32-TB	1.25	1.25	1.26	1.14	.207	2.10	.209	4.33	1.9	Yes

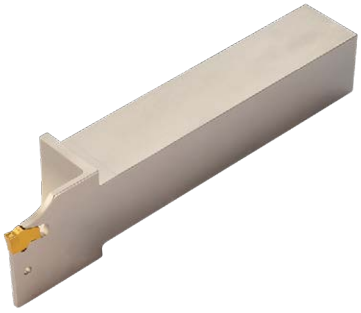
Spare Parts

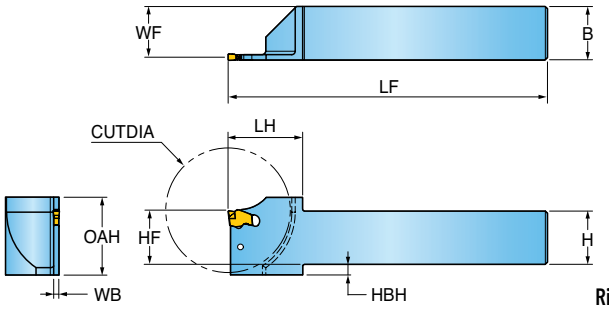
Part Number	Screw	Clamp	O-Ring	Wrench	
					
TTBU 19-32-TB	SR M6X16 DIN912	BKU 100	O-RING ID14X2.5	L-W 5	
TTBU 25.4-32-TB	SR M6X16 DIN912	BKU 110	O-RING ID14X2.5	L-W 5	
TTBU 31.8-32-TB	SR M6X16 DIN912	BKU 110	O-RING ID14X2.5	L-W 5	

CUTSFEED™ SERIES SFER/L

EXTERNAL HOLDERS FOR PARTING AND DEEP GROOVING

Parting Grooving





Right hand shown

Part Number	Insert Seat Size	Dimension (inch)										Insert
		H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	LH Head Length	WF Functional Width	WB Body Width	HBH Head Bottom Offset Height	CUTDIA Cutting Diameter	OAH Overall Height	
SFER/L 19-1.6T22-D45	1	.75	.75	.75	6.0	1.16	.724	.051	.14	1.77	1.14	SF_1.6
SFER/L 25.4-2T25-D50	2	1.00	1.00	1.00	6.0	1.26	.965	.071	-	1.97	1.26	SF_2
SFER/L 25.4-3T30-D60	3	1.00	1.00	1.00	6.0	1.38	.953	.094	.18	2.36	1.44	SF_3

Spare Parts

Part Number	Extractor	
		
SFER/L	ETG 3-4	

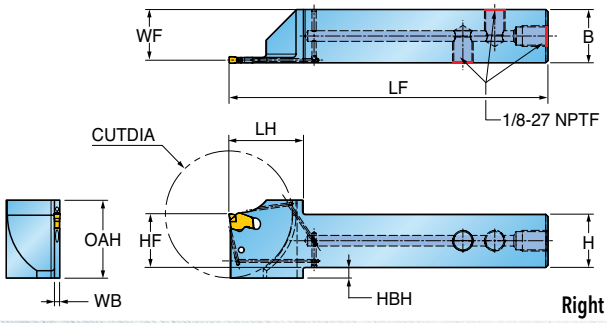
Extractor sold separately.

CUTSFEED™ SERIES SFER/L-TB

EXTERNAL HOLDERS FOR PARTING & DEEP GROOVING WITH HIGH-PRESSURE COOLANT

Parting | Grooving | HP Coolant





Right hand shown

Part Number	Insert Seat Size	Dimension (inch)											Insert
		H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	LH Head Length	WF Functional Width	WB Body Width	HBH Head Bottom Offset Height	CUTDIA Cutting Diameter	OAH Overall Height	CSP Coolant	
SFER/L 25.4-2T25-D50-TB	2	1.00	1.00	1.00	6.0	1.26	.965	.071	-	1.97	1.26	Yes	SF_2
SFER/L 25.4-3T30-D60-TB	3	1.00	1.00	1.00	6.0	1.38	.953	.094	.18	2.36	1.44	Yes	SF_3

Part Number	1000 psi flow rate (gpm)	1500 psi flow rate (gpm)	2000 psi flow rate (gpm)
SFER/L 25.4-2T25-D50-TB	2.6-3.2	3.2-3.7	4.0-4.5
SFER/L 25.4-3T30-D60-TB	3.7-4.2	4.5-5.0	5.5-6.0

