

VALID FROM
MARCH 1 - AUGUST 31, 2014

**Extended to
September 30th, 2014**

TUNGALOY PROMOTIONS



www.tungaloyamerica.com

DOPE^{NT} - Highly productive economical face milling cutter series

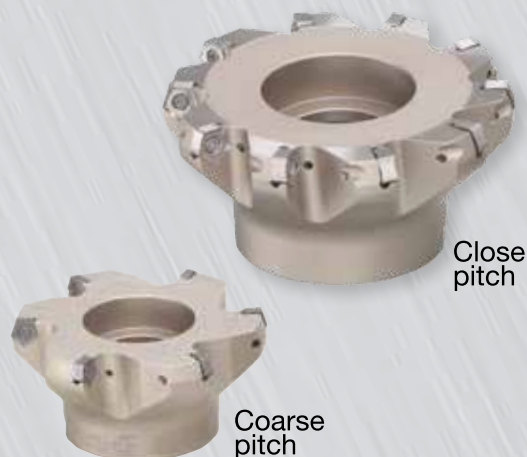
Choices:

Shellmill Type Holder

- 1) Buy 20 inserts, receive 1 shellmill at 25% off
- 2) Buy 30 inserts, receive 1 shellmill at 50% off
- 3) Buy 50 inserts, receive 1 shellmill FREE

Shank Type Holder

- 1) Buy 10 inserts, receive 1 shank type holder at 50% off
- 2) Buy 20 inserts, receive 1 shank type holder at 70% off
- 3) Buy 30 inserts, receive 1 shank type holder FREE



Milling cutter

Shellmill

Pitch	Cat. No.	Stock	No. of Inserts	Dimensions (in)								Weight (lb)	Airhole	Center Bolt
				ϕD_c	ϕD_1	ϕD_b	ϕd	ℓ	L_f	b	a			
Coarse	TEN09R200U0075A03	●	3	2.000	2.228	1.693	.750	.750	1.575	.197	.315	.79	with	C0.375x1.125H
	TEN09R250U0075A04	●	4	2.500	2.728	1.693	.750	.750	1.575	.197	.315	1.10	with	C0.375x1.125H
	TEN09R300U0100A04	●	4	3.000	3.229	1.969	1.000	1.024	1.969	.236	.374	1.92	with	C0.500x1.375H
	TEN09R400U0150A05	●	5	4.000	4.227	3.150	1.500	1.378	1.969	.394	.626	3.44	with	TMBA-0.750H
	TEN09R500U0150A06	●	6	5.000	5.225	3.150	1.50	1.457	2.480	.394	.626	5.95	with	TMBA-0.750H
Close	TEN09R200U0075A04	●	4	2.000	2.228	1.693	.750	.750	1.575	.197	.315	.810	with	C0.375x1.125H
	TEN09R250U0075A06	●	6	2.500	2.728	1.693	.750	.750	1.575	.197	.315	1.10	with	C0.375x1.125H
	TEN09R300U0100A07	●	7	3.000	3.229	1.969	1.000	1.024	1.969	.236	.34	1.89	with	C0.500x1.375H
	TEN09R400U0150A08	●	8	4.000	4.227	3.150	1.50	1.378	1.969	.394	.626	3.52	with	TMBA-0.750H
	TEN09R500U0150A10	●	10	5.000	5.225	3.150	1.50	1.457	2.480	.394	.626	6.17	with	TMBA-0.750H
Fine	TEN09R200U0075A06	●	6	2.000	2.228	1.69	0.75	0.75	1.57	0.20	0.31	.3	with	C0.375x1.125H
	TEN09R250U0075A08	●	8	2.500	2.728	1.69	0.75	0.75	1.57	0.20	0.31	.5	with	C0.375x1.125H
	TEN09R300U0100A10	●	10	3.000	3.229	1.97	1.00	1.02	1.97	0.24	0.37	.9	with	C0.500x1.375H
	TEN09R400U0150A12	●	12	4.000	4.227	3.150	1.50	1.38	1.97	0.39	0.63	1.4	with	TMBA-0.750H
	TEN09R500U0150A16	●	16	5.000	5.225	3.150	1.50	1.46	2.48	0.39	0.63	2.9	with	TMBA-0.750H

Shank type

Cat. No.	Stock	No. of Inserts	Dimensions (in)						Weight (lb)	Airhole	Parts	
			ϕD_c	ϕD_1	ϕD_s	ℓ_s	L_f	L			Clamping Screw	Wrench (Substitution)
EEN09R125U0125W03	●	3	1.250	1.479	1.250	2.281	1.500	3.781	1.21	with	CSTR-4L100	T-15DB (T-15D)
EEN09R150U0125W04	●	4	1.500	1.729	1.250	2.281	2.000	4.281	1.32	with		

Inserts

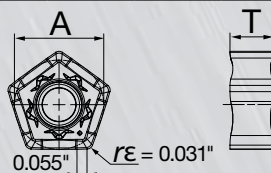


Fig. 1 MJ (Neutral)

Cat. No.	Accuracy	Honing	Grades		Dimensions (inch)		Shape
			Coated		A	T	
			AH3135	AH120			
PNMU0905GNEN-MJ	M	with	●	●	0.480	0.236	Fig. 1

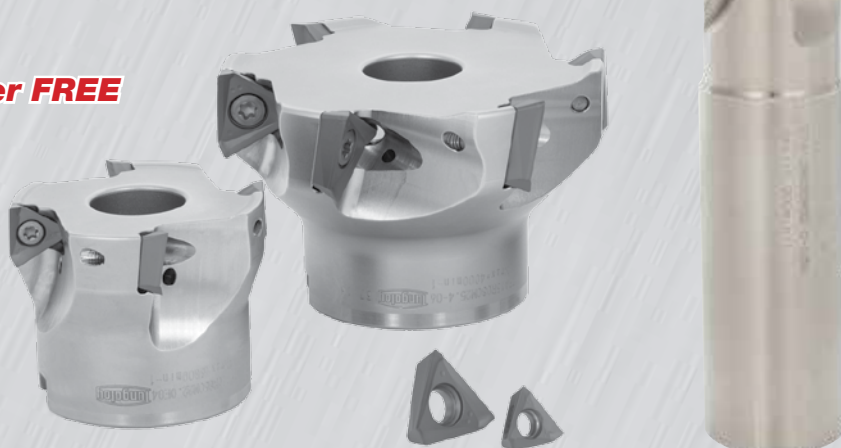
Note: PNCU inserts not included in promotion

2 DoPent Promo Code: TG034

TUNG-TRI 10 & 15

3 cornered shoulder milling cutter with anti-chatter design!

1) Buy 30 inserts, receive 1 cutter FREE



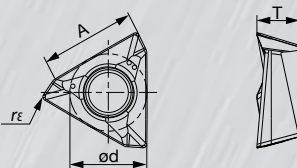
Cutter

Shellmill

Cat. No.	Stock	No. of Inserts	Dimensions (in)							Air hole	Center bolt	Applicable Insert
			ϕD_c	ϕD_b	ϕd	l	L_f	b	a			
TPA10R200U0075A04	●	4	2.000	1.693	0.750	0.750	1.575	0.197	0.315	with	-	TOMT10040* PDER-MJ
TPA10R250U0075A06	●	6	2.500	1.693	0.750	0.750	1.575	0.197	0.315		-	
TPA15R200U0075A04	●	4	2.000	1.625	0.750	0.750	1.570	0.197	0.315	with	TCS9.525-35-I	TOMT15060* PDER-MJ
TPA15R250U0075A05	●	5	2.500	2.125	0.750	0.750	1.570	0.197	0.315		-	
TPA15R300U0100A06	●	6	3.000	2.250	1.000	1.024	1.750	0.236	0.374		-	
TPA15R400U0150A07N	●	7	4.000	3.000	1.500	1.181	2.000	0.394	0.626	without	-	

Shank type

Cat. No.	Stock	No. of Inserts	Dimensions (in)					Air hole	Applicable Insert
			ϕD_c	ϕD_s	l_s	L_f	L		
EPA10R100U0100W02N	●	2	1.000	1.000	2.362	1.378	3.740	without	TOMT10040* PDER-MJ
EPA10R125U0125W03N	●	3	1.250	1.250	2.362	1.378	3.740		
EPA10R150U0125W04N	●	4	1.500	1.250	3.157	1.969	5.126		
EPA15R150U0125W03N	●	3	1.500	1.250	2.250	2.250	4.500	without	TOMT15060* PDER-MJ
EPA15R200U0125W04N	●	4	2.000	1.250	2.250	2.250	4.500		



Inserts

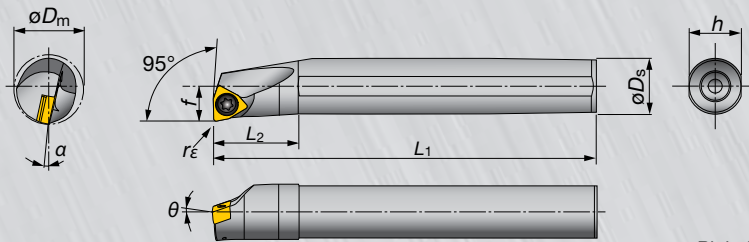
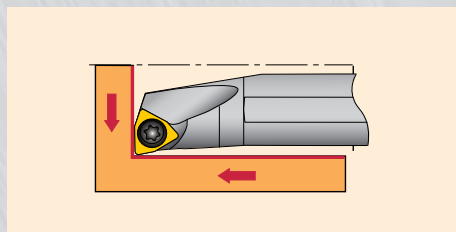
Cat. No.	Accuracy	Honing	Grades		Dimensions (in)				Cutter
			AH3135	AH120	A	ϕd	T	r_E	
			PM	SK					
TOMT10040PDER-MJ	M	with	●	●	0.413	0.339	0.185	0.016	TPA10R... EPA10R...
TOMT100408PDER-MJ			●	●				0.031	
TOMT150604PDER-MJ	M	with	●	●	0.618	0.500	0.236	0.016	TPA15R... EPA15R...
TOMT150608PDER-MJ			●	●				0.031	

