

CHALLENGE 300-HT

SYNTHETIC GRINDING FLUIDS FOR CERAMIC AND OPTICAL MATERIALS

CHALLENGE 300-HT is an aqueous based synthetic formulation developed to optimize removal rate and surface finish in grinding, sawing, and dicing processes using diamond grinding wheels and blades. The product's exceptional heat transfer characteristics insure prolonged diamond life, even with the most difficult materials.

CHALLENGE 300-HT is compatible with all type filtration systems allowing for extended use. Its foam-free operation promotes easy application providing a laminar flow of coolant to the wheel/work-piece interface for fine finishes and prolonged tool life.

Typical Properties:

Surface, Blanchard Type, O.D./Cylindrical, Edge/Bevel/Dicing, Core Drilling, Diamond Wire Sawing.

Benefits:

- Better surface finishes
- Faster removal rates
- No foam
- Extended diamond life
- Non-staining
- Compatible with all filtration systems
- Non-corrosive
- Operator acceptance

Typical Properties:

pH	9.8
Conductivity Ms	0.6
Specific Gravity	1.03

Directions:

Designed for use at low concentrations and is effective in hard, soft and DI water.

Surface/Blanchard	3% - 5%
O.D./Cylindrical/Core Drilling	3% - 5%
Edge/Bevel/Dicing	2% - 3%
Diamond Wire Sawing	3% - 5%

Maintaining dilution ratios with a hand-held refractometer is recommended. A pH meter is also useful. Develop production-specific scales by obtaining accurately measured samples of a properly diluted mixture that corresponds to use.

Additional Information:

CHALLENGE Products are available in 5-gallon pails and 55-gallon drums, F.O.B. Bethel, Connecticut, and also include: grinding fluids, sawing fluids, lapping/polishing slurry additives, rinse/wet storage additives and ultrasonic/megasonic detergents. Safety Data Sheets available upon request.