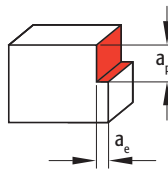
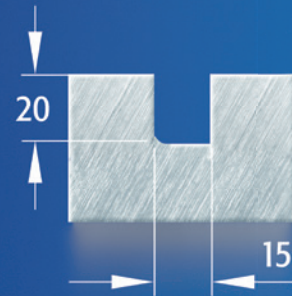


Material group	TSR (N/mm <sup>2</sup> )	Hardness HB	Cutting speed	Coolant
			Vc m/min	
P1.1	< 750	< 250	<b>240 - 300</b>	emulsion
P1.2	< 1000	< 300	<b>160 - 240</b>	emulsion
P1.3	< 1400	< 400	<b>130 - 200</b>	emulsion
H2.1		< 50 HRc	<b>100 - 150</b>	emulsion
M3.1	< 950		<b>100 - 150</b>	emulsion
M3.2	< 1250		<b>90 - 120</b>	emulsion
K4.1	< 800		<b>125 - 225</b>	emulsion
S6.1	< 1500		<b>45 - 65</b>	emulsion
S6.2	< 1600		<b>50 - 80</b>	emulsion
S6.3	< 1600		<b>35 - 55</b>	emulsion
S6.4	< 1250		<b>70 - 105</b>	emulsion

Workpiece Material: St.37

	VHTS 5 100 072 06 03	Competitor
$a_p$ max	20 mm	10 mm
$a_e$	1 mm (programmed)	10 mm / 5 mm
$v_c$	250 mtr/min	180 mtr/min
$n$	7957 rpm	5730 rpm
$F_z$	0,12 mm/t	0,04 mm/t
$v_f$	4774 mm/min	912 mm/min
Productiontime	24 s	37 s



### Shoulder milling / Eckfräsen

Ød (mm)	$a_p$ max. (mm)	$a_e$ max. (mm)	$f_z$ (mm/tooth)
3,0	< 9,00	< 0,600	0,015 - 0,035
4,0	< 12,00	< 0,800	0,025 - 0,050
5,0	< 15,00	< 1,000	0,030 - 0,060
6,0	< 18,00	< 1,200	0,040 - 0,070
8,0	< 24,00	< 1,600	0,050 - 0,085
10,0	< 30,00	< 2,000	0,060 - 0,100
12,0	< 36,00	< 2,400	0,085 - 0,120
16,0	< 40,00	< 3,200	0,100 - 0,145
20,0	< 50,00	< 4,000	0,125 - 0,175