Spare Parts

Part Number	Plug	Wrench	Extractor	
				
SFER/L-TB	NPTF1/8	L-W3/16	ETG 3-4	

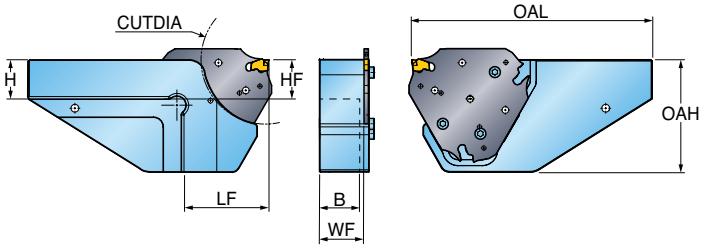
Extractor sold separately.

CUTSFEED™ SERIES THTBR/L-TB

HOLDERS FOR TRIANGULAR BLADE







Right hand shown

Part Number	Dimension (inch)								Blade
	H Shank Height	**HF** Functional Height	**B** Shank Width	**OAL** Overall Length	**OAH** Overall Height	**WF** Functional Width	**LF** Functional Length	**CUTDIA** Cutting Diameter	
THTBR/L 19-D52-TB	.750	.750	.689	5.0	2.05	.925	1.57	2.05	SFTB TGTB
THTBR/L 25.4-D52-TB	1.00	1.00	.886	5.4	2.05	1.122	1.57	2.05	
THTBR/L 19-D82-TB	.750	.750	.689	5.5	2.84	.925	2.03	3.23	
THTBR/L 25.4-D82-TB	1.00	1.00	.886	6.0	2.84	1.122	2.03	3.23	
THTBR/L 25.4-D120-TB	1.00	1.00	.886	6.5	3.74	1.122	2.64	4.72	SFTB
THTBR/L 31.8-D120-TB	1.25	1.25	1.142	6.5	3.74	1.378	2.64	4.72	

Spare Parts

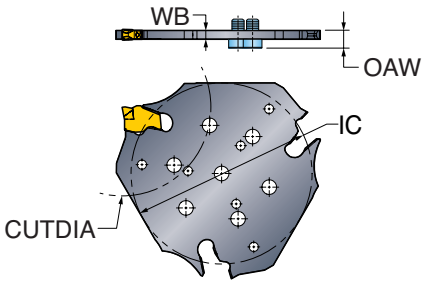
Part Number	Screw	Wrench	
			
THTBR/L-TB	SH M4X0.7X10-TX	T 20	

CUTSFEED™ SERIES SFTB

TRIANGULAR BLADES FOR CUT-SFEED INSERT

Parting Grooving





Part Number	Insert Seat Size	Dimension (inch)				Insert
		IC Diameter	WB Body Width	CUTDIA Cutting Diameter	OAW Overall Width	
SFTB D52-2	2	2.094	.071	2.05	.193	SFC SFJ
SFTB D52-3	3	2.094	.098	2.05	.220	
SFTB D82-2	2	2.531	.071	3.23	.193	
SFTB D82-3	3	2.531	.098	3.23	.220	
SFTB D120-2	2	3.364	.071	4.72	.193	
SFTB D120-3	3	3.364	.098	4.72	.220	

Spare Parts

Part Number	Extractor	
		
SFTB	ETG 3-4	

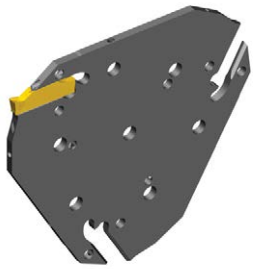
Extractor sold separately.

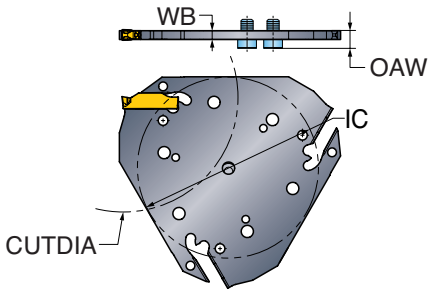
T-CLAMP ULTRA+ SERIES TGTB

TRIANGULAR BLADES FOR T-CLAMP INSERT


Parting


Grooving





Part Number	Insert Seat Size	Dimension (inch)				Insert
		IC Diameter	WB Body Width	CUTDIA Cutting Diameter	OAW Overall Width	
TGTB D52-2	2	2.094	.071	2.05	.193	*TDC/J/T TDXU/XT TSC/J
TGTB D52-3	3	2.094	.098	2.05	.220	
TGTB D82-2	2	2.531	.071	3.23	.193	
TGTB D82-3	3	2.531	.098	3.23	.220	

Spare Parts

Part Number	Extractor	
		
TGTB	EDG-33B	

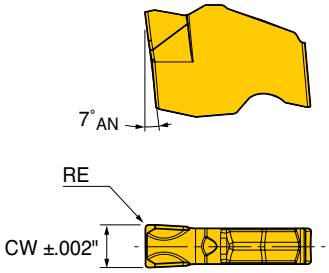
Extractor sold separately.
* Refer to Ingersoll website for all T-ClampUltra+ insert options.

