

# TV 90 Milling Cutters

For Non-Ferrous & Plastic Materials

### Application

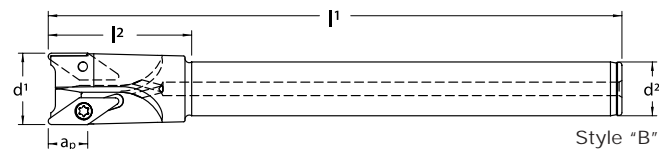
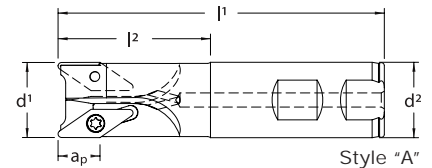
- High speed milling of
  - aluminum alloys
  - copper alloys
  - plastic materials
- Can be used for edge and slot milling, as well as axial plunge milling
- Excellent for deep cavity work

### 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 <sup>1</sup>	d <sup>2</sup>	l <sup>1</sup>	l <sup>2</sup>	Max a <sub>p</sub>	Flutes		Insert Screw	Wrench
<b>Standard length with weldon shank - Style "A"</b>									
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			
<b>Extended length with cylindrical shank - Style "B"</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.

