

DIPOSO TETRA™

12 & 16



Diameters:
1.00" - 8.00"

Cutter Series:
1TJ1Q, TJ*Q (12MM)
1TJ1N, TJ*N, TN1N (16MM)

Corner Radii:
.015, .031, .062 & .094R

Lead Angles:
90 & 45

Depth of Cut:
ANHU12 (90): .43
ANHU16 (90): .59
ANHU16 (45): .33

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



Multi-Purpose



Non-Ferrous



SS/Hi-Temps



Chip Splitters

Double your APKT style geometry from 2 to 4 cutting edges!

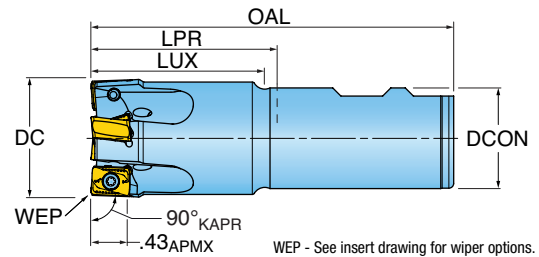
- Two-sided insert adds value by doubling your cutting edges!
- Thick and robust insert adds durability to demanding cutting conditions
- Double-positive geometry benefits machining efficiency and slices stainless steel and high-temp alloys
- Integrated wiper flat produces surface finishes between 32-63Ra
- Coolant through the tool offered



**PRODUCT
ANNOUNCEMENT
• UPDATE •
2018**

SERIES 1TJ1Q (WELDON STYLE) (12MM)

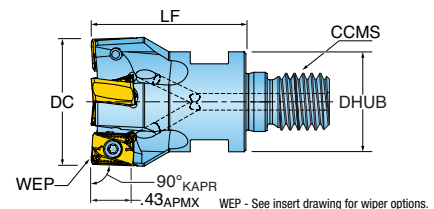
90° END MILL WITH 4 INDEXES



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.
1TJ1Q-1001780R01	1.000	1.55	1.75	4.00	2	1.000	1.4
1TJ1Q-1001784R01	1.000	1.75	1.75	3.75	2	0.750	1.4
1TJ1Q-1003780R01	1.000	3.55	3.75	6.00	2	1.000	1.4
1TJ1Q-1201784R01	1.250	1.75	1.75	3.75	3	0.750	1.0
1TJ1Q-1202281R01	1.250	2.22	2.25	4.50	3	1.250	1.0
1TJ1Q-1204281R01	1.250	4.22	4.25	6.50	3	1.250	1.0
1TJ1Q-1502281R01	1.500	2.25	2.25	4.50	4	1.250	0.7

SERIES 1TJ1Q (TOPON STYLE) (12MM)

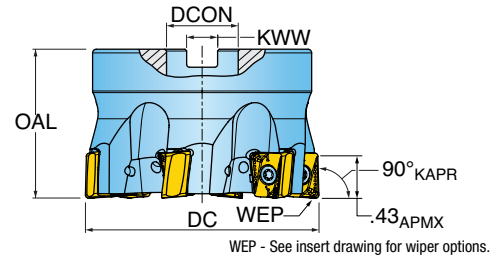
90° MODULAR END MILL WITH 4 INDEXES



Part Number	DC Cutting Dia.	LF Functional Length	ZEFF Effective Teeth	CCMS Connection Code	DHUB Hub Dia.	RMPX Ramp Angle Max.
1TJ1Q-10015X7R01	1.000	1.50	2	TopOn M12	0.81	1.4
1TJ1Q-12017X8R01	1.250	1.75	3	TopOn M16	1.13	1.0
1TJ1Q-15017X8R01	1.500	1.75	4	TopOn M16	1.13	0.7

SERIES TJ5Q, TJ6Q (12MM)

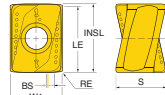
90° FACE MILL WITH 4 INDEXES



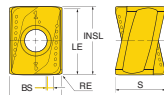
Part Number	DC Cutting Dia.	OAL Overall Length	ZEFF Effective Teeth	DCON Shank Dia.	KWW Keyway	RMPX Ramp Angle Max.
TJ5Q-20R01	2.000	1.57	6	0.750	0.312	.6
TJ6Q-20R01	2.000	1.57	3	0.750	0.312	.6
TJ6Q-25R01	2.500	1.57	6	0.750	0.312	.4
TJ5Q-30R01	3.000	1.75	9	1.000	0.375	.3
TJ6Q-30R01	3.000	1.75	7	1.000	0.375	.3
TJ5Q-40R01	4.000	2.38	11	1.500	0.625	.2
TJ6Q-40R01	4.000	2.38	7	1.500	0.625	.2

