



## Parting off



Machining group	System 305			System 222				
	v <sub>c</sub> (m/min)	F	E	v <sub>c</sub> (m/min) by width		PP neutral	PM L/R	MP
		f (mm/rev)		2	3	f (mm/rev)		
P1.1.1 Unalloyed steel, annealed, 0.15 % C, Rm 420 N/mm <sup>2</sup> , 125 HB	120	0.080	0.080	100	120	0.130	0.060	0.100
P1.1.2 Unalloyed steel, heat-treated, 0.15 % C, Rm 420 N/mm <sup>2</sup> , 125 HB	120	0.080	0.080	100	120	0.130	0.060	0.100
P1.1.3 Unalloyed steel, annealed, 0.45 % C, Rm 640 N/mm <sup>2</sup> , 190 HB	120	0.080	0.080	100	120	0.130	0.060	0.100
P1.1.4 Unalloyed steel, heat-treated, 0.45 % C, Rm 640 N/mm <sup>2</sup> , 190 HB	120	0.080	0.080	100	120	0.130	0.060	0.100
P1.1.5 Unalloyed steel, heat-treated, 0.45 % C, Rm 850 N/mm <sup>2</sup> , 250 HB	120	0.080	0.080	100	120	0.130	0.060	0.100
P1.1.6 Unalloyed steel, annealed, 0.75 % C, Rm 915 N/mm <sup>2</sup> , 270 HB	120	0.080	0.080	100	120	0.130	0.060	0.100
P1.1.7 Unalloyed steel, heat-treated, 0.75 % C, Rm 1020 N/mm <sup>2</sup> , 300 HB	120	0.080	0.080	100	120	0.130	0.060	0.100
P2.1.1 Low-alloy steel, annealed, Rm 610 N/mm <sup>2</sup> , 180 HB	120	0.080	0.080	100	120	0.130	0.060	0.100
P2.1.2 Low-alloy steel, heat-treated, Rm 930 N/mm <sup>2</sup> , 275 HB	120	0.080	0.080	100	120	0.130	0.060	0.100
P2.1.3 Low-alloy steel, heat-treated, Rm 1020 N/mm <sup>2</sup> , 300 HB	120	0.080	0.080	100	120	0.130	0.060	0.100
P2.1.4 Low-alloy steel, heat-treated, Rm 1190 N/mm <sup>2</sup> , 350 HB	120	0.080	0.080	100	120	0.130	0.060	0.100
P3.1.1 High-alloy steel and tool steel, annealed, Rm 680 N/mm <sup>2</sup> , 200 HB	120	0.080	0.080	100	120	0.130	0.060	0.100
P3.1.2 High-alloy steel and tool steel, hardened and tempered, Rm 1100 N/mm <sup>2</sup> , 325 HB	120	0.080	0.080	100	120	0.130	0.060	0.100
M1.1.1 Stainless steel, ferritic/martensitic, with machining additives	110	0.060	0.060	90	110	0.100	0.045	0.075
M1.1.2 Stainless steel, ferritic/martensitic, annealed, Rm 680 N/mm <sup>2</sup> , 200 HB	110	0.060	0.060	90	110	0.100	0.045	0.075
M1.1.3 Stainless steel, ferritic/martensitic, heat-treated, Rm 810 N/mm <sup>2</sup> , 240 HB	110	0.060	0.060	90	110	0.100	0.045	0.075
M2.1.1 Stainless steel, austenitic, quenched, 180 HB	110	0.060	0.060	90	110	0.100	0.045	0.075
M2.2.1 Duplex steel, high-strength stainless steels	110	0.060	0.060	90	110	0.100	0.045	0.075
K1.1.1 Grey cast iron, pearlitic/ferritic, 180 HB	120	0.100	0.100	100	120	0.165	0.075	
K1.1.2 Grey cast iron, pearlitic/martensitic, 260 HB	120	0.100	0.100	100	120	0.165	0.075	
K1.2.1 Cast iron with spheroidal graphite, ferritic, 160 HB	120	0.100	0.100	100	120	0.165	0.075	
K1.2.2 Cast iron with spheroidal graphite, pearlitic, 250 HB	120	0.100	0.100	100	120	0.165	0.075	
K1.3.1 Malleable cast iron, ferritic, 130 HB	120	0.100	0.100	100	120	0.165	0.075	
K1.3.2 Malleable cast iron, pearlitic, 230 HB	120	0.100	0.100	100	120	0.165	0.075	
K2.1.1 Vermicular graphite cast iron (GJV)				100	120	0.130	0.060	
K2.2.1 Austenitic-ferritic spheroidal graphite cast iron (ADI)				100	120	0.130	0.060	
N1.1.1 Wrought aluminium alloys, non-hardened, 60 HB	240		0.120					
N1.1.2 Wrought aluminium alloys, hardened, 100 HB	240		0.120					
N2.1.1 Aluminium casting alloys, non-hardened, ≤ 12 % Si, 75 HB	240		0.120					
N2.1.2 Aluminium casting alloys, hardened, ≤ 12 % Si, 90 HB	240		0.120					
N2.1.3 Aluminium casting alloys, non-hardened, > 12 % Si, 130 HB	240		0.120					
N3.1.1 Copper and copper alloys: Free-machining alloy, Pb > 1 %	240		0.120					
N3.1.2 Copper and copper alloys: CuZn, CuSnZn	240		0.120					
N3.1.3 Copper and copper alloys: CuSn, lead-free copper and copper electrolyte	240		0.120					
N4.1.1 Non-metallic materials: Duroplastics, fibre-reinforced plastics	240		0.120					
N4.1.2 Non-metallic materials: Hard rubber, wood, etc.	240		0.120					
N4.1.3 Non-metallic materials: Graphite	240		0.120					
S1.1.1 Heat-resistant alloys, Fe-based, annealed, 200 HB	80		0.030					
S1.1.2 Heat-resistant alloys, Fe-based, hardened, 280 HB	80		0.030					
S1.1.3 Heat-resistant alloys, Ni- or Co-based, annealed, 250 HB	80		0.030					
S1.1.4 Heat-resistant alloys, Ni- or Co-based, hardened, 350 HB	80		0.030					
S1.1.5 Heat-resistant alloys, Ni- or Co-based, cast, 320 HB	80		0.030					
S2.1.1 Titanium alloys, pure titanium, Rm 400 N/mm <sup>2</sup>	80		0.030					
S2.1.2 Titanium alloys, Alpha and Beta alloys, hardened, Rm 1050 N/mm <sup>2</sup>	80		0.030					
H1.1.1 Hardened steel, hardened and tempered, < 55 HRC	80	0.030						
H1.1.2 Hardened steel, hardened and tempered, < 60 HRC	80	0.030						
H1.1.3 Hardened steel, hardened and tempered, > 60 HRC	80	0.030						
H2.1.1 Chilled cast iron, 400 HB	80	0.030						
H2.1.2 Chilled cast iron, hardened and tempered, < 55 HRC	80	0.030						

Cutting data