

Aircraft Bearings: Polymer pivots, steers and lifts with better performance



History was made last month in the aviation industry as [Boeing delivered its 1,500th 747 aircraft](#) – the first wide-body airplane to reach this delivery milestone.

As a longtime provider of bearings for aircraft ranging from helicopters to [military jets](#) and even space components, TriStar shared in the marvel of the moment.

Aircraft bearings have strict requirements for quality and performance; they must tolerate massive fluctuations in temperatures, pressurized cabins, all-weather conditions, plus extreme loads. And polymer bearings are becoming the go-to material for lift, tilt and pivot points in the steering, fuselage, wings and other areas of commercial aircraft.

Unlike metal bearings, they provide self-lubricating service to save on greasing and maintenance costs.

■ A partnership with TriStar gives you a competitive edge.



Here's a sampling of some self-lubricating bearing aircraft applications:

Fuselage and pivot points

With excessive compressive strength of 54,000 PSI plus a unique geometry, [Ultracomp UC 200 bearings](#) are used in the joining fixtures for fuselage components, landing gears, gear doors, and high load pivot points used on these one of a kind assembly systems. [CJ bearings](#) are another popular choice to replace metal bearings on pivoting lift cylinders.

Steering gear of aircraft tug

All-weather and vibration-resistant, [TriSteel bearings](#) are an ideal replacement to improve the maneuverability of the steering gear of aircraft towing vehicles

Landing components with extended service

To extend service life beyond that of metal bearings, our engineering team designed [Rulon LR landing wear bands](#) for the oleo struts [hydraulic shock absorbers] of small aircraft. Rulon easily tolerates high side load and environmental exposure.

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



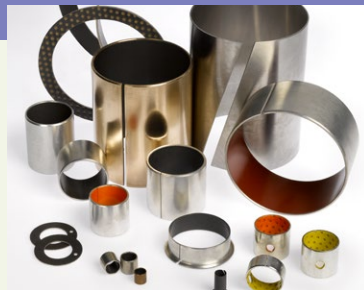
Ultracomp[®]

- 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



Engineered Plastic Solutions[™]

tstar.com

1.800.874.7827

©TriStar Plastics Corp. All rights reserved. Ultracomp is a registered trademark and TriSteel is a trademark of TriStar Plastics Corp. Rulon is a registered trademark of Saint-Gobain Performance Plastics Corporation.