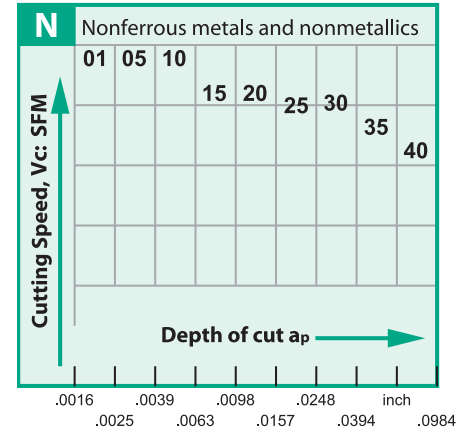


# Cutting Data

## for TCP90 Milling Cutters / TVP90 Milling Cutters

Materials	Conditions of Chip Removal	Application Range - Cutting Speed N01 - N40		
		N01 - N20 (HSC)	N20 - N30 (HSC)	N25 - N40 (HSC)
<b>N</b> Nonferrous metals Aluminum alloys without silicon	High-Speed Milling	100 µin - 200 µin	100 µin - 200 µin	100 µin - 200 µin
	unstable (varied depth)	PDC-S / CVD 2600-14625	PDC-S / CVD 2600-13000	PDC-S / CVD 2600-8125
	continuous	PDC-S / CVD 2600-14625	PDC-S / CVD 2600-13000	PDC-S / CVD 2600-8125
	heavily + slightly interrupted	PDC-S / CVD 2600-14625	PDC-S / CVD 2600-13000	PDC-S / CVD 2600-8125
<b>N</b> Nonferrous metals Aluminum alloys with less than 12% silicon	unstable (varied depth)	PDC-S / CVD 2600-13000	PDC-S / CVD 2600-11375	PDC-S / CVD 2600-8775
	continuous	PDC-S / CVD 2600-13000	PDC-S / CVD 2600-11375	PDC-S / CVD 2600-8775
	heavily + slightly interrupted	PDC-S / CVD 2600-13000	PDC-S / CVD 2600-11375	PDC-S / CVD 2600-8775
<b>N</b> Nonferrous metals Copper and copper alloys brass, bronze, precious metals	unstable (varied depth)	PDC-S / CVD 2600-9750	PDC-S / CVD 2600-8125	PDC-S / CVD 2275-7150
	continuous	PDC-S / CVD 2600-9750	PDC-S / CVD 2600-8125	PDC-S / CVD 2275-7150
	heavily + slightly interrupted	PDC-S / CVD 2600-9750	PDC-S / CVD 2600-8125	PDC-S / CVD 2275-7150

Coolant: Flood or through coolant



ANSI ISO 513	Cutting Data for TV90 Milling Cutters				COATED			UNCOATED			
	Cutter	Max $a_p$	Carbide Insert		TK10MP			TK10M			
<b>N</b>					feed per tooth *(inch)						
	TV90 Face Mill	.50	VCGT / VPGT		.008	.010	.012	.008	.010	.012	
	TV90 End Mill	.38	VCGT / VPGT		.006	.008	.010	.006	.008	.010	
	Work Material	Condition	Hardness HB	Mat. Gr.	vc *(sfm)						
	Wrought	Non AG	60	21	-	-	-	-	-	-	
		AG	100	22	-	-	-	-	-	-	
	Cast aluminum alloys	Non Ag	75	23	4000	3500	3000	3500	2500	2000	
		Si ≤ 12%	AG	90	24	3100	2800	2000	2600	2000	1500
		Si ≥ 12%		130	25	-	-	-	-	-	-
	Copper & Copper alloys	Pb > 1%		110	26	-	-	-	-	-	-
			90	27	1900	1640	1400	1500	1250	900	
			100	28	1180	980	--	800	600	--	