1) Buy 20 inserts, receive 1 steel boring bar FREE



Boring Bars

SWLXR/L Boring & internal facing



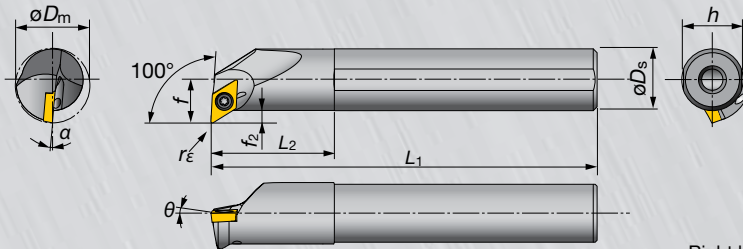
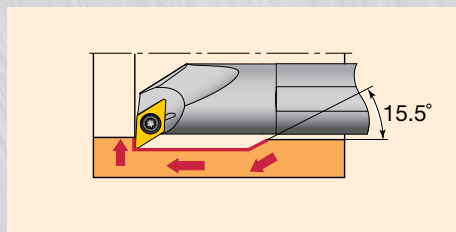
Right hand (R) shown

Steel shank

Cat. No	Stock		Min bore dia. ϕD_m	Dimensions (in)								Std. corner radius r_ϵ	Insert	Parts		Torque (N-m)
	R	L		ϕD_s	f	L_1	L_2	h	f_2	θ	a			Clamping screw	Wrench	
A06-SWLXR/L2-D08	●	●	.500	.375	.281	5.000	.750	.350	-	-10°	-14°	.016	WXGU0403* L/R	SR34-514	T-7F	0.9
A08-SWLXR/L2-D11	●	●	.688	.500	.406	5.000	1.000	.475	-	-10°	-10°	.016				
A10-SWLXR/L2-D14	●	●	.875	.625	.531	7.000	1.250	.600	-	-10°	-8°	.016				
A12-SWLXR/L2-D16	●	●	1.000	.750	.593	7.000	1.438	.725	-	-10°	-7°	.016				

- ① Right hand boring bars (R) are used with left hand inserts (L)
- ② Left hand boring bars (L) are used with right hand inserts (R)

SDXXR/L Boring & internal profiling



Right hand (R) shown

Steel shank

Cat. No	Stock		Min bore dia. ϕD_m	Dimensions (in)								Std. corner radius r_ϵ	Insert	Parts		Torque (N-m)
	R	L		ϕD_s	f	L_1	L_2	h	f_2	θ	a			Clamping screw	Wrench	
A06-SDXXR/L2-D10	●	●	.625	.375	.406	5.000	.750	.350	-	-14	-12	.016	DXGU0703* L/R	SR34-514	T-7F	0.9
A08-SDXXR/L2-D11	●	●	.688	.500	.406	5.000	1.000	.475	-	-13.5	-11	.016				
A10-SDXXR/L2-D14	●	●	.875	.625	.531	7.000	1.250	.600	-	-13	-9	.016				
A12-SDXXR/L2-D16	●	●	1.000	.750	.593	7.000	1.438	.725	-	-13	-8	.016				

- ① Right hand boring bars (R) are used with left hand inserts (L)
- ② Left hand boring bars (L) are used with right hand inserts (R)

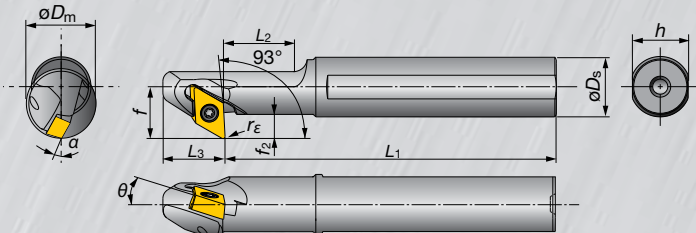
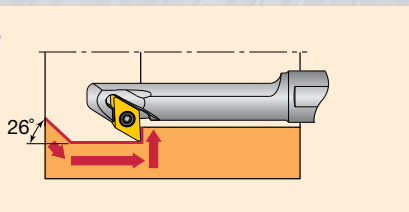
● : Stocked items



Boring Bars - cont'd

SDZXR/L Internal back boring

New



Right hand (R) shown

Steel shank

Cat. No	Stock		Min. bore dia. ϕD_m	Dimensions (in)									Std. corner radius r_E	Insert	Parts		Torque (N-m)
	R	L		ϕD_s	f	L_1	L_2	L_3	h	f_2	θ	α			Clamping screw	Wrench	
A08-SDZXR/L2-D10	●	●	.625	.500	.438	5.000	1.125	13	.475	.188	-10°	-14°	.016	DXGU0703* R/L	SR34-514	T-7F	0.9
A10-SDZXR/L2-D11	●	●	.688	.625	.500	7.000	1.250	13	.600	.188	-10°	-12.5°	.016				
A12-SDZXR/L2-D14	●	●	.875	.750	.563	7.000	1.375	13	.725	.188	-10°	-10.5°	.016				

- 1 Right hand boring bars (R) are used with right hand inserts (L)
- 2 Left hand boring bars (L) are used with left hand inserts (L)

Inserts

80° Trigon

Application	Chipbreaker Appearance (Cross section)	Cat. No.	Grades			Dimensions (in)			
			Coated	Coated cermet	Cermet	I.C. dia. ϕd	Thickness s	Hole dia. ϕd_1	Corner radius r_E
			AH725 P S M	GT530 P	NS530 P				
New Finishing (low cutting forces)	SS 	WXGU040302R-SS	●	●	●	.250	.125	.106	.008
		WXGU040302L-SS	●	●	●				
		WXGU040304R-SS	●	●	●				
		*WXGU040304L-SS	●	●	●				
Finishing to medium cutting	TS 	WXGU040302R-TS	●	●	●	.250	.125	.106	.008
		WXGU040302L-TS	●	●	●				
		WXGU040304R-TS	●	●	●				.016
		*WXGU040304L-TS	●	●	●				
		WXGU040308R-TS	●	●	●				
		WXGU040308L-TS	●	●	●				

55° Rhombic

Application	Chipbreaker Appearance (Cross section)	Cat. No.	Grades			Dimensions (in)			
			Coated	Coated cermet	Cermet	I.C. dia. ϕd	Thickness s	Hole dia. ϕd_1	Corner radius r_E
			AH725 P S M	GT530 P	NS530 P				
New Finishing (low cutting forces)	SS 	DXGU070302R-SS	●	●	●	.250	.125	.106	.008
		DXGU070302L-SS	●	●	●				
		DXGU070304R-SS	●	●	●				.016
		*DXGU070304L-SS	●	●	●				
Finishing to medium cutting	TS 	DXGU070302R-TS	●	●	●	.250	.125	.106	.008
		DXGU070302L-TS	●	●	●				
		DXGU070304R-TS	●	●	●				.016
		*DXGU070304L-TS	●	●	●				
		DXGU070308R-TS	●	●	●				
		DXGU070308L-TS	●	●	●				

1 Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items



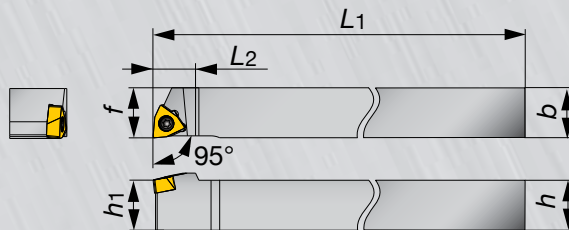
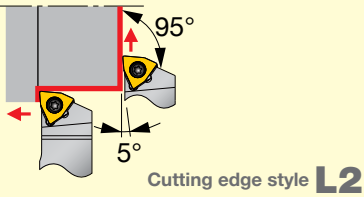
1) Buy 20 inserts, receive 1 toolholder FREE



Toolholders

JSWL2XR/L Turning & facing J-type (Positive rake, screw-on system)

New



Without offset

Right hand (R) shown

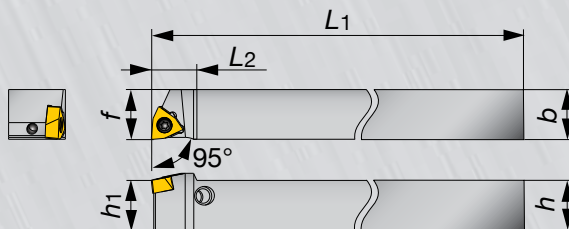
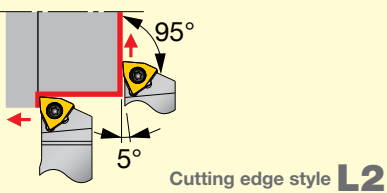
Inch

Cat. No.	Stock		Dimensions (in)						Std. corner radius r_E	Insert	Parts	
	R	L	h	b	L_1	L_2	h_1	f			Clamping screw	Wrench
JSWL2XR/L062	●	●	0.375	0.375	4.750	0.500	0.375	0.375	0.008	WXGU0403*L/R	SR34-514	T-7F
JSWL2XR/L082	●	●	0.500	0.500	4.750	0.500	0.500	0.500	0.008	WXGU0403*L/R	SR34-514	T-7F
JSWL2XR/L102	●	●	0.625	0.625	4.750	0.500	0.625	0.625	0.008	WXGU0403*L/R	SR34-514	T-7F

- 1 Right hand toolholders (R) are used with left hand inserts (L)
- 2 Left hand toolholders (L) are used with right hand inserts (R)

JPWL2XR/L Turning & facing J-type (Positive rake, side clamping system)

New



Without offset

Right hand (R) shown

Inch

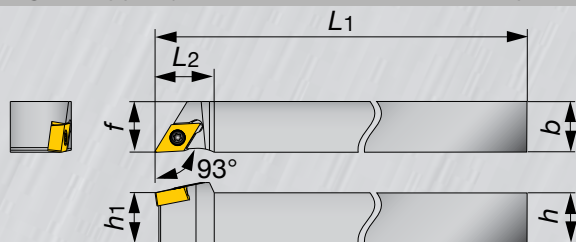
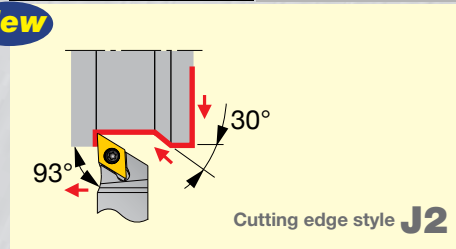
Cat. No.	Stock		Dimensions (in)						Std. corner radius r_E	Insert	Parts			
	R	L	h	b	L_1	L_2	h_1	f			Lever	Pin	Clamping screw	Wrench
JPWL2XR/L062	●	●	0.375	0.375	4.750	0.500	0.375	0.375	0.008	WXGU0403*L/R	SLLV-2	SL-PI-2	SR10400611	P-2F
JPWL2XR/L082	●	●	0.500	0.500	4.750	0.500	0.500	0.500	0.008	WXGU0403*L/R	SLLV-2	SL-PI-2	SR10400611	P-2F
JPWL2XR/L102	●	●	0.625	0.625	4.750	0.500	0.625	0.625	0.008	WXGU0403*L/R	SLLV-2	SL-PI-2	SR10400611	P-2F

