



## CHALLENGE 400-HT

### I.D. SAWING FLUID

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CHALLENGE 400-HT is a synthetic formulation developed for use in “once-through” sawing processes using diamond blades. With its exceptional heat transfer capability, CHALLENGE 400-HT quickly cools the diamond blade for longer diamond life, while the product’s superior detergency keeps the diamond interface clean and free cutting for both increased cutting speed and increased blade life.

#### **Benefits:**

- Extended blade life
- Increased production
- Lowest sub-surface damage
- Less bow and warp
- Reduced blade deflection
- Elimination of exit chipping
- Elimination of substrate tear
- Cleaner machines and working conditions

#### **Directions:**

CHALLENGE 400-HT is designed for use at very high dilution ratios. Evaluation of the product should be performed at a ratio of 400 parts water to 1 part product (.25%). Since the dilution ratio is so high, water quality plays an important role in the performance of the fluid make-up. Deionized water works best because of the elimination of ion interference with the surfactant base. Softened or fairly normal tap water will also perform adequately if the quality does not fluctuate.

Monitor the dilution ratio using a pH meter and a conductivity meter. Create a set of in-house graphs based upon the water supply to be used. Maintain the correct dilution using these graphs. Use this product in “once-through” systems only.

#### **Additional Information:**

CHALLENGE Products are available in 5-gallon pails and 55-gallon drums, F.O.B. Bethel, Connecticut, and also include: grinding fluids, suspension additives for lapping/polishing slurries, rinse/wash agents and ultrasonic/megasonic detergents. Material Safety Data Sheets available upon request.

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