

MIXING INSTRUCTIONS

For

ST (Suspension Treated) or T (Treated)

Micro Alumina or Optical Powder

First, measure the amount of abrasive for your slurry. This is typically done by weight or volume. We recommend you start with no less than **1 to 2 pounds abrasive per gallon** of water or oil. If measuring by volume, this is approximately a 4 -5 parts water to 1 part abrasive. If you use a Hydrometer to check the density of your slurry, we suggest beginning Baume of 20°- 25°. Our “ST” and “T” formulas are designed for slurry mixtures in the 1-2 pounds abrasive per gallon range. Slurries mixed less than 1# per gallon won't adequately suspend the abrasive and the film between the part and work surface is starved for abrasive. A slurry mixed to thick may provide too much cushion between the part and work surface which slows the cutting of the abrasive.

To correctly mix your slurry, always **add the abrasive to the water** and use warm water if available. This helps to disperse the abrasive more quickly and thoroughly. If possible, mix your slurry the night before you plan to use it. This helps to assure the abrasive and suspension additives are completely saturated and mixed. It's best to use a variable speed mixer to get the best mixing action as opposed to mixing by hand. The most important thing is to make sure that everything is thoroughly mixed - NO CLUMPS OR LUMPS of material should be present. Probe the bottom of your mixing container for any unmixed material by using a plastic pipe. A thoroughly mixed slurry will assure consistent stock removal rate, predictable cycle time and high yield rate.

If you have several lapping machines all using the same abrasive, we strongly recommend you mix slurry in one central container. Your operators draw slurry for their lap equipment from the central slurry reservoir. This helps to eliminate variability in mixing procedures from one operator to another.

“ST” treated abrasive is mixed with water only and no other suspension additives.

“T” treated abrasive can be mixed with either oil or water. Other suspension additives in water-base slurries are compatible with this treatment.