- 1 Right hand toolholders (R) are used with left hand inserts (L)
- 2 Left hand toolholders (L) are used with right hand inserts (R)

Toolholders - cont'd

JSDJ2XR/L Turning & profiling J-type (Positive rake, screw-on system)

New



Without offset

Right hand (R) shown

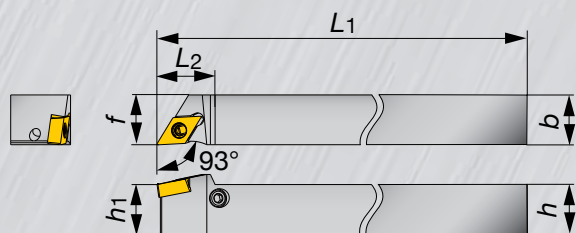
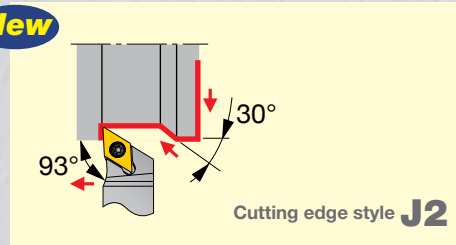
Inch

Cat. No.	Stock		Dimensions (in)					Std. corner radius r_E	Insert	Parts		
	R	L	h	b	L_1	L_2	h_1			f	Clamping screw	Wrench
JSDJ2XR/L062	●	●	0.375	0.375	4.750	0.625	0.375	0.375	0.008	DXGU0703*L/R	SR34-514	T-7F
JSDJ2XR/L082	●	●	0.500	0.500	4.750	0.625	0.500	0.500	0.008	DXGU0703*L/R	SR34-514	T-7F
JSDJ2XR/L102	●	●	0.625	0.625	4.750	0.625	0.625	0.625	0.008	DXGU0703*L/R	SR34-514	T-7F

- 1 Right hand toolholders (R) are used with left hand inserts (L)
- 2 Left hand toolholders (L) are used with right hand inserts (R)

JPDJ2XR/L Turning & profiling J-type (Positive rake, side clamping system)

New



Without offset

Right hand (R) shown

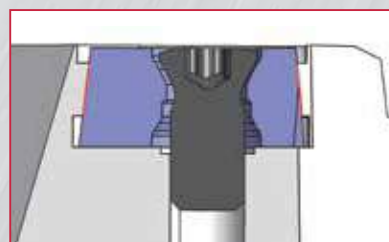
Inch

Cat. No.	Stock		Dimensions (in)					Std. corner radius r_E	Insert	Parts				
	R	L	h	b	L_1	L_2	h_1			f	Lever	Pin	Clamping screw	Wrench
JPDJ2XR/L062	●	●	0.375	0.375	4.750	0.625	0.375	0.375	0.008	DXGU0703*L/R	SLLV-2	SL-PI-2	SR10400611	P-2F
JPDJ2XR/L082	●	●	0.500	0.500	4.750	0.625	0.500	0.500	0.008	DXGU0703*L/R	SLLV-2	SL-PI-2	SR10400611	P-2F
JPDJ2XR/L102	●	●	0.625	0.625	4.750	0.625	0.625	0.625	0.008	DXGU0703*L/R	SLLV-2	SL-PI-2	SR10400611	P-2F

- 1 Right hand toolholders (R) are used with left hand inserts (L)
- 2 Left hand toolholders (L) are used with right hand inserts (R)

JP-type screw accessible from both sides.

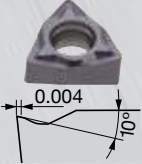

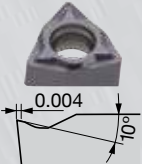

Dove Tail structure ensures secure insert clamping.





Inserts

80° Trigon

Application	Chipbreaker	Cat. No.	Grades			Dimensions (in)			
			Coated	Coated cermet	Cermet	I.C. dia. ϕd	Thickness s	Hole dia. ϕd_1	Corner radius r_ϵ
	AH725		GT530	NS530					
	P S M		P	P					
New Finishing to medium cutting (For swiss type automatic lathes)	JTS 	WXGU040301MR-JTS	●			0.250	0.125	0.106	< 0.004*
		WXGU040301ML-JTS	●			0.250	0.125	0.106	< 0.004*
		WXGU040302MR-JTS	●			0.250	0.125	0.106	< 0.008*
		WXGU040302ML-JTS	●			0.250	0.125	0.106	< 0.008*
New Finishing (Low cutting force) (For swiss type automatic lathes)	JSS 	WXGU040301MR-JSS	●			0.250	0.125	0.106	< 0.004*
		WXGU040301ML-JSS	●			0.250	0.125	0.106	< 0.004*
		WXGU040302MR-JSS	●			0.250	0.125	0.106	< 0.008*
		WXGU040302ML-JSS	●			0.250	0.125	0.106	< 0.008*
Finishing to medium cutting (For small CNC lathes)	TS 	WXGU040302R-TS	●	●	●	0.250	0.125	0.106	0.008
		WXGU040302L-TS	●	●	●	0.250	0.125	0.106	0.008
		WXGU040304R-TS	●	●	●	0.250	0.125	0.106	0.016
		WXGU040304L-TS	●	●	●	0.250	0.125	0.106	0.016
		WXGU040308R-TS	●	●	●	0.250	0.125	0.106	0.031
Finishing (Low cutting force) (For small CNC lathes)	SS 	WXGU040302R-SS	●	●	●	0.250	0.125	0.106	0.008
		WXGU040302L-SS	●	●	●	0.250	0.125	0.106	0.008
		WXGU040304R-SS	●	●	●	0.250	0.125	0.106	0.016
		WXGU040304L-SS	●	●	●	0.250	0.125	0.106	0.016

* Corner radius has minus tolerance.

● : Stocked items

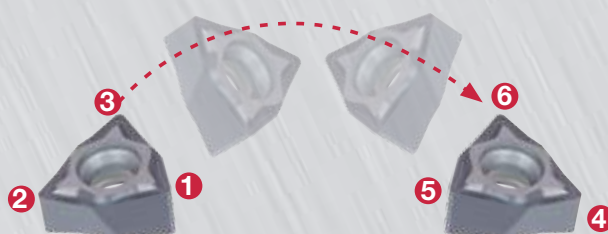


① Right hand toolholder with left hand insert shown



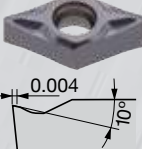

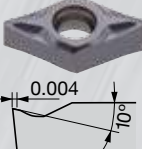
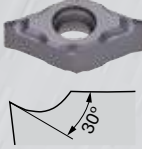
② Left hand toolholder with right hand insert shown

WXGU0403.. Positive inserts with 6 corners



Inserts - cont'd

55° Rhombic

Application	Chipbreaker	Cat. No.	Grades			Dimensions (in)			
			Coated	Coated cermet	Cermet	I.C. dia. ød	Thickness s	Hole dia. ød1	Corner radius r _ε
	AH725		GT530	NS530					
	PSM		P	P					
New Finishing to medium cutting (For swiss type automatic lathes)	JTS 	DXGU070301MR-JTS	●			0.250	0.125	0.106	< 0.004*
		DXGU070301ML-JTS	●			0.250	0.125	0.106	< 0.004*
		DXGU070302MR-JTS	●			0.250	0.125	0.106	< 0.008*
		DXGU070302ML-JTS	●			0.250	0.125	0.106	< 0.008*
New Finishing (Low cutting force) (For swiss type automatic lathes)	JSS 	DXGU070301MR-JSS	●			0.250	0.125	0.106	< 0.004*
		DXGU070301ML-JSS	●			0.250	0.125	0.106	< 0.004*
		DXGU070302MR-JSS	●			0.250	0.125	0.106	< 0.008*
		DXGU070302ML-JSS	●			0.250	0.125	0.106	< 0.008*
Finishing to medium cutting (For small size CNC lathes)	TS 	DXGU070302R-TS	●	●	●	0.250	0.125	0.106	0.008
		DXGU070302L-TS	●	●	●	0.250	0.125	0.106	0.008
		DXGU070304R-TS	●	●	●	0.250	0.125	0.106	0.016
		DXGU070304L-TS	●	●	●	0.250	0.125	0.106	0.016
		DXGU070308R-TS	●	●	●	0.250	0.125	0.106	0.031
		DXGU070308L-TS	●	●	●	0.250	0.125	0.106	0.031
Finishing (Low cutting force) (For small size CNC lathes)	SS 	DXGU070302R-SS	●	●	●	0.250	0.125	0.106	0.008
		DXGU070302L-SS	●	●	●	0.250	0.125	0.106	0.008
		DXGU070304R-SS	●	●	●	0.250	0.125	0.106	0.016
		DXGU070304L-SS	●	●	●	0.250	0.125	0.106	0.016

* Corner radius has minus tolerance.

