

Material Groups						Cutting parameters						
ISO	Material	Condition	Tensile Strength [N/mm <sup>2</sup> ]	Hardness, HB	Group	Diameter range, mm	D=12-13.9	D=14-15.9	D=16-19.9	D=20-25.9	D=26-32.9	
						Cutting speed, V <sub>c</sub> [m/min]						
P	non-alloy steel and cast steel, free cutting steel	< 0.25 %C	annealed	420	125	1	70-90-110	0.16 0.24	0.18 0.26	0.22 0.30	0.24 0.34	0.28 0.38
		≥ 0.25 %C	annealed	650	190	2	70-100-120					
		< 0.55 %C	quenched and tempered	850	250	3	70-90-110					
		≥ 0.55 %C	annealed	750	220	4	60-80-100					
			quenched and tempered	1000	300	5	50-70-90					
	low alloy and cast steel (less than 5% of alloying elements)	annealed	600	200	6	70-90-110	0.15 0.22	0.18 0.26	0.22 0.30	0.24 0.34	0.28 0.38	
		quenched and tempered	930	275	7	60-80-100						
			1000	300	8	50-70-90						
			1200	350	9	40-55-70						