Stainless Steel Cut - Technical Resources

High performance grinding on stainless steel applications

- Ensures extremely high machining output and service life for rust and acid-resistant steels.
- Reduces sparking when working with titanium alloys.
- Prevents material discoloration due to low heat generation.
- For use on: austenitic and ferritic stainless steels, nickel-based alloys, and titanium.

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
Stainless steel	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	Coarse machining = high stock removal	1476-2953	450-900
			Fine machining = low stock removal		

Cutting speed				
SFM		1476	1969	2953
m/min		450	600	900
Ø (in)	Ø (mm)	Rotational speed (rpm)		
1/8	3	48,000	64,000	100,000
1/4	6	24,000	32,000	48,000
5/16	8	18,000	24,000	36,000
3/8	9.6	14,000	19,000	30,000
1/2	12	12,000	16,000	24,000
5/8	16	9,000	12,000	18,000

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").