● : Stocked items

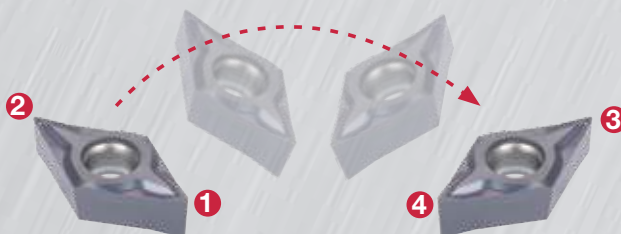


1 Right hand toolholder with left hand insert shown



2 Left hand toolholder with right hand insert shown

DXGU0703.. Positive inserts with 4 corners



- 1) Buy 4 heads, receive 1 steel drill body at 50% off
- 2) Buy 8 heads, receive 1 steel drill body FREE



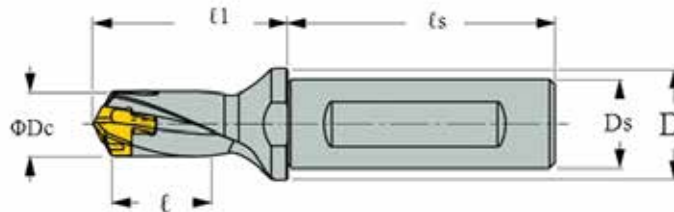
Drill body TIDC type

Drill dia. ϕD_c	L/D	Cat. No.	Stock	Dimensions (mm)				Pocket size	Clamping key (included)	Applicable head
				ϕD_s	l	l_1	l_s			
10.0 - 10.4	3	TIDC100C10-3	●	10	30	42	43	10	K-TID10-19.99	DMP100 - DMP104
	5	TIDC100C10-5	●		50	62				
10.5 - 10.9	3	TIDC105C11-3	●	11	31.5	44.1	43	10		DMP105 - DMP109
	5	TIDC105C11-5	●		52.5	65.1				
11.0 - 11.4	3	TIDC110C11-3	●	11	33	46.2	43	11		DMP110 - DMP114
	5	TIDC110C11-5	●		55	68.2				
11.5 - 11.9	3	TIDC115C12-3	●	12	34.5	48.3	43	11		DMP115 - DMP119
	5	TIDC115C12-5	●		57.5	71.3				
12.0 - 12.4	3	TIDC120C12-3	●	12	36	52	43	12		DMP120 - DMP124
	5	TIDC120C12-5	●		60	76				
12.5 - 12.9	3	TIDC125C13-3	●	13	37.5	52.5	43	12		DMP125 - DMP129
	5	TIDC125C13-5	●		62.5	77.5				
13.0 - 13.4	3	TIDC130C13-3	●	13	39	54.6	45	13		DMP130 - DMP134
	5	TIDC130C13-5	●		65	80.6				
13.5 - 13.9	3	TIDC135C14-3	●	14	40.5	56.7	45	13		DMP135 - DMP139
	5	TIDC135C14-5	●		67.5	83.7				
14.0 - 14.4	3	TIDC140C14-3	●	14	42	58.8	45	14		DMP140 - DMP144
	5	TIDC140C14-5	●		70	86.8				
14.5 - 14.9	3	TIDC145C15-3	●	15	43.5	60.9	45	14		DMP145 - DMP149
	5	TIDC145C15-5	●		72.5	89.9				
15.0 - 15.9	3	TIDC150C15-3	●	15	45	63	45	15	DMP150 - DMP159	
	5	TIDC150C15-5	●		75	93				
16.0 - 16.9	3	TIDC160C16-3	●	16	48	69.7	48	16	DMP160 - DMP169	
	5	TIDC160C16-5	●		80	101.7				
17.0 - 17.9	3	TIDC170C17-3	●	17	51	71.4	48	17	DMP170 - DMP179	
	5	TIDC170C17-5	●		85	105.4				
18.0 - 18.9	3	TIDC180C18-3	●	18	54	75.8	48	18	DMP180 - DMP189	
	5	TIDC180C18-5	●		90	111.6				
19.0 - 19.9	3	TIDC190C19-3	●	19	57	78.2	54	19	DMP190 - DMP199	
	5	TIDC190C19-5	●		95	116.2				

• Please select a drill head with a diameter larger than the drill body. (Applicable drill head with diameter ϕD_c shown in above table.)

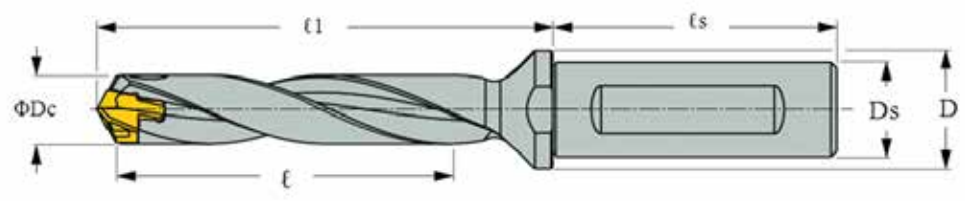
• Machined hole diameter may change depending upon the rigidity of the machine tool or cutting conditions.

L/D=1.5



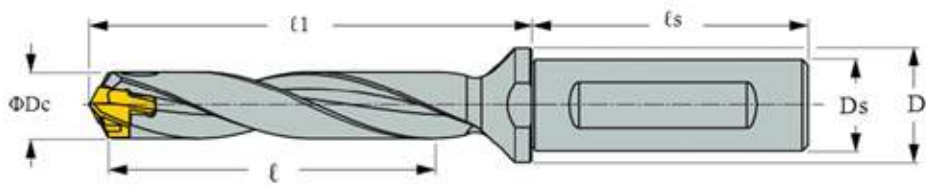
L/D	Cat. No.	Stock	Dimensions(mm)						Pocket Size	Clamping key (included)	Applicable head
			ϕD_c	ϕD_s	ϕD	l	l_1	l_s			
1.5	TID100F16-1.5	●	10.0-10.9	16.00	20.00	15.0	31.2	48.0	10	K-TID10-19.99	DMP100-DMP109
1.5	TID110F16-1.5	●	11.0-11.9	16.00	20.00	17.0	33.1	48.0	11		DMP110-DMP119
1.5	TID120F16-1.5	●	12.0-12.9	16.00	20.00	18.0	35.0	48.0	12		DMP120-DMP129
1.5	TID130F16-1.5	●	13.0-13.9	16.00	20.00	20.0	37.1	48.0	13		DMP130-DMP139
1.5	TID140F16-1.5	●	14.0-14.9	16.00	20.00	21.0	41.1	48.0	14		DMP140-DMP149
1.5	TID150F20-1.5	●	15.0-15.9	20.00	25.00	23.0	46.2	50.0	15		DMP150-DMP159
1.5	TID160F20-1.5	●	16.0-16.9	20.00	25.00	24.0	49.3	50.0	16		DMP160-DMP169
1.5	TID170F20-1.5	●	17.0-17.9	20.00	25.00	26.0	52.4	50.0	17		DMP170-DMP179
1.5	TID180F25-1.5	●	18.0-18.9	25.00	32.00	27.0	55.5	56.0	18		DMP180-DMP189
1.5	TID190F25-1.5	●	19.0-19.9	25.00	32.00	29.0	58.5	56.0	19		DMP190-DMP199

L/D=3



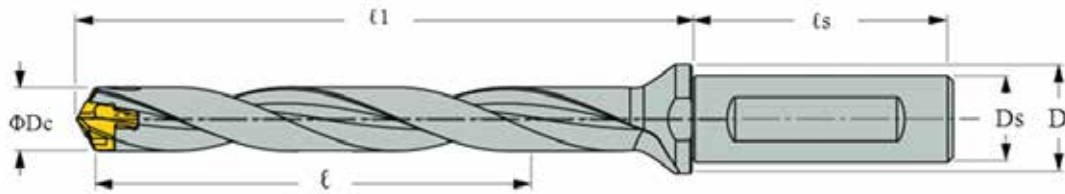
L/D	Cat. No.	Stock	Dimensions(mm)						Pocket Size	Clamping key (included)	Applicable head
			φDc	φDs	φD	ℓ	φl	φs			
3	TID100F16-3	●	10.0-10.4	16.00	20.00	30.0	46.2	48.0	10	K-TID10-19.99	DMP100-DMP104
3	TID105F16-3	●	10.5-10.9	16.00	20.00	32.0	47.7	48.0	10		DMP105-DMP109
3	TID110F16-3	●	11.0-11.4	16.00	20.00	33.0	49.6	48.0	11		DMP110-DMP114
3	TID115F16-3	●	11.5-11.9	16.00	20.00	35.0	51.1	48.0	11		DMP115-DMP119
3	TID120F16-3	●	12.0-12.4	16.00	20.00	36.0	53.0	48.0	12		DMP120-DMP124
3	TID125F16-3	●	12.5-12.9	16.00	20.00	37.0	54.5	48.0	12		DMP125-DMP129
3	TID130F16-3	●	13.0-13.4	16.00	20.00	39.0	56.6	48.0	13		DMP130-DMP134
3	TID135F16-3	●	13.5-13.9	16.00	20.00	41.0	58.1	48.0	13		DMP135-DMP139
3	TID140F16-3	●	14.0-14.4	16.00	20.00	42.0	62.1	48.0	14		DMP140-DMP144
3	TID145F16-3	●	14.5-14.9	16.00	20.00	44.0	63.6	48.0	14		DMP145-DMP149
3	TID150F20-3	●	15.0-15.9	20.00	25.00	45.0	68.7	50.0	15		DMP150-DMP159
3	TID160F20-3	●	16.0-16.9	20.00	25.00	48.0	73.3	50.0	16		DMP160-DMP169
3	TID170F20-3	●	17.0-17.9	20.00	25.00	51.0	77.9	50.0	17		DMP170-DMP179
3	TID180F25-3	●	18.0-18.9	25.00	32.00	54.0	82.5	56.0	18		DMP180-DMP189
3	TID190F25-3	●	19.0-19.9	25.00	32.00	57.0	87.0	56.0	19		DMP190-DMP199

