

TV 90 Milling Cutters

For Non-Ferrous & Plastic Materials

Application

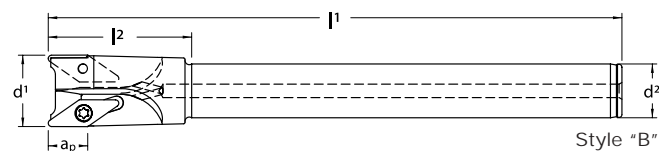
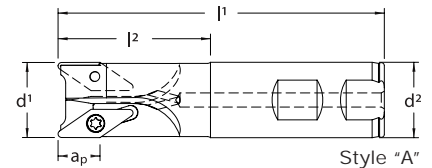
- High speed milling of
 - aluminum alloys
 - copper alloys
 - plastic materials
- Can be used for edge and slot milling, as well as axial plunge milling
- Excellent for deep cavity work

Features / Benefits

- High positive geometry insert with wave shape topography eliminates edge build-up and provides efficient chip removal
- End mills designed with coolant bore holes directed toward cutting edges
- New insert grade TK10MP is specifically designed for the machining of aluminum and non-ferrous materials that require high cutting speeds

TV90 End Mills

Optimized design for aluminum



DESIGNATION	DIMENSIONS						INSERT	SPARE PARTS	
	d ¹	d ²	l ¹	l ²	Max a _p	Flutes		Insert Screw	Wrench
Standard length with weldon shank - Style "A"									
TVP90-0750C	.750	.750	3.28	1.25	.40	2	VPGT-221-ALM	LF-89972	214.80.866 (S/D)
TVP90-1000XC	1.000	1.000	4.28	2.00	.40	3			214.80.011 (F/T)
TVP90-1000C	1.000	1.000	4.28	2.00	.53	2	VPGT-333-ALM VPGT-33 PPFR-ALM*	LF-51706	214.80.824 (S/D)
TVP90-1250C	1.250	1.250	4.28	2.00	.53	2			214.80.012 (F/T)
TVP90-1500C	1.500	1.250	4.88	2.00	.53	3			
Extended length with cylindrical shank - Style "B"									
TVP90CY-0750-XLC	.750	.625	6.75	1.25	.40	2	VPGT-221-ALM	LF-89972	214.80.866 (S/D)
TVP90CY-1000-XLC	1.000	.750	8.00	2.00	.53	2	VPGT-333-ALM VPGT-33 PPFR-ALM*	LF-51706	214.80.011 (F/T)
TVP90CY-1250-XLC	1.250	1.000	8.00	2.00	.53	2			214.80.824 (S/D)
TVP90CY-1500-XLC	1.500	1.250	8.00	2.00	.53	3			214.80.012 (F/T)

* To provide necessary clearance when using VPGT-33 PPFR-ALM inserts, the cutter body must be relieved.

TV 90 Milling Cutters & Inserts

For Non-Ferrous & Plastic Materials

TV90 Face Mills

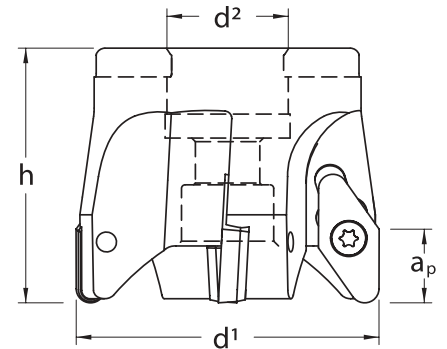
Optimized design for aluminum



Style "C"



Style "D"



DESIGNATION	DIMENSIONS					INSERT	SPARE PARTS	
	d ¹	d ²	h	Max a _p	Flutes		Insert Screw	Wrench
Standard face mills - Style "C"								
TVP90-2000	2.000	.750	2.12	.53	4	VPGT-333-ALM VPGT-33 PPFR-ALM*	LF-89972	214.80.866 (S/D) 214.80.011 (F/T)
TVC90-2000	2.000	.750	2.12	.59	3	VCGT-43.58-ALM	C-1250	214.80.994 (S/D) 214.80.076 (F/T)
TVC90-2500	2.500	1.000	2.12	.59	4			
TVC90-3000	3.000	1.000	2.12	.59	5			
Coarse pitch face mills - Style "D"								
TVC90-2500AL-3	2.500	1.000	2.12	.59	3	VCGT-43.58-ALM	C-1250	214.80.994 (S/D) 214.80.076 (F/T)
TVC90-3000AL-3	3.000	1.000	2.12	.59	3			

* To provide necessary clearance when using VPGT-33 PPFR-ALM inserts, the cutter body must be relieved.

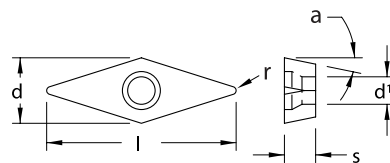
Inserts



VCGT



VPGT



VCGT / VPGT Inserts

DESIGNATION	l	s	r	d	d ¹	a	Coated				DLC				Uncoated				Cermet																				
							TK10MP				TK10TB					TK10M																							
VCGT-43.58-ALM	.870	7/32	.118	1/2	1/2	7°	●																																
VPGT-221-ALM	.437	1/8	1/64	1/4	1/4	11°	●			●																													
VPGT-333-ALM	.654	3/16	3/64	3/8	3/8	11°	●			●																													
VPGT-33 PPFR-ALM	.654	3/16	---	3/8	3/8	11°	●																																

RTC Rani Tool Corp.

205 Kelsey St., Unit #103, Newington, CT 06111

Tel: (888) 554-RANI or (860) 665-7771 • Fax: (860) 665-7319

E-mail: sales@ranitool.com • www.ranitool.com

Available from:

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