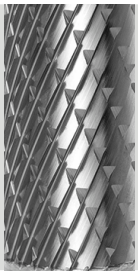
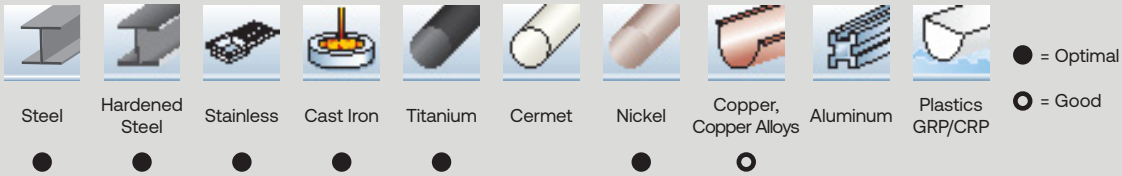
Double Cut - Technical Resources

Double cut for general purpose use improves control and reduces chips

- High cutting action with cross-cut style ensures smooth operation.
- Generates short chips for controlled stock removal and cleaner work.
- For use on: ferrous metals including cast iron, steel < 60 HRC, stainless steel, nickel-based, titanium alloys, and non-ferrous metals like copper, brass, and bronze.



Application



Recommended Operating Speeds

The operating speeds listed below serve as a guide for using tungsten carbide burs, based on bur head diameter.

Material groups			Application	Cutting speed	
				SFPM	m/min
Steel, cast steel	Non-hardened, non-heat treated steels up to 1200 N/mm² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steels	Coarse machining with high stock removal	1476-1969	450–600
	Hardened, heat-treated steels exceeding 1200 N/mm² (> 38 HRC)	Tool steels, tempered steels, alloyed steel, cast steels		820-1148	250–350
Stainless steel	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	Coarse machining with high stock removal	820-1148	250–350
Non-ferrous metals	Hard non-ferrous metals	Bronze, titanium/titanium alloys, hard alu-alloys (high Si content)	Coarse machining with high stock removal	820-1148	250–350
	High-temperature resistant materials	Nickel based alloys, cobalt based alloys (aircraft engine and turbine construction)		984-1476	300–450
Cast iron	Gray cast iron, white cast iron	Cast iron with flake graphite EN-GJL, with nodular graphite cast iron EN-GJS, white annealed cast iron EN-GJMW, black cast iron EN-GJMB	Coarse machining with high stock removal	1476-1969	450–600

Cutting speed								
SFM		820	984	1148	1312	1476	1640	1969	2953
m/min		250	300	350	400	450	500	600	900
Ø (in)	Ø (mm)	Rotational speed (rpm)							
5/64	2	40,000	48,000	56,000	64,000	72,000	80,000	95,000	100,000
1/8	3	27,000	32,000	37,000	42,000	48,000	53,000	64,000	100,000
5/32	4	20,000	24,000	28,000	32,000	36,000	40,000	48,000	70,000
1/4	6	13,000	16,000	19,000	21,000	24,000	27,000	32,000	48,000
5/16	8	10,000	12,000	14,000	16,000	18,000	20,000	24,000	36,000
3/8	9.6	8,000	10,000	11,000	13,000	14,000	16,000	19,000	30,000
1/2	12	7,000	8,000	9,000	11,000	12,000	13,000	16,000	24,000
5/8	16	5,000	6,000	7,000	8,000	9,000	10,000	12,000	18,000
3/4	20	4,000	5,000	6,000	6,000	7,000	8,000	10,000	15,000
1	25	3,000	4,000	4,000	5,000	6,000	6,000	8,000	12,000

Recommended speeds are based on standard shank length burs up to 1 ¾", with maximum overhang of 3/8".
Max operating speed of 15,000 rpm for extended shanks (>1 ¾").