

Technical Data and Settings

Cutting Data BSF

Material	Condition	Tensile strength (N/mm ²)	Cutting speed (m/min.)	Series and Bore diameter				
				A	B	C	D	E/F/G
				6.50-7.00	7.50-8.50	9.00-10.00	10.50-11.50	12.00-21.00
				Feed F (mm/rev.)				
Unalloyed steel		<500	40-70	0.01-0.02	0.01-0.03	0.02-0.04	0.03-0.06	0.03-0.08
Cast steel		500-800	40-70	0.01-0.02	0.01-0.03	0.02-0.04	0.03-0.06	0.03-0.08
Grey cast iron		<500	50-90	0.01-0.02	0.01-0.03	0.02-0.04	0.03-0.06	0.03-0.08
Ductile cast iron		300-800	40-70	0.01-0.02	0.01-0.03	0.02-0.04	0.03-0.06	0.03-0.08
Low alloy steel	annealed	<850	40-70	0.01-0.02	0.01-0.03	0.02-0.04	0.03-0.06	0.03-0.08
	tempered	850-1000	30-50	0.01-0.02	0.01-0.03	0.02-0.04	0.03-0.06	0.03-0.08
	tempered	1000-1200	15-30	0.01-0.02	0.01-0.02	0.01-0.03	0.02-0.04	0.02-0.05
High alloy steel	annealed	<850	20-50	0.01-0.02	0.01-0.03	0.02-0.04	0.03-0.06	0.03-0.08
	tempered	850-1100	15-30	0.01-0.02	0.01-0.02	0.01-0.03	0.02-0.04	0.02-0.05
Stainless steel	ferritic	450-650	15-30	0.01-0.02	0.01-0.03	0.02-0.04	0.03-0.06	0.03-0.08
	austenitic	650-900	10-20	0.01-0.02	0.01-0.02	0.01-0.03	0.02-0.04	0.02-0.05
	martensitic	500-700	15-30	0.01-0.02	0.01-0.02	0.01-0.03	0.02-0.04	0.02-0.05
Special alloy	(Inconel, Titan)	<1200	10-20	0.01-0.02	0.01-0.02	0.01-0.03	0.02-0.04	0.02-0.05
Wrought / Cast aluminium alloys		60-120	60-120	0.02-0.03	0.02-0.04	0.02-0.05	0.02-0.08	0.05-0.10
Copper alloys	Brass		50-90	0.01-0.02	0.01-0.03	0.02-0.04	0.03-0.06	0.03-0.08
	Bronze short-chipping		30-50	0.01-0.02	0.01-0.03	0.02-0.04	0.03-0.06	0.03-0.08
	Bronze long-chipping		20-30	0.01-0.02	0.01-0.02	0.01-0.03	0.02-0.04	0.02-0.05

WARNING NOTICE

All listed cutting data are standard values only! The cutting values depend on the amount of slope of the uneven bore edge. (i.e. high slope ► low cutting value). The feed also depends on the sloping ratio. In case of hard to machine materials or uneven bore edges, we recommend to apply cutting speeds that are at the lower end of the range for uneven bore edges.