L/D=5



L/D	Cat. No.	Stock	Dimensions(mm)						Pocket Size	Clamping key (included)	Applicable head
			φDc	φDs	φD	ℓ	φl	φs			
5	TID100F16-5	●	10.0-10.4	16.00	20.00	50.0	66.2	48.0	10	K-TID10-19.99	DMP100-DMP104
5	TID105F16-5	●	10.5-10.9	16.00	20.00	53.0	68.7	48.0	10		DMP105-DMP109
5	TID110F16-5	●	11.0-11.4	16.00	20.00	55.0	71.6	48.0	11		DMP110-DMP114
5	TID115F16-5	●	11.5-11.9	16.00	20.00	58.0	74.1	48.0	11		DMP115-DMP119
5	TID120F16-5	●	12.0-12.4	16.00	20.00	60.0	77.0	48.0	12		DMP120-DMP124
5	TID125F16-5	●	12.5-12.9	16.00	20.00	62.0	79.5	48.0	12		DMP125-DMP129
5	TID130F16-5	●	13.0-13.4	16.00	20.00	65.0	82.6	48.0	13		DMP130-DMP134
5	TID135F16-5	●	13.5-13.9	16.00	20.00	68.0	85.1	48.0	13		DMP135-DMP139
5	TID140F16-5	●	14.0-14.4	16.00	20.00	70.0	90.2	48.0	14		DMP140-DMP144
5	TID145F16-5	●	14.5-14.9	16.00	20.00	73.0	92.7	48.0	14		DMP145-DMP149
5	TID150F20-5	●	15.0-15.9	20.00	25.00	75.0	98.7	50.0	15		DMP150-DMP159
5	TID160F20-5	●	16.0-16.9	20.00	25.00	80.0	105.3	50.0	16		DMP160-DMP169
5	TID170F20-5	●	17.0-17.9	20.00	25.00	85.0	111.9	50.0	17		DMP170-DMP179
5	TID180F25-5	●	18.0-18.9	25.00	32.00	90.0	118.5	56.0	18		DMP180-DMP189
5	TID190F25-5	●	19.0-19.9	25.00	32.00	95.0	125.0	56.0	19		DMP190-DMP199

L/D=8



L/D	Cat. No.	Stock	Dimensions(mm)						Pocket Size	Clamping key (included)	Applicable head
			ϕDc	ϕDs	ϕD	l	l_1	l_s			
8	TID100F16-8	●	10.0-10.4	16.00	20.00	80.0	96.2	48.0	10	K-TID10-19.99	DMP100-DMP104
8	TID105F16-8	●	10.5-10.9	16.00	20.00	84.0	100.2	48.0			DMP105-DMP109
8	TID110F16-8	●	11.0-11.4	16.00	20.00	88.0	104.6	48.0	11		DMP110-DMP114
8	TID115F16-8	●	11.5-11.9	16.00	20.00	92.0	108.6	48.0			DMP115-DMP119
8	TID120F16-8	●	12.0-12.4	16.00	20.00	96.0	113.0	48.0	12		DMP120-DMP124
8	TID125F16-8	●	12.5-12.9	16.00	20.00	100.0	117.0	48.0			DMP125-DMP129
8	TID130F16-8	●	13.0-13.4	16.00	20.00	104.0	121.6	48.0	13		DMP130-DMP134
8	TID135F16-8	●	13.5-13.9	16.00	20.00	108.0	125.6	48.0			DMP135-DMP139
8	TID140F16-8	●	14.0-14.4	16.00	20.00	112.0	132.1	48.0	14		DMP140-DMP144
8	TID145F16-8	●	14.5-14.9	16.00	20.00	116.0	136.2	48.0			DMP145-DMP149
8	TID150F20-8	●	15.0-15.9	20.00	25.00	120.0	143.7	50.0	15	DMP150-DMP159	
8	TID160F20-8	●	16.0-16.9	20.00	25.00	128.0	153.3	50.0	16	DMP160-DMP169	
8	TID170F20-8	●	17.0-17.9	20.00	25.00	136.0	162.9	50.0	17	DMP170-DMP179	
8	TID180F25-8	●	18.0-18.9	25.00	32.00	144.0	172.5	56.0	18	DMP180-DMP189	
8	TID190F25-8	●	19.0-19.9	25.00	32.00	152.0	182.0	56.0	19	DMP190-DMP199	

Drill head DMP type

Cat. No.	Stock	Dimensions (mm)		Pocket size	Applicable drill body
	AH725	ϕDc	S		
	P S M				
DMP100	●	10	6.05	10	TIDC100C10-3
DMP101	●	10.1			TIDC100C10-5
DMP102	●	10.2			TID100F16-1.5
DMP103	●	10.3			TID100F16-3
DMP104	●	10.4			TID100F16-5
DMP105	●	10.5	TID100F16-8		
DMP106	●	10.6	6.05	10	TIDC105C11-3
DMP107	●	10.7			TIDC105C11-5
DMP108	●	10.8			TID100F16-1.5
DMP109	●	10.9			TID105F16-3
DMP110	●	11.0			TID105F16-5
DMP111	●	11.1	TID105F16-8		
DMP112	●	11.2	6.45	11	TIDC110C11-3
DMP113	●	11.3			TIDC110C11-5
DMP114	●	11.4			TID110F16-1.5
DMP115	●	11.5			TID110F16-3
DMP116	●	11.6			TID110F16-5
DMP117	●	11.7	TID110F16-8		
DMP118	●	11.8	6.45	11	TIDC115C12-3
DMP119	●	11.9			TIDC115C12-5
DMP120	●	12.0			TID110F16-1.5
DMP121	●	12.1			TID115F16-3
DMP122	●	12.2			TID115F16-5
DMP123	●	12.3	TID115F16-8		

Cat. No.	Stock	Dimensions (mm)		Pocket size	Applicable drill body
	AH725	ϕDc	S		
	P S M				
DMP120	●	12	6.8	12	TIDC120C12-3
DMP121	●	12.1			TIDC120C12-5
DMP122	●	12.2			TID120F16-1.5
DMP123	●	12.3			TID120F16-3
DMP124	●	12.4			TID120F16-5
DMP125	●	12.5	TID120F16-8		
DMP126	●	12.6	6.8	12	TIDC125C13-3
DMP127	●	12.7			TIDC125C13-5
DMP128	●	12.8			TID120F16-1.5
DMP129	●	12.9			TID125F16-3
DMP130	●	13.0			TID125F16-5
DMP131	●	13.1	TID125F16-8		
DMP132	●	13.2	7.4	13	TIDC130C13-3
DMP133	●	13.3			TIDC130C13-5
DMP134	●	13.4			TID130F16-1.5
DMP135	●	13.5			TID130F16-3
DMP136	●	13.6			TID130F16-5
DMP137	●	13.7	TID130F16-8		
DMP138	●	13.8	7.4	13	TIDC135C14-3
DMP139	●	13.9			TIDC135C14-5
DMP140	●	14.0			TID130F16-1.5
DMP141	●	14.1			TID135F16-3
DMP142	●	14.2			TID135F16-5
DMP143	●	14.3	TID135F16-8		



Drill head DMP type cont'd

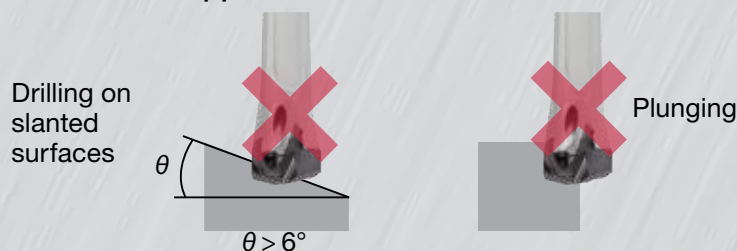
DRILLMEISTER

Cat. No.	Stock	Dimensions (mm)		Pocket size	Applicable drill body
	AH725	øDc	S		
	P S M				
DMP140	●	14	7.95	14	TIDC140C14-3 TIDC140C14-5 TID140F16-1.5 TID140F16-3 TID140F16-5 TID140F16-8
DMP141	●	14.1			
DMP142	●	14.2			
DMP143	●	14.3			
DMP144	●	14.4			
DMP145	●	14.5	7.95	14	TIDC145C15-3 TIDC145C15-5 TID145F16-1.5 TID145F16-3 TID145F16-5 TID145F16-8
DMP146	●	14.6			
DMP147	●	14.7			
DMP148	●	14.8			
DMP149	●	14.9			
DMP150	●	15	8.53	15	TIDC150C15-3 TIDC150C15-5 TID150F20-1.5 TID150F20-3 TID150F20-5 TID150F20-8
DMP151	●	15.1			
DMP152	●	15.2			
DMP153	●	15.3			
DMP154	●	15.4			
DMP155	●	15.5			
DMP156	●	15.6			
DMP157	●	15.7			
DMP158	●	15.8			
DMP159	●	15.9			
DMP160	●	16	9.1	16	TIDC160C16-3 TIDC160C16-5 TID160F20-1.5 TID160F20-3 TID160F20-5 TID160F20-8
DMP161	●	16.1			
DMP162	●	16.2			
DMP163	●	16.3			
DMP164	●	16.4			
DMP165	●	16.5			
DMP166	●	16.6			
DMP167	●	16.7			
DMP168	●	16.8			
DMP169	●	16.9			

Cat. No.	Stock	Dimensions (mm)		Pocket size	Applicable drill body
	AH725	øDc	S		
	P S M				
DMP170	●	17	9.7	17	TIDC170C17-3 TIDC170C17-5 TID170F20-1.5 TID170F20-3 TID170F20-5 TID170F20-8
DMP171	●	17.1			
DMP172	●	17.2			
DMP173	●	17.3			
DMP174	●	17.4			
DMP175	●	17.5			
DMP176	●	17.6			
DMP177	●	17.7			
DMP178	●	17.8			
DMP179	●	17.9			
DMP180	●	18	10.3	18	TIDC180C18-3 TIDC180C18-5 TID180F25-1.5 TID180F25-3 TID180F25-5 TID180F25-8
DMP181	●	18.1			
DMP182	●	18.2			
DMP183	●	18.3			
DMP184	●	18.4			
DMP185	●	18.5			
DMP186	●	18.6			
DMP187	●	18.7			
DMP188	●	18.8			
DMP189	●	18.9			
DMP190	●	19	10.8	19	TIDC190C19-3 TIDC190C19-5 TID190F25-1.5 TID190F25-3 TID190F25-5 TID190F25-8
DMP191	●	19.1			
DMP192	●	19.2			
DMP193	●	19.3			
DMP194	●	19.4			
DMP195	●	19.5			
DMP196	●	19.6			
DMP197	●	19.7			
DMP198	●	19.8			
DMP199	●	19.9			

■ The coolant flow and pressure required Please always use coolant supply to evacuate chips.

■ Applications not-recommended:



Drill head Package Quantity = 2 pcs.

