



XTREME GRIND 291

Extreme Performance Grinding Fluid

Performance Benefits

- Exceptional stock removal rates and increased productivity due to specific additives effective at the high heat and pressures associated with high speed grinding
- Low foaming in soft water and high-pressure operations such as creep-feed grinding, ejector drilling, and gun drilling or gun reaming
- Superior corrosion protection
- Long fluid life in both central systems and individual sumps
- Clean parts and machine tools
- Bimetallic corrosion protection for parts and machine tools
- Easy to dispose of by conventional waste treatment methods

XTREME GRIND 291 is a highly fortified, heavy duty, emulsifiable grinding fluid specifically designed for performance grinding. This fluid delivers extreme grinding performance with either conventional or CBN wheels. XTREME GRIND 291 is low foaming in either naturally soft or treated waters. XTREME GRIND 291 utilizes a combination of extreme pressure and polar additives to give excellent surface finishes. XTREME GRIND 291 can be used in a wide variety of water qualities. XTREME GRIND 291 is recommended for grinding of ferrous and non-ferrous metals to include steel, cast iron, stainless steel, aluminum, titanium and copper alloys.

Operations

Centerless Grinding	Creep-Feed Grinding	Broaching
Tapping	Deep Hole Drilling	Reaming
Roll Form Threading		

Typical Characteristics

Appearance.....	Clear, amber liquid
Appearance of Dilution.....	Semi-translucent
Density	8.38 lbs./gal
pH of 5% emulsion.....	8.8-9.0
Chlorine	Yes
Sulfur	Yes
Active Sulfur	No
DEA, Formaldehyde	
Release Biocides, Nitrites, Phenols.....	None

Recommended Dilutions

XTREME GRIND 291 is to be mixed with water for use (add concentrate to water)
Grinding: 3-12%

Concentration Control

The chart below was prepared using an Atago Master M refractometer and dilutions of XTREME GRIND 291 in distilled water. Refractometer readings can vary with the type of water and refractometer used. Atago Master M refractometers are available from QualiChem, Inc.

CONCENTRATION %:	3	4	5	6	7	8	10	12
REFRACTOMETER READING:	3.2	4.2	5.3	6.4	7.4	8.5	10.6	12.8

Packaging

XTREME GRIND 291 is packaged in 310-gallon, one-way tote tanks and 55-gallon, non-returnable steel drums. Bulk and 5-gallon pails are also available.



The Next Generation in Metalworking Chemistry