

Composite Bearings Increase Material Handling Productivity



From dockside loading to final delivery, fork trucks play a critical role in the complex material handling supply chain. When one OEM experienced serious failure with their trucks' metal rolling bearings, they came to us for a composite plastic replacement – and gained an increase in bearing efficiency and lower maintenance costs along the way.

Lubrication is the number one cause of metal bearing failure, leading to uneven wear and poor operation. Our partner had metal bearings and greased steel wear pads installed throughout their mast assemblies, including the trunnion, guide pads and guide wheels. Over time, inconsistent maintenance of these hard-to-reach bearings had taken a toll. No lubrication caused the metal to seize and fail, and over lubrication created a lapping compound which attracted contaminants and abrasion.

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■ A partnership with TriStar gives you a competitive edge.



Ultracomp Bearings

Ultracomp composite plastic = no lubrication

Our team replaced the metal rolling bearings and guide wheels, split trunnion bearings and wear pads with [Ultracomp composite plastic](#). These greaseless bearings prompted an immediate savings in maintenance costs and eliminated the concern of over- or under-lubrication. Ultracomp is a versatile replacement material for both rolling element and lubricated split-hardened steel bearings.

Look to Ultracomp plastic composites for rugged material handling applications:

- **Compressive strength** – of over 54,000 psi enables fork trucks to lift and carry without failure
- **High-load capacity** – better load distribution leads to smooth operation to move more volume
- **Environmental resistance** – no grease means no worries about attracting grit and dirt
- **Vibration tolerance** – good resistance to shock means no more bearing misalignment or risk of separation

Do you have a rugged metal bearing application that could benefit from composite? [Our experts can help you source a cost-effective solution!](#)

1-800-TriStar [874-7827]

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



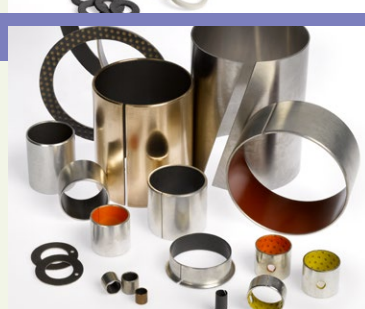
Ultracomp®

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



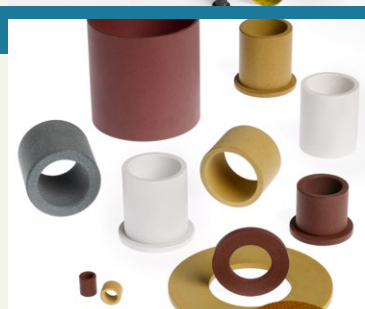
TriSteel™

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



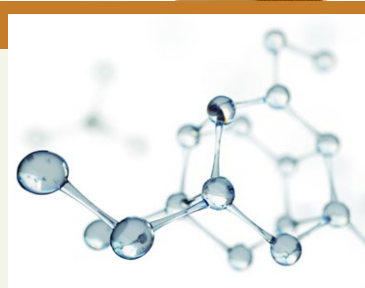
Rulon®

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



Enhanced Materials Division

- Plasma Surface Treatment
- Specialized Primers & Coatings
- Material ID & Selection
- Process Engineering | Analysis & Testing



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