● : Stocked items

① Note: Chamfering adapter and inserts sold separately. *Wrench included

DrillMeister Promo Code: TG039



Choices

Steel Shank

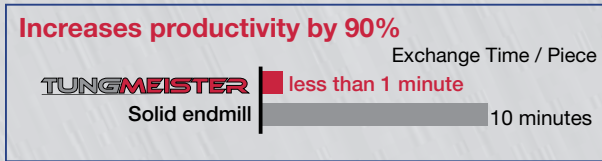
- 1) Buy 4 heads, receive 1 steel shank at 50% off
- 2) Buy 8 heads, receive 1 steel shank FREE

Carbide Shank

- 1) Buy 4 heads, receive 1 carbide shank at 30% off
- 2) Buy 8 heads, receive 1 carbide shank at 60% off

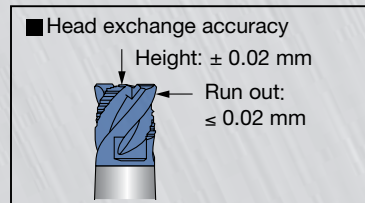
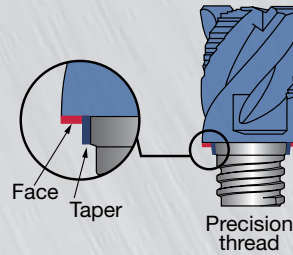
Features

- ▶ Reduces tool changeover times drastically!!



- ▶ The weight of the tool to be disposed is reduced
- ▶ No regrinding cost

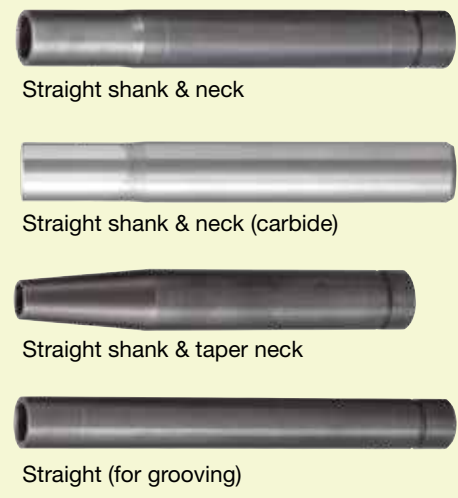
- ▶ Highly accurate repeatability



1 Wide range of cutting heads
23 kinds of cutting heads are available. The head exchange is easy and highly accurate with the precision thread.

Flexible combinations
TungMeister can be applied to all kinds of endmill machining applications.

2 Two kinds of shank material
Users can choose the most suitable combination according to the machining parameters, length and rigidity required.








Overview

● Head

Head	Square	Toroidal	High Feed	Ball	Drilling (Centering drill)	Chamfering	Slotting
Appearance							

● Shank

Shank	Straight	Weldon	Straight	Straight	Adaptor for TungFlex
Neck	Straight	Straight	Taper	(Grooving)	
Appearance					
Steel	●	●	●	●	●
Carbide	●	-	●	●	-
Carbide (with coolant hole)	-	-	-	●	-



*Note: See technical brochure for more product details.

Wrench Sold Separately *Tungsten shanks not included in promotion. ****Cutting heads packaged quantity = 2pcs

EASycut

Highly rigid self-clamping tools that provide remarkable tool life

Choices:

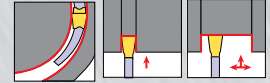
- 1) Buy 10 inserts, receive 1 external or face grooving holder 50% off
- 2) Buy 20 inserts, receive 1 external or face grooving holder FREE



Inserts

ETX

Grooving and traversing



	Cat. No.	Grades	Dimensions (in)		
		Coated	W±0.002	r _E	L
		AH725			
		P M			
ETX4-040	●	0.157	0.016	0.315	
ETX5-040	●	0.197	0.016	0.394	
ETX6-040	●	0.236	0.016	0.472	

● : Stocked items

Innovative insert with long tool life

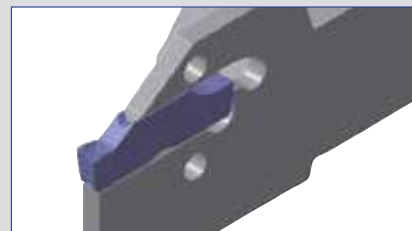
EASycut Self-clamping system (Inserted type)

- ① High clamping rigidity reduces insert wear and edge chipping. It also makes traversing possible



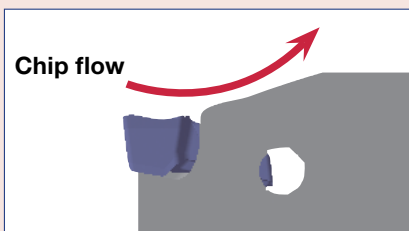
Conventional clamping system (Clipped type)

- ① Traversing is not recommended

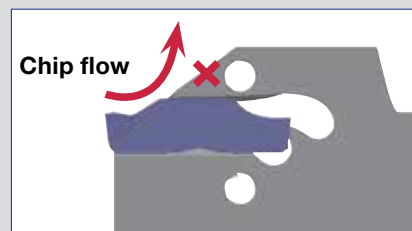


Exceptional chip evacuation

- ② Smooth chip flow and evacuation due to no-clamp structure

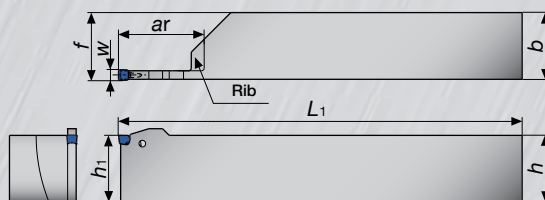
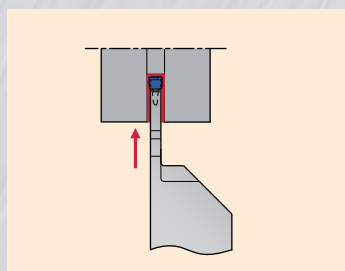


- ② The upper clamp prevents efficient chip flow



Toolholders

ETE R/L External grooving

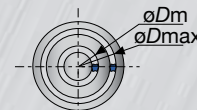
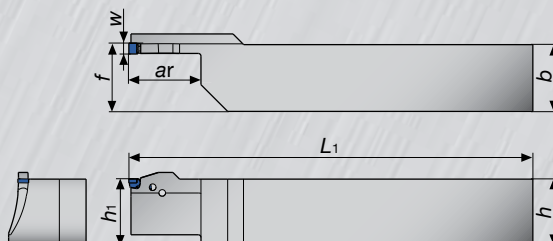
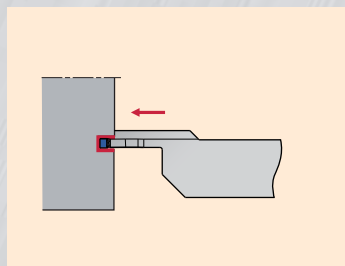


Right hand (R) shown.

Groove width W (in)	Cat. No.	Stock		Max. groove depth ar (in)	Dimensions (in)					Inserts	Rib	Parts Wrench
		R	L		h ₁	b	h	L ₁	f			
0.157	ETER/L12-4T25	●	●	0.984	0.750	0.750	0.750	5.000	0.766	ETX4...	Without	ECW-456EF
	ETER/L16-4T25	●	●	0.984	1.000	1.000	1.000	6.000	1.016			
	ETER/L20-4T30	●	●	1.181	1.250	1.250	1.250	7.000	1.266			
0.197	ETER/L12-5T25	●	●	0.984	0.750	0.750	0.750	5.000	0.766	ETX5-...		
	ETER/L16-5T32	●	●	1.260	1.000	1.000	1.000	6.000	1.016			
	ETER/L20-5T32	●	●	1.260	1.250	1.250	1.250	7.000	1.266			
0.236	ETER/L16-6T35	●	●	1.378*	1.000	1.000	1.000	6.000	1.016	ETX6-...	With	
	ETER/L20-6T35	●	●	1.378**	1.250	1.250	1.250	7.000	1.266			

* Max. ϕ 6.69 and ** Max. ϕ 13.38 due to toolholder clearance

ETF R/L Face grooving



Right hand (R) shown.

Groove width W (in)	Cat. No.	Stock		Min. dia. ϕD_m (in)	Max. dia. ϕD_{max} (in)	Max. groove depth ar (in)	Dimensions (in)					Inserts	Parts Wrench
		R	L				h ₁	b	h	L ₁	f		
0.157	ETFR/L12-4T15-030035	●	●	1.181	1.378	0.591	0.750	0.750	0.750	5.000	0.770	ETX4...	ECW-456EF
	ETFR/L16-4T15-030035	●	●	1.181	1.378	0.591	1.000	1.000	1.000	6.000	1.020		
	ETFR/L12-4T22-035045	●	●	1.378	1.772	0.866	0.750	0.750	0.750	5.000	0.770		
	ETFR/L16-4T22-035045	●	●	1.378	1.772	0.866	1.000	1.000	1.000	6.000	1.020		
	ETFR/L12-4T25-045055	●	●	1.772	2.165	0.984	0.750	0.750	0.750	5.000	0.770		
	ETFR/L16-4T25-045055	●	●	1.772	2.165	0.984	1.000	1.000	1.000	6.000	1.020		
	ETFR/L12-4T25-055075	●	●	2.165	2.953	0.984	0.750	0.750	0.750	5.000	0.770		
	ETFR/L16-4T25-055075	●	●	2.165	2.953	0.984	1.000	1.000	1.000	6.000	1.020		
	ETFR/L12-4T25-075120	●	●	2.953	4.724	0.984	0.750	0.750	0.750	5.000	0.770		
	ETFR/L16-4T25-075120	●	●	2.953	4.724	0.984	1.000	1.000	1.000	6.000	1.020		
	ETFR/L16-4T25-120200	●	●	4.724	7.874	0.984	1.000	1.000	1.000	6.000	1.020		
	ETFR/L16-4T25-200500	●	●	7.874	19.685	0.984	1.000	1.000	1.000	6.000	1.020		
0.196	ETFR/L16-5T25-035045	●	●	1.378	1.772	0.984	1.000	1.000	1.000	6.000	1.020	ETX5...	ECW-456EF
	ETFR/L16-5T25-045055	●	●	1.772	2.165	0.984	1.000	1.000	1.000	6.000	1.020		
	ETFR/L16-5T25-055075	●	●	2.165	2.953	0.984	1.000	1.000	1.000	6.000	1.020		
	ETFR/L16-5T32-075120	●	●	2.953	4.724	1.260	1.000	1.000	1.000	6.000	1.020		
	ETFR/L16-5T32-120200	●	●	4.724	7.874	1.260	1.000	1.000	1.000	6.000	1.020		
0.236	ETFR/L16-6T25-040055	●	●	1.575	2.165	0.984	1.000	1.000	1.000	6.000	1.020	ETX6...	ECW-456EF
	ETFR/L16-6T25-055075	●	●	2.165	2.953	0.984	1.000	1.000	1.000	6.000	1.020		
	ETFR/L16-6T32-075120	●	●	2.953	4.724	1.260	1.000	1.000	1.000	6.000	1.020		
	ETFR/L16-6T32-120200	●	●	4.724	7.874	1.260	1.000	1.000	1.000	6.000	1.020		
	ETFR/L16-6T32-200500	●	●	7.874	19.685	1.260	1.000	1.000	1.000	6.000	1.020		

● Note: Blades, tool blocks and wrench sold separately.