INSERTS (12MM)

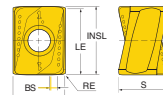
ANHU12



ANHU12_FR



ANHU12_P



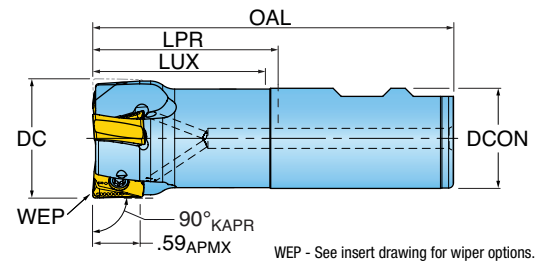
Part Number	Application	RE/BCH Corner Radius/ Chamfer	BS Wiper Length	LE Cutting Edge Length	INSL Insert Length	W1 Insert Width	S Thickness	NOI Number of Indexes	IH Insert Hand	Grade	IN10K	IN2505	IN2510	IN2530	IN2540	IN4030	IN4035
ANHU120604R	Multi-Purpose	0.015 R	0.059	0.430	0.472	0.362	0.338	4	Right		•						
ANHU120608R	Multi-Purpose	0.031 R	0.043	0.430	0.472	0.362	0.338	4	Right		•	•	•	•	•	•	
ANHU120616R	Multi-Purpose	0.062 R	0.027	0.430	0.472	0.362	0.338	4	Right		•		•				
ANXU120608R	Multi-Purpose	0.031 R	0.043	0.430	0.472	0.362	0.338	4	Right		•		•				
ANHU120608FR	SS/Hi-Temps	0.031 R	0.043	0.430	0.472	0.362	0.338	4	Right								•
ANHU120604FR-P	Non-Ferrous	0.015 R	0.059	0.430	0.472	0.362	0.338	4	Right	•							
ANHU120608FR-P	Non-Ferrous	0.031 R	0.043	0.430	0.472	0.362	0.338	4	Right	•							

HARDWARE (12MM)

					
	Insert Screw	Driver Handle	Driver Blade	Retention Bolt	Optional Coolant Bolt
1TJ1Q	SM35-088-10	DS-A00T	DS-T106B	-	-
TJ5Q-20R01	SM35-088-10	DS-A00T	DS-T106B	SD-06-46	SD-06-89
TJ6Q-20R01	SM35-088-10	DS-A00T	DS-T106B	SD-06-46	SD-06-89
TJ6Q-25R01	SM35-088-10	DS-A00T	DS-T106B	SD-06-46	SD-06-89
TJ5Q-30R01	SM35-088-10	DS-A00T	DS-T106B	SD-08-46	SD-08-92
TJ6Q-30R01	SM35-088-10	DS-A00T	DS-T106B	SD-08-46	SD-08-92
TJ5Q-40R01	SM35-088-10	DS-A00T	DS-T106B	SD-12-82	SD-12-99
TJ6Q-40R01	SM35-088-10	DS-A00T	DS-T106B	SD-12-82	SD-12-99

SERIES 1TJ1N (WELDON STYLE) (16MM)

90° END MILL WITH 4 INDEXES

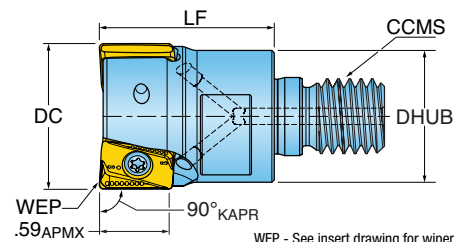


WEPP - See insert drawing for wiper options.

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.
1TJ1N-1202281R01	1.250	2.05	2.25	4.50	2	1.250	1.2
1TJ1N-1204281R01	1.250	4.05	4.25	6.50	2	1.250	1.2
1TJ1N-1206281R01	1.250	6.05	6.25	8.50	2	1.250	1.2
1TJ1N-1502281R01	1.500	2.25	2.25	4.50	3	1.250	1.1
1TJ1N-1504281R01	1.500	4.25	4.25	6.50	3	1.250	1.1
1TJ1N-2002281R01	2.000	2.25	2.25	4.50	4	1.250	1.0

SERIES 1TJ1N (TOPON STYLE) (16MM)

90° END MILL WITH 4 INDEXES

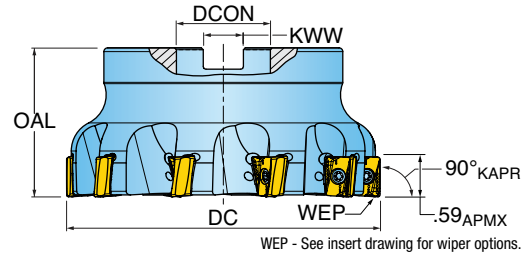


WEPP - See insert drawing for wiper options.

