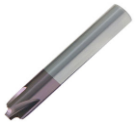
Carbride Corner Rounding Cutters (VOR45-CCRC) / (MC-DR)



MATERIAL GROUP	MATERIAL TO BE MACHINED	CUTTING SPEED Vc (m/min)	Fz [mm/tooth]				
			Ø1 - Ø2	Ø3 - Ø4	Ø6 - Ø8	Ø10 - Ø12	Ø16
P	Low & Medium Carbon Steels	60 - 70	0.01	0.012	0.015	0.02	0.03
	High Carbon Steels	40 - 60	0.01	0.012	0.015	0.02	0.03
	Alloy Steels, Treated Steels	30 - 40	0.01	0.012	0.013	0.017	0.025
M	Stainless Steel - Free Cutting	20 - 30	0.007	0.01	0.01	0.015	0.02
	Stainless Steel - Austentic	20 - 30	0.007	0.01	0.01	0.015	0.02
	Cast Steels	20 - 30	0.007	0.01	0.01	0.015	0.02
K	Cast Iron	30 -40	0.01	0.012	0.013	0.017	0.025
N	Alluminium ≤6%, Copper	70 - 100	0.012	0.012	0.015	0.02	0.03
	Alluminium ≥6%	90 - 150	0.012	0.012	0.015	0.02	0.03
	Synthetics, Duroplastics, Thermoplastcs	100 - 150	0.015	0.025	0.03	0.04	0.05
S	Nickel Alloys, Titanium Alloys	15 - 30	0.007	0.01	0.01	0.015	0.02
H	Hardened Steel, 45-50 HRc	20 - 40	0.007	0.01	0.013	0.017	0.025

Key	
Vc	Cutting speed (m/min)
n	RPM (rev/min)
Fz	Feed rate (mm/tooth)
f	Feed rate (mm/rev)
z	No. of teeth

To calculate RPM from cutting speed: $n = \frac{v_c * 1000}{\pi * ø}$

To calculate cutting speed from RPM: $v_c = \frac{n * \pi * ø}{1000}$

All recommendations are based on ideal machining conditions. Adjustments may need to be made according to your set-up. The recommendations for speeds, feeds and other parameters presented in this chart are nominal recommendations and should be considered only as good starting points.