● : Stocked items

EasyCut Promo Code: TG032

DOFEED QUAD

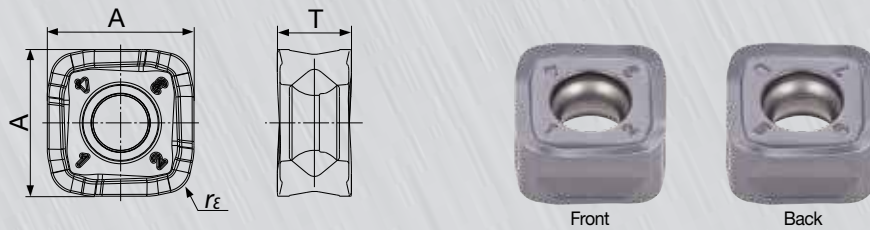
Remarkable productivity with tough cutting edges

1) Buy 10 inserts, receive 1 cutter at 50% off



Cutter

Cat. No.	Stock	No. of inserts	Dimensions (in)								Weight (lb)	Airhole	Center bolt	Insert
			ϕD_c	ϕD_{c_1}	ϕD_b	ϕd	l	L_f	b	a				
TXQ12R200U0075A03	●	3	2.000	1.362	1.850	.750	.750	1.969	.197	.315	1.12	with	(C0.375X1.125H)	SQMU1206 ZSR-MJ
TXQ12R200U0075A04	●	4	2.000	1.362	1.850	.750	.750	1.969	.197	.315	1.12		(C0.375X1.125H)	
TXQ12R250U0075A04	●	4	2.500	1.862	2.323	.750	.750	1.969	.197	.315	1.76		(C0.375X1.125H)	
TXQ12R300U0100A05	●	5	3.000	2.362	2.835	1.000	1.024	2.480	.236	.374	3.77		(C0.500X1.375H)	
TXQ12R400U0150A06	●	6	4.000	3.362	3.780	1.500	1.457	2.480	.394	.626	5.71		(TMBA-0.750H)	
TXQ12R500U0150A07	●	7	5.000	4.362	3.780	1.500	1.457	2.480	.394	.626	7.01		(TMBA-0.750H)	



Inserts

Cat. No.	Accuracy	Honing	Grades				Dimensions (in)		
			PREMIUMTEC				A	T	r_ϵ
			AH725	AH130	AH120	T3130			
			P K S H	M	K S	P			
SQMU1206ZSR-MJ	M	with	●	●	●	●	.461	.236	.079

Grade Selection

Grades	P Steel	M Stainless	K Cast Iron	S Super alloys	H Hard Materials
AH725	⊙		○	⊙	⊙
AH130	○ For impact resistance	⊙			
AH120			⊙		
T3130	○ For wear resistance				

⊙ : First choice
○ : Applicable

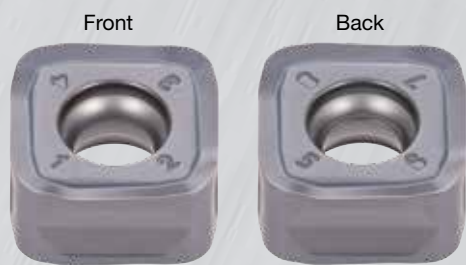
Replacement parts

Description	Parts Cat. No.	
Clamping Screw	CSPB-4	
Wrench	Bit	BLD IP15/S7
	Handle	H-TBS

DOFEED QUAD

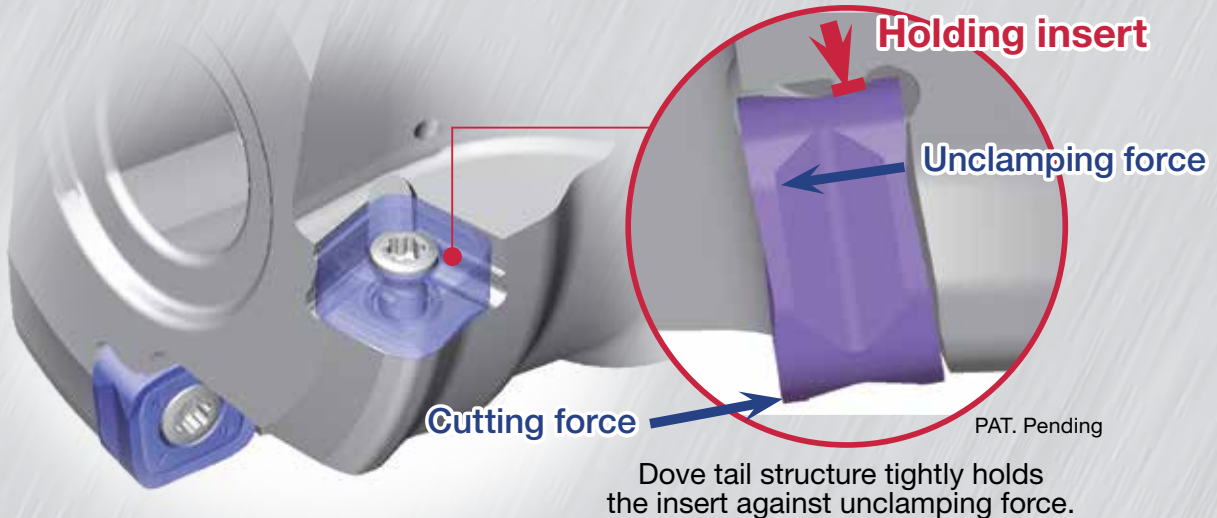
Economical advantages

- Double sided insert with 8 corners for high feed milling.

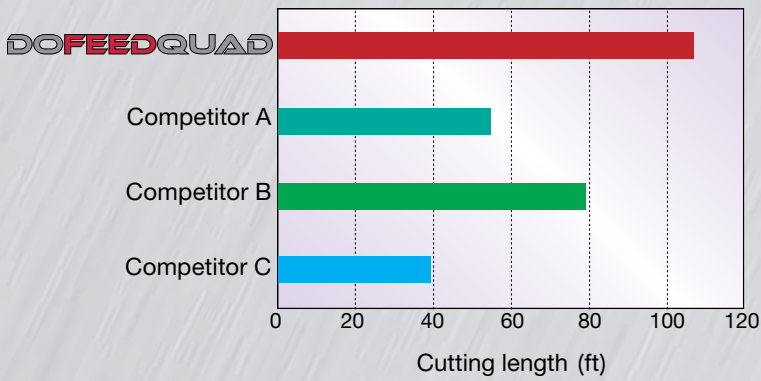


Remarkable reliability in high feed milling

- Dovetail structure improves the clamping strength by 50%*. * Calculated with Finite Element Analysis (FEA)
- Rigid clamping with one screw.
- Simple structure offers a high level of cutter body rigidity with easy operation.



■ Comparison of reliability



Rigid clamping provides high reliability and long tool life.

Cutter	: TXQ12R200U0075A03 (Single insert cutting)
Insert	: SQMU1206ZSR-MJ
Grade	: AH725
Work material	: Prehardened steels (40HRC)
Cutting speed	: $V_c = 330$ sfm
Feed per tooth	: $f_z = .039$ ipt
Depth of cut	: $a_p = .039$ "
Width of cut	: $a_e = 1.1$ "
Overhang length	: 7.4"
Coolant	: Dry
Machine	: Vertical M/C, BT50

KITS

ECOTURN

Small size insert with less resource consumption provides ecological benefits

ECOTURN KITS

- Highly **Economical** for maximum profit
- Highly **Ecological** for the environment



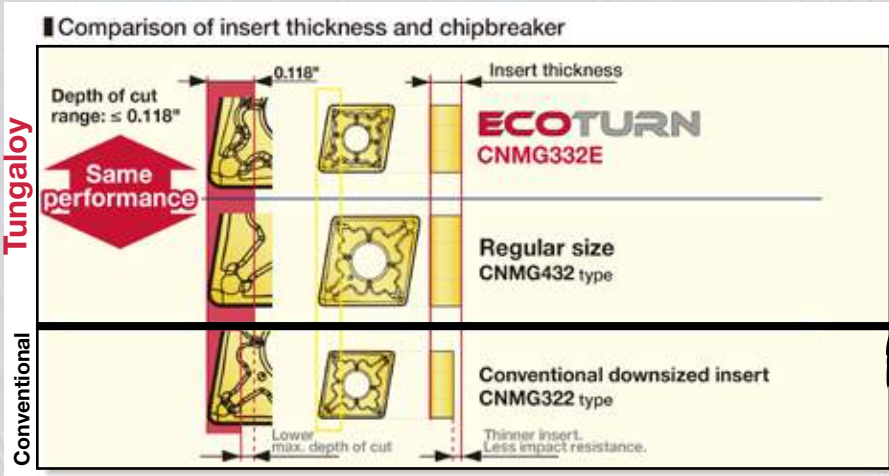
~~WAS: \$115~~

- Choose:
- One A style holder
 - 10 inserts

NOW

\$98

- ONE 1" A STYLE HOLDER
- 20 INSERTS

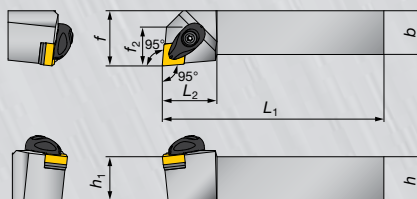
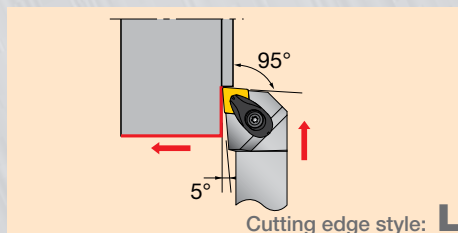