Part Number	DC Cutting Dia.	LF Functional Length	ZEFF Effective Teeth	CCMS Connection Code	DHUB Hub Dia.	RMPX Ramp Angle Max.
1TJ1N-12015X8R01	1.250	1.50	2	TopOn M16	1.13	1.2
1TJ1N-15015X8R01	1.500	1.50	3	TopOn M16	1.13	1.1

SERIES TJ5N, TJ6N (16MM)

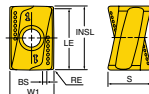
90° FACE MILL WITH 4 INDEXES



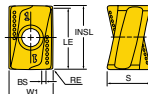
Part Number	DC Cutting Dia.	OAL Overall Length	ZEFF Effective Teeth	DCON Shank Dia.	KWW Keyway	DBC Bolt Circle	CSP Coolant	RMPX Ramp Angle Max.
TJ5N-20R01	2.000	1.57	4	0.750	0.312	NA	Yes	1.0
TJ6N-20R01	2.000	1.57	3	0.750	0.312	NA	Yes	1.0
TJ5N-25R01	2.500	1.75	5	1.000	0.375	NA	Yes	.6
TJ5N-30R01	3.000	1.75	7	1.000	0.375	NA	Yes	.5
TJ6N-30R01	3.000	1.75	5	1.000	0.375	NA	Yes	.5
TJ5N-40R01	4.000	2.38	8	1.500	0.625	NA	Yes	.35
TJ6N-40R01	4.000	2.38	5	1.500	0.625	NA	Yes	.35
TJ5N-50R01	5.000	2.38	10	1.500	0.625	NA	Yes	.25
TJ6N-50R01	5.000	2.38	7	1.500	0.625	NA	Yes	.25
TJ5N-60R01	6.000	2.48	11	1.500	0.625	NA	Yes	.15
TJ6N-60R01	6.000	2.48	8	1.500	0.625	NA	Yes	.15
TJ5N-80R01	8.000	2.48	14	2.500	1.000	4.00	No	.05

INSERTS (16MM)

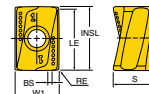
ANHU16



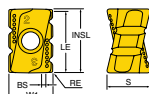
ANHU16_FR



ANHU16_P



ZNHU16



Part Number	Application	RE/BSCH Corner Radius/ Chamfer	BS Wiper Length	LE Cutting Edge Length	INSL Insert Length	W1 Insert Width	S Thickness	NOI Number of Indexes	IH Insert Hand	Grade	IN10K	IN2505	IN2510	IN2530	IN2540	IN6515	IN4035	IN4030
ANHU160704R	Multi-Purpose	0.015 R	0.067	0.590	0.630	0.433	0.421	4	Right									
ANHU160708R	Multi-Purpose	0.031 R	0.055	0.590	0.630	0.433	0.417	4	Right									
ANHU160716R	Multi-Purpose	0.062 R	0.023	0.590	0.630	0.433	0.413	4	Right									
ANHU160724R	Multi-Purpose	0.094 R	-	0.590	0.630	0.433	0.409	4	Right									
ANXU160708R	M-P Pressed	0.031 R	0.055	0.590	0.630	0.433	0.425	4	Right									
ANHU160708FR	SS/Hi-Temps	0.031 R	0.055	0.590	0.630	0.433	0.417	4	Right									
ANHU160704FR-P	Non-Ferrous	0.015 R	0.051	0.590	0.630	0.433	0.429	4	Right									
ANHU160708FR-P	Non-Ferrous	0.031 R	0.051	0.590	0.630	0.433	0.421	4	Right									
ZNHU160708R	Chip Splitters	0.031 R	0.055	0.590	0.630	0.433	0.417	4	Right									

HARDWARE (16MM)