CUTSFEED™ SERIES SFC

SINGLE-ENDED INSERTS FOR PARTING & DEEP GROOVING WITH C-TYPE CHIP BREAKER

Parting Grooving





Part Number	Insert Seat Size	CW Cutting Width	RE Corner Radius	Feed (ipr)	Coated	
					TT9080	TT8020
SFC 1.6	1	.063" (1.6mm)	.008" (.2mm)	.002-.006	•	•
SFC 2	2	.079" (2mm)	.008" (.2mm)	.003-.008	•	•
SFC 3	3	.118" (3mm)	.008" (.2mm)	.004-.010	•	•

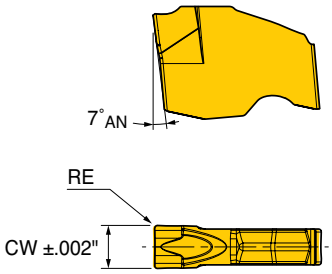
•: Standard items

CUTSFEED™ SERIES SFJ

SINGLE-ENDED INSERTS FOR PARTING & DEEP GROOVING WITH J-TYPE CHIP BREAKER

Parting Grooving





Part Number	Insert Seat Size	CW Cutting Width	RE Corner Radius	Feed (ipr)	Coated	
					TT9080	TT8020
SFJ 2	2	.079" (2mm)	.008" (.2mm)	.002-.006	•	•
SFJ 3	3	.118" (3mm)	.008" (.2mm)	.003-.008	•	•

•: Standard items

COOLBURST™ CONNECTORS

Fig.1 - STRAIGHT MALE CONNECTORS

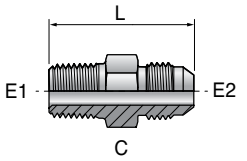


Fig. 1A

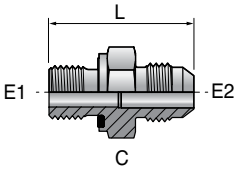
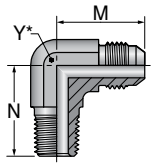


Fig. 1B

Fig.2 - ELBOW MALE CONNECTORS



Y* – Across wrench flats

Fig. 2A

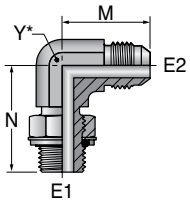


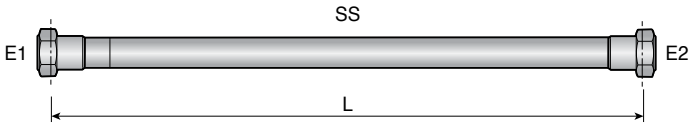
Fig. 2B

Fig.	Part Number	End Size		C (hex)	L	Max Pressure (psi)
		E1	E2			
1A	TB-4-FTX-S	1/8-27 NPTF	1/4 (37° Flare)	1/2"	1.22"	6000
1B	TB-4F42EDMX-S	1/8-28 BSPP	1/4 (37° Flare)	14mm	30.2mm	7200

Fig.	Part Number	End Size		Y	M	N	Max Pressure (psi)
		E1	E2				
2A	TB-4-CTX-S	1/8-27 NPTF	1/4 (37° Flare)	7/16"	0.89"	0.78"	6000
2B	TB-4C4OMX-S	1/8-28 BSPP	1/4 (37° Flare)	11mm	22.6mm	26.5mm	3600

All connectors ordered separately.

COOLBURST™ FLEXIBLE HIGH-PRESSURE HOSES



Part Number	Dimension (inch)			Max Pressure (psi)
	L	E1	E2	
TB-HOSE-7/16-7/16-8.0SS	8.0 inch	1/4 (37° Flare)	1/4 (37° Flare)	3000
TB-HOSE-7/16-7/16-10.0SS	10.0 inch	1/4 (37° Flare)	1/4 (37° Flare)	3000

All hoses ordered separately.

NOTES:

NOTES:

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