Toolholders - Unique pocket design for EcoTurn inserts

ACLN R/L

External turning and facing

A-type (Negative rake, clamp-on system)



Right hand (R) shown

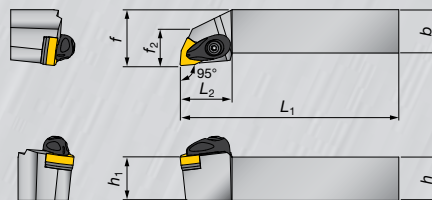
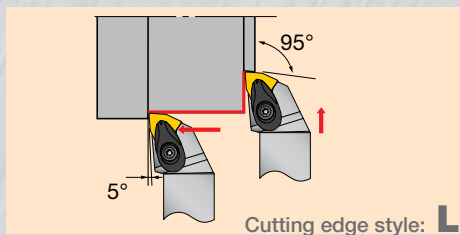
Cat. No	Stock		Dimensions (in)						Std. corner radius r_E	Insert	Torque (N·m)	
	R	L	h	b	L_1	L_2	h_1	f				f_2
ACLNR/L1633-A	●	●	1.000	1.000	6.000	1.000	1.000	1.250	0.750	0.031	CN□□33□□	3.0

Toolholders - cont'd

AWLN R/L

External turning and facing

A-type (Negative rake, clamp-on system)



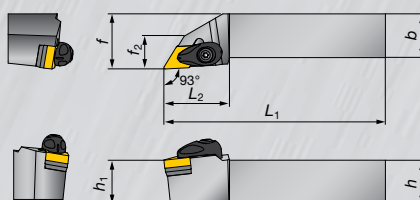
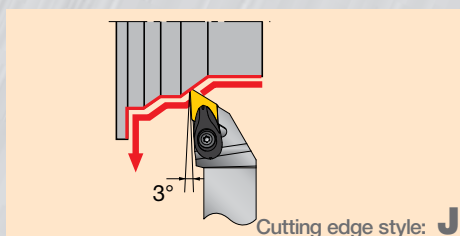
Right hand (R) shown

Cat. No	Stock		Dimensions (in)							Std. corner radius r_E	Insert	Torque (N·m)
	R	L	h	b	L_1	L_2	h_1	f	f_2			
AWLNR/L1633-A	●	●	1.000	1.000	6.000	1.125	1.000	1.250	0.875	0.031	WN□□33□□	3.0

ADJN R/L

External turning and profiling

A-type (Negative rake, clamp-on system)



Right hand (R) shown


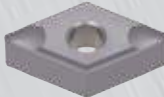


Cat. No	Stock		Dimensions (in)							Std. corner radius r_E	Insert	Torque (N·m)
	R	L	h	b	L_1	L_2	h_1	f	f_2			
ADJNR/L1633-A	●	●	1.000	1.000	6.000	1.250	1.000	1.250	0.900	0.031	DN□□33□□	3.0

Inserts Negative type





Rhombic, 80°

Application	Chipbreaker Appearance (Cross section)	Cat. No	Stocked grades						Dimensions (in)				
			Coated			Cermet	Coated cermet	I.C. dia ϕd	Thick- ness s	Hole dia ϕd_1	Corner radius r_E		
			T9115	T9125	T6120 T6130	AH630 AH645	NS9530					GT9530	
Finishing	TSF 	CNMG 331E-TSF	●	●				●	●	0.375	0.187	0.150	0.016
		CNMG 332E-TSF	●	●				●	●				0.031
	SS 	CNMG 331E-SS				●	●			0.375	0.187	0.150	0.016
		CNMG 332E-SS				●	●						0.031
Medium cutting	TM 	CNMG 331E-TM	●	●						0.375	0.187	0.150	0.016
		CNMG 332E-TM	●	●									0.031
		CNMG 333E-TM	●	●									0.047
	SM 	CNMG 331E-SM			●	●	●			0.375	0.187	0.150	0.016
		CNMG 332E-SM			●	●	●						0.031
		CNMG 333E-SM			●	●	●						0.047

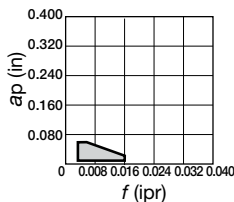
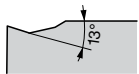
Rhombic, 55°

Application	Chipbreaker	Cat. No	Stocked grades							Dimensions (in)				
	Appearance (Cross section)		Coated					Cermet	Coated cermet	I.C. dia	Thick- ness	Hole dia	Corner radius	
			T9115	T9125	T6120	T6130	AH630	AH645	NS9530					GT9530
Finishing	TSF	DNMG 331E-TSF	●	●					●	●	0.375	0.187	0.150	0.016
		DNMG 332E-TSF	●	●					●	●				0.031
	DNMG 333E-TSF	●	●						●	●				0.047
	SS	DNMG 331E-SS					●	●			0.375	0.187	0.150	0.016
		DNMG 332E-SS					●	●						0.031
Medium cutting	TM	DNMG 331E-TM	●	●							0.375	0.187	0.150	0.016
		DNMG 332E-TM	●	●										0.031
	DNMG 333E-TM	●	●											0.047
	SM	DNMG 331E-SM			●	●	●				0.375	0.187	0.150	0.016
		DNMG 332E-SM			●	●	●							0.031

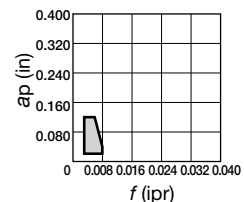
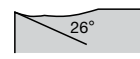
Trigon, 80°

Finishing	TSF	WNMG 331E-TSF	●	●					●	●	0.375	0.187	0.150	0.016
		WNMG 332E-TSF	●	●					●	●				0.031
	WNMG 333E-TSF	●	●						●	●				0.047
	SS	WNMG 331E-SS					●	●			0.375	0.187	0.150	0.016
		WNMG 332E-SS					●	●						0.031
	WNMG 333E-SS					●	●							0.047
Medium cutting	TM	WNMG 331E-TM	●	●							0.375	0.187	0.150	0.016
		WNMG 332E-TM	●	●										0.031
	WNMG 333E-TM	●	●											0.047
	SM	WNMG 331E-SM			●	●	●				0.375	0.187	0.150	0.016
		WNMG 332E-SM			●	●	●							0.031
	WNMG 333E-SM			●	●	●								0.047

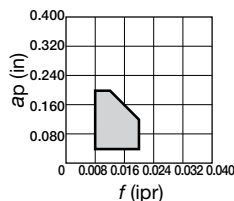
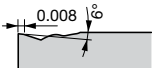
TSF - Chipbreaker



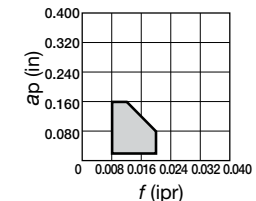
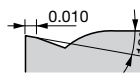
SS - Chipbreaker



TM - Chipbreaker



SM - Chipbreaker

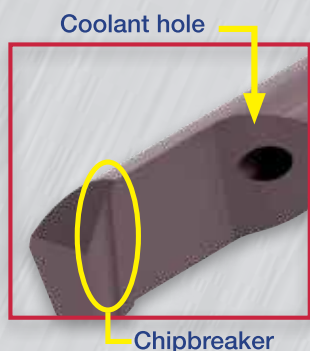


TINYTURN KITS

Solid carbide boring bars for small diameter turning

Well-designed edge provides highly accurate machining

- Generates fine surface finishes and prevents edge chipping
- Smooth cutting edge leads to high precision products
- Cutting edge is extremely fine compared to competitors



Coolant hole

- Supplies coolant directly to the cutting edge.
- Offers remarkable chip evacuation.

*Face Grooving Kit pictured

Cat. No.	General Kit Includes:		Min. Bore Dia. (mm)	Groove Width (mm)	Tmax (mm)	Special Price	
TinyTurn General Kit	Sleeve	JBBS159-4-7	-	-	-	\$260	
	Solid Boring Bars Boring, Profiling, Chamfering, Face Grooving & Grooving	JBTR04090010-D028 SH730	2.8	-	0.2		
		JBTR07140015-D050 SH730	5	-	0.5		
		JBGR07090150-D050 SH730	5	1.5	1		
		JBGR07140200-D068 SH730	6.8	2	2.5		
		JBFR07110150-D060 SH730	6	1.5	2		
	JBTR04090005-D020 SH730	2	-	0.1			
Wrench	P25	-	-	-			
Cat. No.	General Kit Includes:		Min. Bore Dia. (mm)	Groove Width (mm)	Tmax (mm)	Special Price	
TinyTurn Face Groove Kit	Sleeve	JBBS159-4-7	-	-	-	\$250	
	Solid Boring Bars Face Grooving	JBFR07110150-D060 SH730	6	1.5	2		
		JBFR07110200-D080 SH730	8	2	3		
		JBFR07200250-D150 SH730	15	2.5	20		
		JBFR07200300-D150 SH730	15	3	20		
Wrench	P25	-	-	-			
Cat. No.	General Kit Includes:		Min. Bore Dia. (mm)	Groove Width (mm)	Flat Width (mm)	Tmax (mm)	Special Price
TinyTurn Groove & Thread Kit	Sleeve	JBBS159-4-7	-	-	-	-	\$220
	Solid Boring Bars Grooving and Threading	JBGR07090150-D050 SH730	5	1.5	-	1	
		JBGR07140200-D068 SH730	6.8	2	-	2.5	
		JBIR07140100-D048 SH730	4.8	-	0.12	-	
		JBIR07140150-D060 SH730	6	-	0.18	-	
Wrench	P25	-	-	-	-		

ΑΓΙΟΣ ΙΕ ΤΣΟΥΔΑ - Τ ΗΔΡΑΜ

Promo Details:

- Orders must be drop shipped
- Promotional pricing not applicable when ordering online or EDI
- Promo code must be used when ordering
- Prices valid in U.S. only

ΥΟΛΑΔΗΝΤ ΡΝΟΙΤΟΜΟΡΑ



Tungaloy America, Inc.

3726 N Ventura Drive, Arlington Heights, IL 60004, U.S.A.
 Inside Sales: +1-888-554-8394
 Technical Support: +1-888-554-8391
 Fax: +1-888-554-8392
www.tungaloyamerica.com



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