



## BLACK AMALGON® (BA)

PNEUMATIC CYLINDER TUBING

(Clear and Custom Colors Available)

### *The Alternative to Metal*

For more than 40 years Amalga has produced an alternative to metallic pneumatic cylinder tubing.

Constructed of fiber reinforced thermoset epoxy matrix, Black Amalgon has an inner surface of evenly dispersed low friction additives. The results: A light weight, high strength, corrosion resistant composite material which replaces carbon steel, honed and chromed steel, stainless steel, aluminum or brass cylinder barrels.



#### **... the Better Choice**

##### **▶ 75% Reduction in Weight.**

Black Amalgon reduces material handling and shipping costs. Approximately 1/4 the weight of steel or brass and 3/4 the weight of aluminum, BA is much easier to handle than traditional metal tubing. Assembly times are reduced and stress loads on connected component parts are decreased.

**▶ Superior Corrosion Resistance.** Trouble-free performance in chemical, high moisture and other adverse environments including salt and chlorinated water which results in significant reduction in life cycle costs.

**▶ Reduced Maintenance Costs.** No piston lock-up. BA's manufacturing process ensures a smooth self-lubricating inside surface that prevents pistons from sticking, even after they have remained idle for months. Ongoing tests conducted on non-lubricated cylinders resulted in cycles of greater than a million strokes without requiring seal replacement.

**▶ Storage Capacity.** We can stock products to meet your JIT, MRP, or KAN BAN requirements.

**▶ Eliminate Honing Costs.** A surface smoother than honed steel...without the costs of honing. A 5-15 Ra micro-inch surface finish performs just like a honed surface.

**▶ Shape Stability and Impact Resistance.** Ship, store and cut BA, it will retain its circular shape. Unlike metals, the product does not dent. Material impact strength is 40 Izod ft-lbs.

**▶ Excellent Thermal Stability.** With a very low coefficient of thermal expansion, BA operates efficiently up to 275 °F and customers have reported success in using our product at temperatures below -300 °F.

**▶ Non-Magnetic Material.** Permits magnetic sensors to control piston movement directly through the wall thickness.