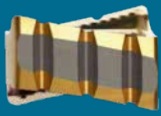
					
	Insert Screw	Driver Handle	Driver Blade	Retention Bolt	Optional Coolant Bolt
1TJ1N	SM40-120-20	DS-A00T	DS-T156B	-	-
TJ5N-20R01	SM40-120-20	DS-A00T	DS-T156B	SD-06-46	SD-06-89
TJ6N-20R01	SM40-120-20	DS-A00T	DS-T156B	SD-06-46	SD-06-89
TJ5N-25R01	SM40-120-20	DS-A00T	DS-T156B	SD-08-46	SD-08-92
TJ5N-30R01	SM40-120-20	DS-A00T	DS-T156B	SD-08-46	SD-08-92
TJ6N-30R01	SM40-120-20	DS-A00T	DS-T156B	SD-08-46	SD-08-92
TJ5N-40R01	SM40-120-20	DS-A00T	DS-T156B	SD-12-82	SD-12-99
TJ6N-40R01	SM40-120-20	DS-A00T	DS-T156B	SD-12-82	SD-12-99
TJ5N-50R01	SM40-120-20	DS-A00T	DS-T156B	SD-12-82	SD-12-99
TJ6N-50R01	SM40-120-20	DS-A00T	DS-T156B	SD-12-82	SD-12-99
TJ5N-60R01	SM40-120-20	DS-A00T	DS-T156B	SD-12-82	SD-12-99
TJ6N-60R01	SM40-120-20	DS-A00T	DS-T156B	SD-12-82	SD-12-99
TJ5N-80R01	SM40-120-20	DS-A00T	DS-T156B	-	-

CHIPSPLITTER INFORMATION (16MM)

CHIPSPLITTER INFORMATION

- Reduces vibration and noise
- Improves chip evacuation (Chips split into small pieces)
- Reduces heat generation
- Suitable for long overhang machining (weak machining and fixture applications)
- Mountable on all standard cutter lines without any modification

ZNHU

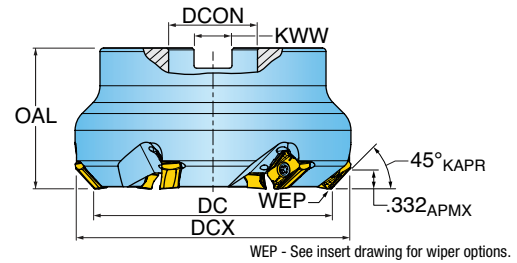
Side A

Side B

With three grooves
With two grooves

Depth of Cut	ANH16
d1	.10"
d2	.23"

SERIES TN1N (16MM)

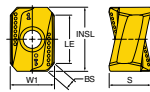
45° FACE MILL WITH 4 INDEXES



Part Number	DC Cutting Dia.	DCX Cutting Dia. Max.	OAL Overall Length	ZEFF Effective Teeth	DCON Shank Dia.	KWW Keyway
TN1N-20R01	2.000	2.75	1.750	4	0.750	0.312
TN1N-30R01	3.000	3.75	1.750	5	1.000	0.375
TN1N-30R02	3.000	3.75	1.750	7	1.000	0.375
TN1N-40R01	4.000	4.75	2.375	6	1.500	0.625
TN1N-40R02	4.000	4.75	2.375	8	1.500	0.625

INSERTS (16MM)

ANHU1607ANR



Part Number	Application	BS Wiper Length	LE Cutting Edge Length	INSL Insert Length	W1 Insert Width	S Thickness (To Cutting Edge)	NOI Number of Indexes	IH Insert Hand	Grade	IN2510	IN2530	IN2540
ANHU1607ANR	Multi-Purpose	0.062	0.500	0.630	0.433	0.409	4	Right	•	•	•	

HARDWARE (16MM)



Insert Screw

Driver Handle

Driver Blade

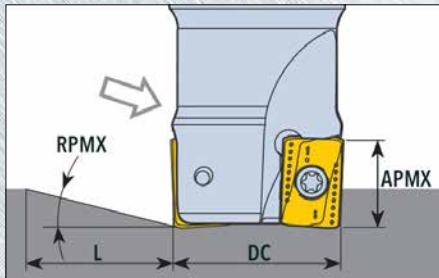
Retention Bolt

Optional Coolant Bolt

TN1N-20R01	SM40-120-20	DS-A00T	DS-T156B	SD-06-46	SD-06-89
TN1N-30R01	SM40-120-20	DS-A00T	DS-T156B	SD-08-46	SD-08-92
TN1N-30R02	SM40-120-20	DS-A00T	DS-T156B	SD-08-46	SD-08-92
TN1N-40R01	SM40-120-20	DS-A00T	DS-T156B	SD-12-82	SD-12-99
TN1N-40R02	SM40-120-20	DS-A00T	DS-T156B	SD-12-82	SD-12-99

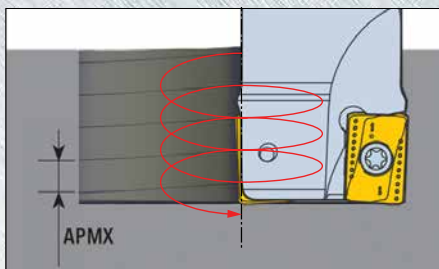
RAMPING DATA (12MM)

