ebaboard 0700

milling-parameters

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

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

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

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

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

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	VCGT 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	16	12	12	10	8	2
number of tool cutting edges	3	2	4	2	2	2	2
Radius [mm]	3	3	0	2	1	4	1
Cutting Speed vc [m/min]	600	500	340	500	450	380	100
Revolutions n [1/min]	4547	9947	9000	13262	14323	15120	15900
Feed per Tooth fz [mm]	0,5	0,4	0,15	0,3	0,15	0,2	0,1
Feed Rate vf [mm/min]	6820	7957	5304	7957	4297	6050	3180
Axial Depth of Cut ap [mm]	5	2,5	10	2	0,5	0,2	0,3
Radial Depth of Cut ae [mm]	30	3	6	8	6	0,5	0
Runtime [min]	6	10	1	1	3,5	90	1
Dust Formation	middle	low	low	none	none	none	none

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