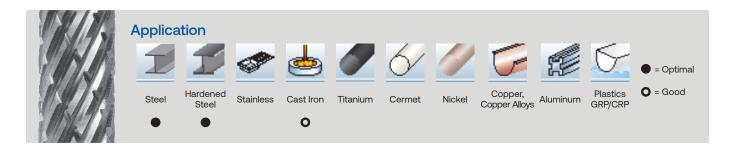
Steel Cut - Technical Resources

Aggressive cutting form for increased stock removal on steels and cast iron

- · Results in significantly increased machining output, as compared to conventional cross-cut.
- · Generates large chips with superior chip removal.
- Prevents discoloration or surface softening due to low heat development.
- For use on: construction steels, carbon steels, tool steels, and case-hardened steels.



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 =	1476-2953	450 - 900
	Hardened, heat treated steels exceeding 1200 N/mm² (> 38 HRC)	Tool steels, tempered steels, alloyed steels, cast steels	high stock removal with impact load		

Cutting speed								
SFM		1476	2461	2953				
m/min		450	750	900				
Ø (in)	Ø (mm)	Rotational speed (rpm)						
1/4	6	24,000	40,000	48,000				
5/16	8	18,000	30,000	36,000				
3/8	9.6	14,000	24,000	30,000				
1/2	12	12,000	20,000	24,000				
5/8	16	9,000	17,000	18,000				

Recommended speeds are based on standard shank length burs up to 1 3/4", with maximum overhang of 3/8". Max operating speed of 15,000 rpm for extended shanks (>1 34").

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