STRAIGHT RAMPING - 1TJ1Q, TJ5Q, TJ6Q



DC Cutting Dia.	RMPX Ramping Angle	L	APMX
1.00	1.4	17	0.43
1.25	1.0	25	0.43
1.50	0.7	31	0.43
2.00	0.6	41	0.43
2.50	0.4	62	0.43
3.00	0.3	82	0.43
4.00	0.2	124	0.43

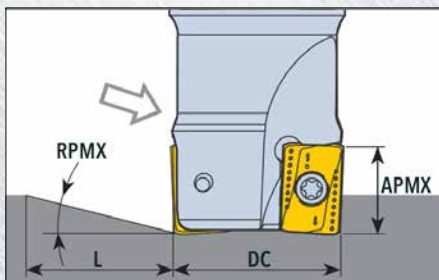
HELICAL RAMPING - 1TJ1Q, TJ5Q, TJ6Q



Cutter Dia. (DC) Using R.031 Insert	MIN. Diameter Milled Hole	MIN. APMX/Rev	MAX. Diameter Milled Hole	MAX. APMX/Rev
1.00	1.25	0.01	2.00	0.06
1.25	1.75	0.02	2.50	0.06
1.50	2.25	0.02	3.00	0.06
2.00	3.25	0.03	4.00	0.05
2.50	4.25	0.03	5.00	0.04
3.00	5.25	0.03	6.00	0.04
4.00	7.25	0.03	8.00	0.04

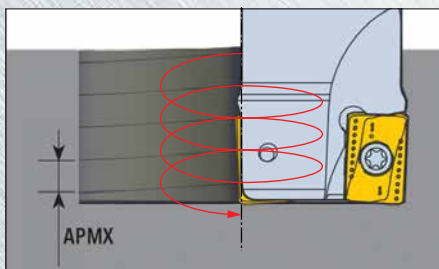
RAMPING DATA (16MM)

STRAIGHT RAMPING - 1TJ1N, TJ5N, TJ6N



DC Cutting Dia.	RMPX Ramping Angle	L	APMX
1.25	1.20	28	0.59
1.50	1.10	31	0.59
2.00	1.00	34	0.59
2.50	0.60	56	0.59
3.00	0.50	68	0.59
4.00	0.35	97	0.59
5.00	0.25	135	0.59
6.00	0.15	226	0.59
8.00	0.05	677	0.59

HELICAL RAMPING - 1TJ1N, TJ5N, TJ6N



Cutter Dia. (DC) Using R.031 Insert	MIN. Diameter Milled Hole	MIN. APMX/Rev	MAX. Diameter Milled Hole	MAX. APMX/Rev
1.25	1.75	0.024	2.44	0.071
1.50	2.40	0.039	2.94	0.079
2.00	3.25	0.055	3.94	0.091
2.50	4.25	0.047	4.94	0.071
3.00	5.50	0.055	5.94	0.075
4.00	7.25	0.051	7.94	0.063
5.00	9.10	0.047	9.94	0.059
6.00	11.85	0.039	11.94	0.043
8.00	15.00	0.016	15.94	0.020

OPERATING GUIDELINES

DiPos TETRA - Series 1TJ1Q, TJ5Q, TJ6Q, 1TJ1N, TJ5N, TJ6N, TN1N					IN10K	IN2505	IN2510	IN2530/IN4030	IN2540	IN4035	IN6515	Coolant
Material		Brinnell Hardness	SFM	Feed per Insert								
Aluminum	6061-T6, 7075-T6, 2024	-	1500 - 8000	.004 - .009	1							Yes
Cast Iron	Gray	150 - 250	300 - 1000	.004 - .008		3	1				2	No
	Nodular		300 - 600			3	2				1	
Steel	Low Carbon 1018, 8620	150 - 250	400 - 1000	.004 - .008	2		1	3				No
	High Carbon F-6180, Nitr alloy 52100	250 - 400	350 - 500	.004 - .007								
	Alloyed Steel 4140, 4340, 6150	150 - 300	300 - 700	.004 - .008								
	Tool Steel A-6, D-1, D-2, P20	Up to 300										
Stainless Steel	300 Series, 304, 316	-	300 - 550	.004 - .008		3	2	4	1			May not be required at high speeds
	400 Series 15-5 PH, 17-4 PH	Up to 320	350 - 600									Yes
	13-8 PH	-	200 - 400									
Nickel Alloys	Inconel 600, 706, 718, 903, Hastelloy, Waspalloy	-	75-120	.003 - .006		2		3		1		Yes
Titanium	6AL-4V	-	100 - 150	.004 - .007		3		2		1		Yes