

Plasma Treatment Prepares Catheters for Specialty Coatings

■ A partnership with TriStar gives you a competitive edge.



[At left] A surgeon inserts an angiography catheter in a patient.

[Above] A surgeon performing an endoscopic biopsy.

Catheters are flexible, hollow tubes used to create a channel for the passage of fluids from the body, or to create an entryway for the insertion of a medical device into the body. Catheters have become especially critical in the diagnosis and treatment of potentially fatal cardiac conditions.

With angiography, for instance, physicians can detect life-threatening abnormalities in the brain, heart, kidney, and other areas of the body. Here, a catheter is inserted into an artery through a small incision in the skin, where physicians can then insert imaging technology or contrast materials to view key blood vessels. Cardiologists also use specially designed balloon-tipped catheters to clear clogged arteries around the heart for the implantation of a stent.

But how do catheters — some measuring five feet long — manage to “slide” and thread throughout the narrow veins of the body with ease and flexibility?

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Plasma Treatment Improves Adherence

Our client needed to improve the flexibility of the catheters to “slide” easily through the narrow veins of the body. By incorporating [plasma treatment](#) “super-cleaning” of the polymers, we were able to improve the adherence of the lubricious coating. Plasma removed all traces of contaminants and provided a superior base for the secondary processing application.

Plasma cleaning has also been used with excellent results to pretreat and clean drainage tubes, endoscopes, and intraocular lenses.

Did you know that TriStar was a pioneer in treating medical PEEK and PVC materials? [Ask us how we've improved the “release” factor of time-release medications.](#) You might be surprised at how plasma surface treatment can improve the performance of plastics!

[Download our Surface Treatment technical paper to explore!](#)

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



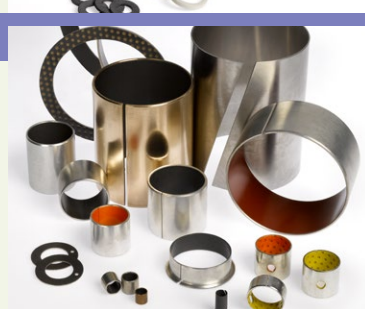
Ultracomp[®]

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



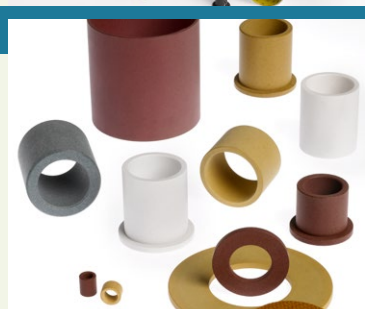
TriSteel[™]

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



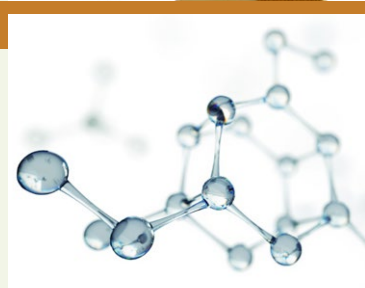
Rulon[®]

- 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



TriStar



Engineered Plastic Solutions[™]

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