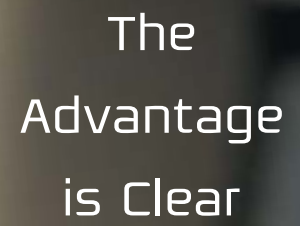


TriStar



Engineered Plastic Solutions™

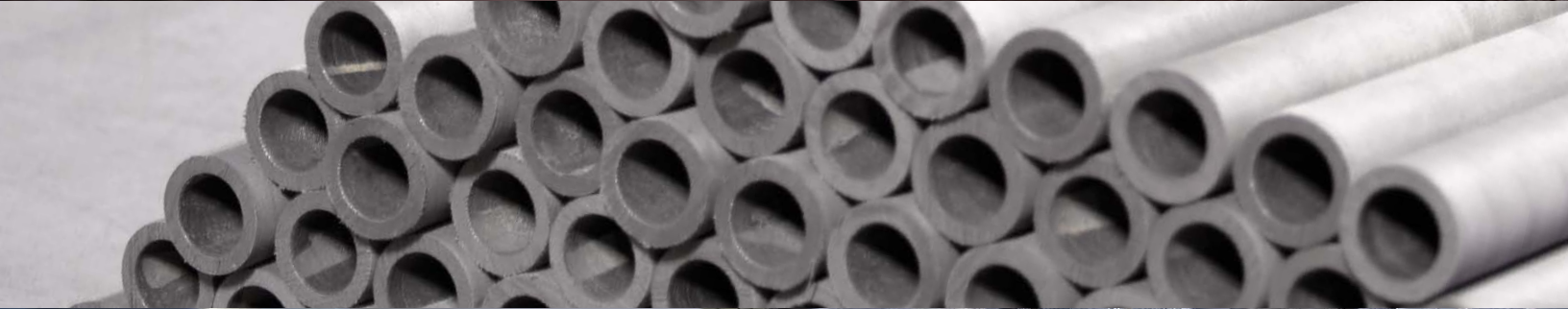
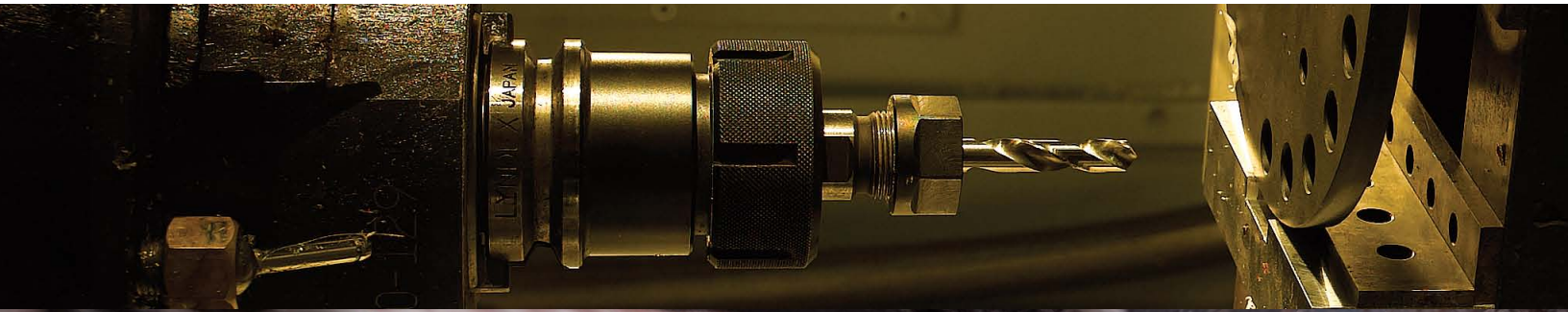


The
Advantage
is Clear



Engineering | Custom Fabrication | Manufacturing

The TriStar Advantage



Engineering | Custom Fabrication | Manufacturing



Our business has been designed by you.

Established in 1982, TriStar Plastics Corp. provides engineering, custom fabrication and manufacturing of high-performance polymers, composites and self-lubricating bearing materials.

With engineering and sales offices coast to coast we stand ready to serve you.



The TriStar Advantage is yours.

TriStar's commitment to exploring new materials for demanding environments has led to several patents and new, state-of-the-art solutions. With capabilities including design, product selection, prototyping, production, and surface modification, our in-house technical experts will help you find cost-effective, performance improving solutions for all of your engineering needs.

