

HSS-E Coabalt 4 Flute Corner Rounding Cutters (159102)



MATERIAL GROUP	HRc		RADIUS (mm)											
			1	1.5	2	2.5	3	4	5	6	8	10	12	16
P	≤20	Vc (m/min)	15	15	15	15	15	15	15	15	15	15	15	15
		n	600	470	470	390	390	330	26	230	190	155	130	95
		fz	0.015	0.016	0.016	0.019	0.019	0.023	0.029	0.033	0.039	0.04	0.048	0.053
		f (mm/min)	35	30	30	30	30	30	30	30	30	30	25	25
	20 - 30	Vc (m/min)	10	10	10	10	10	10	10	10	10	10	10	10
		n	480	380	380	315	315	270	210	185	155	125	105	75
		fz	0.018	0.023	0.02	0.024	0.024	0.023	0.03	0.034	0.04	0.05	0.048	0.05
		f (mm/min)	35	35	30	30	30	25	25	25	25	25	20	15
N		Vc (m/min)	90	80	90	85	90	90	80	90	90	85	85	90
		n	3500	2800	2800	2400	2400	200	1600	1400	1200	950	800	600
		fz	0.018	0.021	0.02	0.023	0.022	0.025	0.031	0.034	0.038	0.045	0.05	0.058
		f (mm/min)	245	230	220	220	210	200	200	190	180	170	160	140

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:
$$n = \frac{v_c \cdot 1000}{\pi \cdot \phi}$$

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

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.