

MICRO ALUMINA

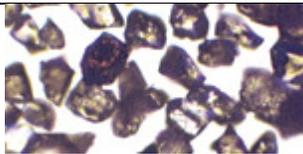
SIZE IN MICRONS (um)

1	9	20
3	12	25
5	15	30
7	18	40

MICRO ALUMINA

K.C. Abrasive Company manufactures a premium quality Micro Alumina to meet your specific requirements for lapping quartz crystals, precision optics, ophthalmic lenses, electronic components, semi-conductor substrates, or other lapping applications. Our Micro Aluminas feature a flat plate-like shaped crystal structure which reduces surface damage.

We also offer our Micro Alumina powders with a dry powder suspension additive at no additional charge. Please specify **x ST MA** treatment for water based slurries or **x T MA** treatment for oil-based lapping applications.



OPTICAL POWDER

SIZE IN MICRONS (um)

1.0	12.5	22.5
3.0	14.5	25.0
5.0	17.5	27.5
9.5	20.0	

OPTICAL POWDER

K.C. Abrasive Company's Optical Powders are manufactured to exacting specifications for wholesale ophthalmic and precision lens industries. Our Optical Powders feature a blocky, angular shaped crystal for consistent stock removal and a narrow particle size distribution to assure a uniform surface finish from the fining process.

We also offer our Optical Powders with a dry powder suspension additive at no additional charge. Please specify **x ST OP** treatment for water based slurries and re-circulating slurry systems.



CRYSTAL FINISHING POWDER

SIZE IN MICRONS (um)

1.0	12.5	22.5
3.0	14.5	25.0
5.0	17.5	27.5
9.5	20.0	

CRYSTAL FINISHING POWDER

K.C. Abrasive Company's Crystal Finishing Powders were originally formulated for the lapping of quartz crystals. Today's lapping powders are manufactured to even tighter specifications for the quartz crystal industry.

We also offer our Optical Powders with a dry powder suspension additive at no additional charge. Please specify **x T CFP** for oil based slurries, or, for certain applications, **x ST CFP** treatment for water based slurries.



LAPPING GUIDELINES

These guidelines are intended to help control the abrasive slurry used in the lapping process. Following these suggestions will help to bring this variable in the lapping process under greater control. Consistent stock removal and surface finish quality result in a predictable product, and the consistency of the abrasive slurry is critical in the lapping process.

1. Slowly add the abrasive into the slurry while stirring the mixture.

2. Slurries are typically

- Water
- Oil
- Water + Additive

(Additives are usually liquids that help to suspend and/or act as a corrosion inhibitor)

3. K. C. Abrasive Powders come three ways:

- Untreated, designated as MA, OP, CFP, AO
- Suspension Treated, designated as ST
- Treated, designated as T

4. Suspension treated (ST) should be mixed with water only. Do not mix with water and another vehicle.

5. Suspension treated (ST) abrasive powders are typically used when recirculating the slurry.

6. Mix "ST" abrasive 1.5 to 2.5 lbs. per gallon of water.

7. Recommended starting mix ratio: 2 lbs. per gallon.

8. K. C. Abrasive "ST" (Suspension Treated) is comparable to most competitors "T", i.e. WCA 15T.

9. Do not use "ST" (Suspension Treated) abrasive in a brush feed application.

10. All K. C. Abrasive Treatments are dry ingredients that have been blended into the abrasive so that it comes to our customers ready to be mixed with oil or water.

11. Treated "T" abrasive is typically mixed with oil or a water + additive mixture.

12. K. C. Abrasive's "T" (Treated) is comparable to most competitors "TO" designation.

13. When adding fresh abrasive to a working slurry, it is recommended to premix a concentrated slurry, then add it to the existing slurry.

14. Where there are several lapping machines in use, we recommend that a central mixing tank is used to mix the slurry, then draw off slurry for each individual machine.