

ebaboard /ebablock® W

milling-parameters



n = revolutions
z = number of teeth
d = diameter
vf = feed rate

$$n = \frac{vc \cdot 1000}{d \cdot \pi} \quad [1/\text{min}]$$

$$vf = n \cdot fz \cdot z \quad [\text{mm}/\text{min}]$$

$$fz = \frac{vf}{z \cdot n} \quad [\text{mm}]$$

$$vc = \frac{n \cdot \pi \cdot d}{1000} \quad [\text{m}/\text{min}]$$



The specified tools and cutting parameters are for reference only. They may vary depending on the machine tool and part size

Technical Datas	Machining 1	Machining 2	Machining 3	Machining 4	Machining 5	Machining 6	Machining 7
Strategy	Roughing Z-Constant	Profile Roughing	Roughing Pocket	Roughing Residual Material Z-Constant	Finishing Face Milling	Finishing Z-Constant	Engraving
Type of milling cutter	EMZ90 V22.042TH050 (1043249)	EBG V16.016AN140	DHC Ø12 INOX	EBG V12.012AN120-C (6128023)	EBG V10.010AN120-C (6130578)	EBG R08.008AP100-C (9148824)	Airline Kugel (1121894)
indexable inserts	VC GT 220530-ALM (1069759)	WPB 16 AF 30	-	WPB 12 CF 20 (6128107)	WPB 10 CF 10 (6129238)	WPR 08 DN (6131629)	-
cutting diameter [mm]	42	25	12	12	10	8	2
number of tool cutting edges	3	2	3	2	2	2	2
Radius [mm]	3	13	1	2	1	4	1
Cutting Speed vc [m/min]	600	750	500	500	450	452	113
Revolutions n [1/min]	4500	9500	13262	13262	14323	18000	18000
Feed per Tooth fz [mm]	0,6	0,6	0,20	0,3	0,15	0,1	0,1
Feed Rate vf [mm/min]	8200	11200	7957	7957	4297	3600	3600
Axial Depth of Cut ap [mm]	5	2,5	10	2	0,5	0,2	0,5
Radial Depth of Cut ae [mm]	30	3	6	8	6	0,5	0
Runtime [min]	6	10	1	4	3,5	80	2
Dust Formation	none	none	none	none	none	none	none



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ebalta Kunststoff GmbH | Erlbacher Straße 100 | 91541 Rothenburg o.d.T. - GERMANY | +49 9861 7007-0 | info@ebalta.com | www.ebalta.com