With a legacy of engineering expertise, design innovation, and in-house services, TriStar is a proud partner to over 50 industries, including railroad, marine, medical, military and agriculture. Our goal is to become your in-house plastics engineering department.

TriStar



Engineered Plastic Solutions™

Engineering

Our technical staff is dedicated to helping you choose the right material and component geometry for your application. Our clients benefit from our ongoing research of the latest products, as well as our design experience in thousands of applications for over 50 industries. ■ From our in-house engineers assisting you with any type of non-metallic application, to our Technical Director visiting your facility and conducting seminars to educate your staff on how and when to use plastics, our goal is clear: to become your in-house plastics engineering department. ■ Our team is committed to putting our knowledge to work for you.

Partnerships

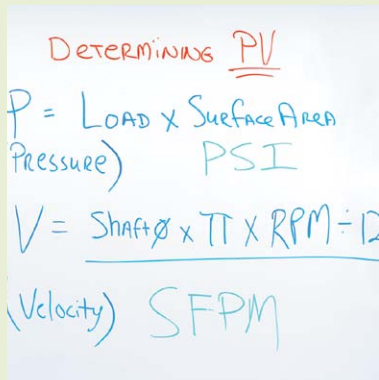
- In-house Engineering Team
- Materials Research
- CAD/CAM Services

Education

- Material Selection
- Component Geometry
- Calculating PV

Seminars

- High Performance Materials
- Plane Bearing Technology
- Surface Modification

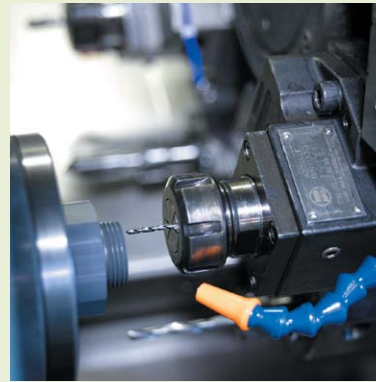




At TriStar,
we are experts
at machining plastics.

Fabrication

Our state-of-the-art fabrication facility features the latest in CNC machines – from small diameter screw machines to large diameter CNC turning centers and large capacity CNC milling centers. All of our machinists and quality control technicians are highly trained in the art of machining plastics, making sure your parts are right the first time, every time. ■ By working as a team, our manufacturing engineers and machinists design the right tools for every job. We also fabricate all fixtures and tooling in-house to assure quality and to minimize lead-time. ■ At TriStar we are experts in machining plastics.



CNC Turning

- Live Mill Head Attachments
- 6-Axis
- Chucking Capacity up to 21"

CNC Milling

- Up to 36" x 81" Travel
- Rapid Tool Change
- CAD/CAM

Custom Fabrication

- Design Assistance
- Prototype
- Only Machine Plastics

Manufacturing

Manufacturing bearings and bearing materials allows us to offer custom blends and unique sizes that others simply can not. Producing our own raw materials in-house enables us to implement your designs on time and on budget giving you a strategic advantage over your competitors. ■ TriStar manufacturing standards are designed to exceed your requirements.

Prototypes

- Engineering Design Assistance
- Material Selection
- Rapid Prototype Service


Production

- Prototype to Production
- Precision Workmanship
- Rigid Quality Control

Manufacturing

- CJ – Composite Journal Bearings
- Ultracomp® – Self-lubricating Bearings
- TriSteel™ – Metal-Backed Bearing System





**TriStar
manufacturing**

standards are
designed to exceed
your requirements.

