

MTC06

Polyester Resin Composite (Resin & Fabric)

SPECIFICATIONS

| Property | Imperial | Metric |
|--|-----------------------------|--------------------------|
| Hardness | 100 Rockwell M | 100 Rockwell M |
| Density | 1.25 (Gms/cc) | 1.25 (Gms/cc) |
| Tensile Strength-Crosswise | 8,000psi | 55 N/mm ² |
| Compressive Strength-Flatwise | 45,000psi | 311 N/mm ² |
| Compressive Strength-Edgewise | 24,000psi | 311 N/mm² |
| Water Absorption, 1/8 in.th. | Less than 0.1% | <0.1 (1% wall thickness) |
| Linear Expansion Coefficients | Parallel to Laminations | 5 |
| 20-100°C(Per °C x 10-5) | Rt. Angle to Laminations | 10 |
| Max Operating Temp. | 230°F | 120°C |
| Coefficient of friction, TC6 vs. stainless steel | Dry | 0.18-0.20 |
| Bearing pressure 15.5N/mm ² | | |
| Surface Speed 2.20M/Sec | | |
| Color | Pink/White | |

DESCRIPTION

MTC06 is a polyester resin composite with hardness 100 Rockwell M. Fabric reinforced composite materials are engineered from liquid thermosetting resins impregnated in fabric and subsequently cured to form solid shapes. Various thermosetting resins are available for use as bushings and bearing as unsaturated polyester. Within each category there are numerous resins to choose from. Prudent selection of a resin depends upon its viscosity, desired thermal, chemical or mechanical properties. Unsaturated polyester resin is most commonly used. Vinyl ester resin has higher mechanical properties and better chemical and temperature resistance than unsaturated polyester resin. Phenolic resins are cured very differently and are used for high temperature, high pressure and flame resistant applications. Thermoset composite materials have highly cross linked molecular networks. As a result, they have much higher mechanical strength than thermoplastics.