



GLASSINSIGHT

Improving Performance In Production

May 2010

Issue 5

www.pyrotek.info/glass

ADVANCED MATERIALS THE KEY TO OPTIMUM PERFORMANCE OF SWEEP-OUT COMPONENTS

Sweep-outs are a critical hot glass contact point, requiring careful engineering in coordination with appropriate material construction. Supporting framework must be durable to withstand the demanding glass manufacturing environment, yet lightweight to not wear out IS machinery. Glass contact materials must fit the specific temperature and physical requirements, as well as have low thermal conductivity to not check the glass-ware.

For optimum strength to withstand container ware crashes, Pyrotek offers three frame material options.

1. Specially-treated aerospace aluminium alloy used in lightweight frame construction, extends the life of sweep-out mechanisms and components while providing smoother operation. Strong joints at bends and welds for example, reduce the chance of mechanical failures at these stress points to provide longer life.
2. High-strength aluminium alloy provides some flexibility after forming and accommodates bending or twisting without breakage of the component.
3. Hot-rolled steel is hardened to prevent bending and delivers the highest strength and temperature resistance. The heaviest material option, it is recommended for use in only the most severe operating conditions due to increased wear on sweep-out mechanisms and components.

To accompany these base frame options, Pyrotek offers a wide variety of glass contact materials to meet specific operating requirements and applications:

P-25T and P-30T materials are carbon-carbon composites used as glass contact materials for sweep-outs. Both materials are proven to be non-checking and display low thermal conductivity with excellent durability and wear-resistance. Both P-25T and P-30T are not brittle and can withstand abuse in typical sweep-out process applications.

TS-200 material is a high-temperature, silicone-based resin containing graphite and glass fibers for strength. This glass contact material provides excellent thermal conductivity and good wear-resistance. TS-200 is produced through compression molding with random long fibers incorporated for strength.

PMC (Pyrotek Molded Composite) molded fingers are made from Pyrotek PT-1, a fiberglass / graphite filled silicone based thermoset molding compound. Designed to withstand high impact resistance at elevated temperatures, component parts in this material are made for extended durability in the high volume, high temperature and repetitive movement environment faced in the glass container industry.

The Pyrotek PMC finger design is built for extended operational life, with extra thick metal mounting tabs, and a ribbed contact area specially designed to limit pad surface contact with the glass, thus preventing thermal or physical checking.

Stainless steel tapes and ropes, manufactured from high quality stainless steel yarn, exhibit excellent abrasion resistance. A proven and cost effective solution, these fabrics are a flexible option for a variety of contact applications.



DuPont™ Vespel® SCP-5050 components are the optimal choice for either long runs at high speeds or heavier containers that require maximum life of contact parts with minimum operation disruption. For more information on DuPont™ Vespel® see the insert in this issue of Glass Insight.

With dedicated global support and local service, Pyrotek is dedicated to working with customers to improve glass manufacturing performance, lower scrap loss and improve pack rates. Contact your local Pyrotek sales engineer to help solve checking problems or to improve your operating performance.

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