Our engineering

team can help you

choose the right

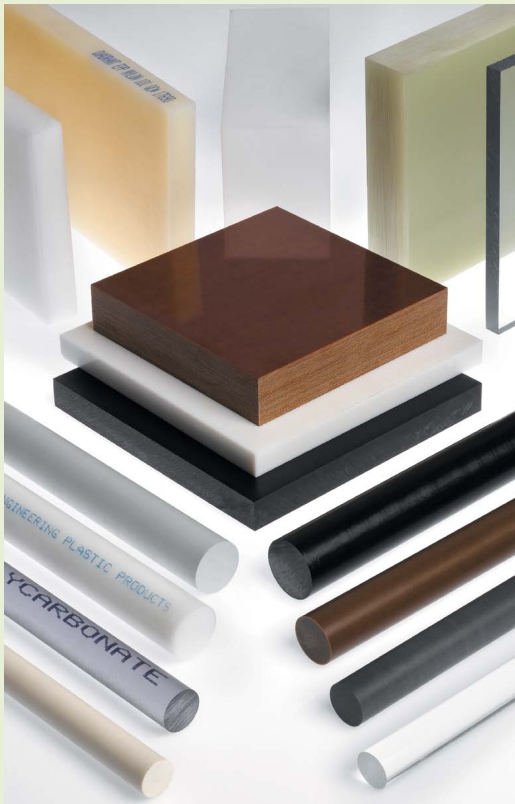
material for your

application



Materials

We can assist in your design, selection, and supply of high performance plastic materials, either through TriStar's educational seminars at your facility, our extensive material database accessible on-line at tstar.com, or a phone conference. ■ You can also visit our interactive on-line Material Selection Process [MSP] at tstar.com/msp. This on-line process gathers all of your material needs information and e-mails a snapshot to our engineering team so we may assist you in your material selection. ■ At TriStar, our highly experienced engineering team can help you choose the right material for your application.



Engineered Materials

- High Temperature
- Chemically Resistant
- FDA Compliance

Rulon® Materials

- Wear Resistance
- Low Friction
- Maintenance-Free

Rulon® Standard Bearings

- Self-Lubricating
- Standard and Custom Sizes
- Wash-Down – Caustic Resistant

Rulon® is a registered trademark of Saint-Gobain Performance Plastics Corporation

Bearings

Advances in plastics technology that better utilize the strength, wear resistance and self-lubricating features of advanced polymers give engineers and end users a simple, reliable and economical alternative to rolling element bearings. ■ **Ultracomp®**, **TriSteel™** and **CJ Composite** bearings are ideal for non-lubricated, high-load applications in a variety of operating environments. ■ Visit our interactive on-line Plane Bearing Design Worksheet [PBD] at tstar.com/pbd. This on-line process gathers all of the information regarding your bearing application and e-mails a snapshot to our engineering team so we may assist you in your bearing material selection. Let our engineering team assist you in choosing the right bearing material for your application.

Ultracomp®

- High Load and Vibration
- 54,400 PSI Compressive Strength
- Multi-Surface Bearing



TriSteel™

- Metal-Backed System
- High Loads – High Speeds
- Self-Lubricating



CJ Bearings

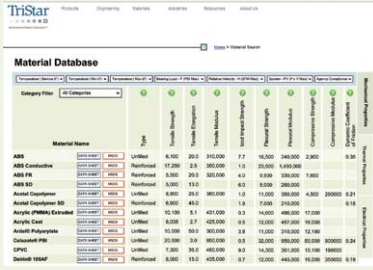
- Low Weight – High Strength
- Chemical Resistance
- High Load – High Shock





**Visit our
interactive**

on-line Plane Bearing
Design worksheet at
tstar.com/pbd.



Material Data

Our Material Database offers you the ability to instantly filter and compare thousands of the most popular high performance plastics in the industry based on your specific characteristics.

Filter, compare and call our engineering team to help you choose the right material and component geometry for your application.



Educational Seminars

We offer a series of Training Seminars on a variety of subjects relative to materials, component design and applications.

Custom seminars are available for your specific industry. Contact TriStar's technical department for more information.

High Performance Materials	Pushing the Design Envelope of Plastics
Plane Bearing Technology	The Application of Self Lubricating Materials in Bearings
Composites	Materials for Extreme Bearing and Structural Applications
Fluoropolymers	Specific Overview of Fluoropolymers and Their Applications



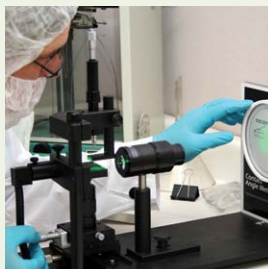
Surface Modification

From enhancing cell culture trays to bonding dissimilar materials, the scientists at TriStar's Surface Modification Division (SMD) can assist you in identifying problems and recommending solutions for your toughest surface issues.

Our expert technicians apply unique, dry, and environmentally-friendly techniques to modify the surface of polymers, elastomers, and films in order to dramatically increase (or, if desired, to decrease) the bond strength of adhesives, paint, markings, or specialty coatings.

Our services include:

- Surface Treatments
- Plasma Contract Services
- Custom Adhesive and Specialty Chemicals



Analytical Services

We offer a complete array of surface analysis and materials characterization solutions by providing services that help companies get the critical information they need.

