

Gaining Traction in Remote-Control Racing

■ A partnership with TriStar gives you a competitive edge.



Begun as a hobby in the mid-1960s, remote-control miniature car racing has since exploded in popularity—now even rivaling the intensity of conventional motor racing.

Today's model cars are designed to about 1/12th the scale of a full-sized auto, and compete in races throughout the world. To achieve top performance, contestants are constantly in search of the right mix of parts and technology to gain the ultimate in off-road traction and speed.

The Challenge

Today's races are often held in off-road tracks and harsh desert environments, where wear and tear on plastic components can be severe. Racers are true enthusiasts who often invest thousands of dollars in upgrades and customization to ensure their vehicles deliver top performance. But a challenge many racers faced was in sourcing a tire that could withstand the rigors of 55-75 MPH speed, as well as the extreme heat and gritty sand of desert terrain. Many tires on the market tended to "blowout" at such high levels of friction. Enter the experts at TriStar's Surface Modification Division (SMD), to develop a process for a virtually indestructible hub-to-tire surface adhesion.

The Results

Like a pit crew, SMD engineers analyzed why modern resins would not allow for a secure, long-lasting hub-to-tire bond. They discovered that through their plasma technique, they could treat the rigid urethane around the hub—and produce a dramatic increase in the strength of the surface adhesives. This formula is an industry first, and has been quickly embraced by racing enthusiasts who understand the need for a sturdy 'carcass' (body of a tire) and 'squirm' (movement of a tire between the ground and the wheel). The outcome is a tire that is revved for resiliency and longevity, and can withstand the rigors of the remote control circuit.

Need help determining the right bearing for your specific application?

Visit www.tstar.com/machinedesign and ask our experts!

We're ready to put our engineering expertise to work for you from prototype to production.

Engineering | Custom Fabrication | Manufacturing



CJ Composite

- Self-Lubricating
- Low weight | High Strength
- Chemical Resistance
- Direct replacement for Bronze



Ultracomp™

- Self-Lubricating
- High Load | Low Speed
- 54,400 PSI Compressive Strength
- Exceptional Resistance to Vibration and Impact



TriSteel™

- Self-Lubricating
- High Load | High Speed
- Metal Backed Bearing System
- 100% Lead Free



Rulon®

- Self-Lubricating
- Low weight | High Strength
- Low Coefficient of Friction
- Chemically Resistant



TriStar



Engineered Plastic Solutions™

tstar.com

1.800.874.7827