

Recommended rotational speed range [RPM]

To determine the recommended cutting speed range [m/min], please proceed as follows:

- ❶ Select the material group to be machined.
- ❷ Establish the cutting speed range.

To determine the recommended rotational speed range [RPM], please proceed as follows:

- ❸ Select the required burr diameter.
- ❹ The cutting speed range and the burr diameter determine the recommended rotational speed range.

❶ Material group		Application	Cut	❷ Cutting speed	
Steel, cast steel	Steels up to 1,200 N/mm ² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steel, alloyed steels	Coarse stock removal	ALLROUND	450–750 m/min
	Hardened, heat-treated steels over 1,200 N/mm ² (> 38 HRC)	Tool steels, tempering steels, alloyed steels, cast steel	Coarse stock removal	ALLROUND	250–450 m/min
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	Coarse stock removal	ALLROUND	450–600 m/min
Non-ferrous metals	Soft non-ferrous metals	Brass, copper, zinc	Coarse stock removal	ALLROUND	450–750 m/min
	Hard non-ferrous metals	Bronze, titanium/titanium alloys, hard aluminium alloys (high Si content)	Coarse stock removal	ALLROUND	450–600 m/min
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS)	Coarse stock removal	ALLROUND	450–900 m/min

Example:

TC burr,
ALLROUND cut,
burr dia. 12 mm.
Coarse stock removal on steels
up to 1,200 N/mm².
Cutting speed: 450–750 m/min

**Rotational speed range:
12,000–20,000 RPM**

❸ Burr dia. [mm]	❹ Cutting speeds [m/min]				
	250	450	600	750	900
	Rotational speeds [RPM]				
6	13,000	24,000	32,000	40,000	48,000
8	10,000	18,000	24,000	30,000	36,000
10	8,000	14,000	19,000	24,000	29,000
12	7,000	12,000	16,000	20,000	24,000
16	5,000	9,000	12,000	15,000	18,000

