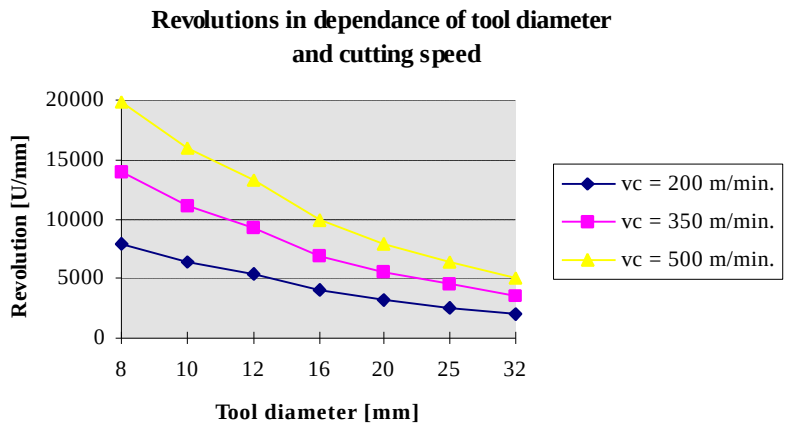
Standard Data for Chipping Operations with CIBATOOL® Board Material

CIBATOOL
BM 5166, BM 5112, BM 5273, RS 470
Board material for the Model- and Toolmaking Industry

KIENINGER Cutting Tools

GWR-/GWV-Copy Milling Tools for Roughing a. Finishing Diameter from 8 - 32 mm with carbide inserts WPR resp. WPV with chipbreaker

Operation Parameters



v_c = 200 ... 500 m/min
f_z = 0,15 ... 0,35 mm
a_p = 2 mm (Finishing)
a_e = 0,2 ... 0,4 x D
z = 2

v_c	Cutting speed	[m/min]
f_z	Forward feed per tooth	[mm]
a_p	Cutting depth	[mm]
a_e	Width of cut / Line spacing	[mm]
z	Number of tool teeth	
D	Tool diameter	[mm]
n	Revolutions	[min^{-1}]
v_f	Forward feed rate	[mm/min]

Conversion Formula:

$$n = \frac{v_c \cdot}{1000} \quad [min^{-1}]$$

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

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

$$f_z = \frac{v_f}{z \cdot n} \quad [mm]$$

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