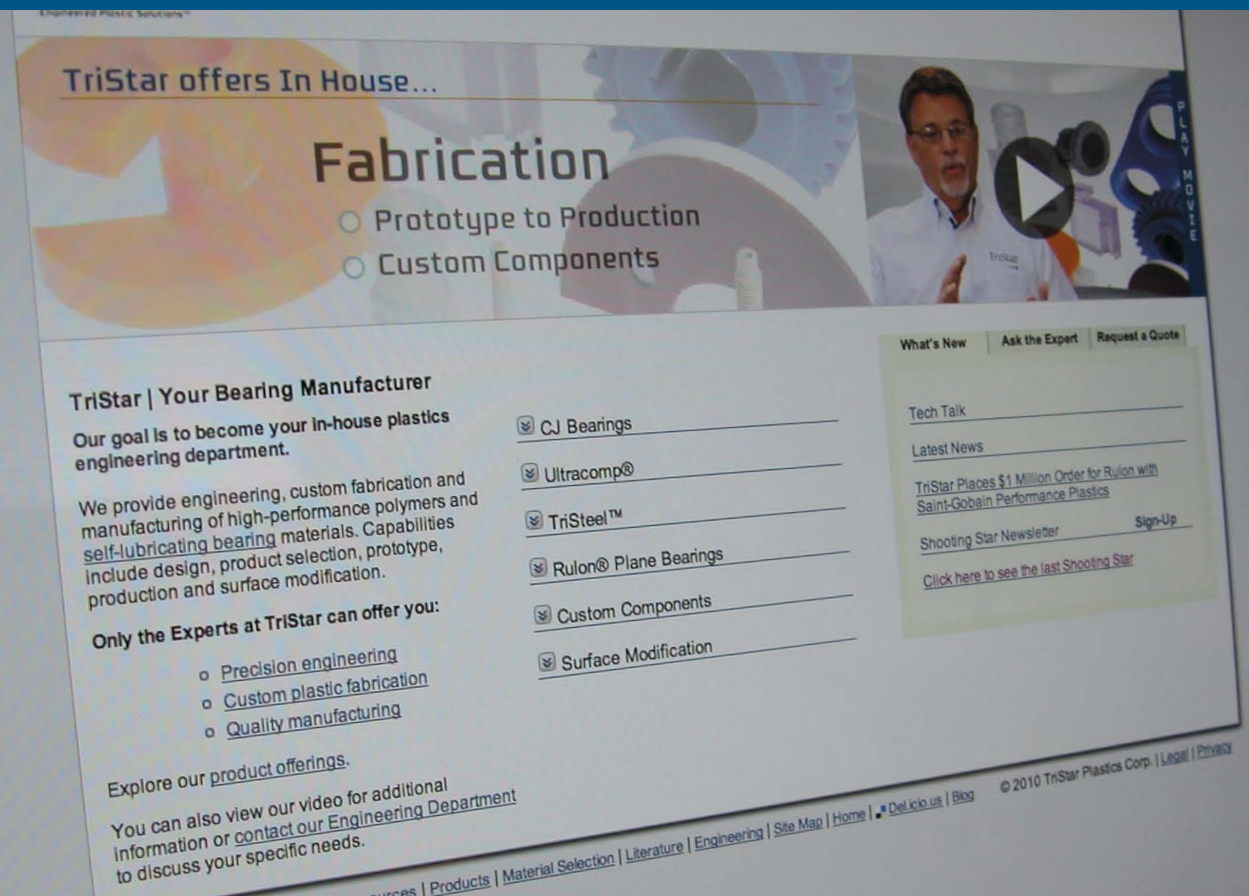
Our analytical techniques include:

- FTIR
- XPS
- AFM
- Goniometry
- Durometer (shore A shore D)
- Haze, Transmittance, Clarity (mainly transparent materials)
- Tensile Pull Testing (shear and T-peel)
- Compression Testing
- Flexural Testing

Over 50 Industries Served | tstar.com/50-industries

Since 1982 TriStar has been the in-house engineering resource providing engineering, design assistance, prototyping, custom fabrication, and manufacturing in over 50 industries including:

- Agriculture
- Construction
- Food
- Marine
- Medical
- Railroad



Your on-line Advantage | tstar.com

Our site has been praised by engineers and purchasing agents alike. We continually strive to make this site an indispensable engineering resource for your company.

- Engineering Tools
- Material Database
- On-line Brochures
- Tech Talk Blog
- Ask The Expert
- Product Videos

With our in-house technical and scientific staff we can resolve any challenge and help you find the right engineered plastic solution.

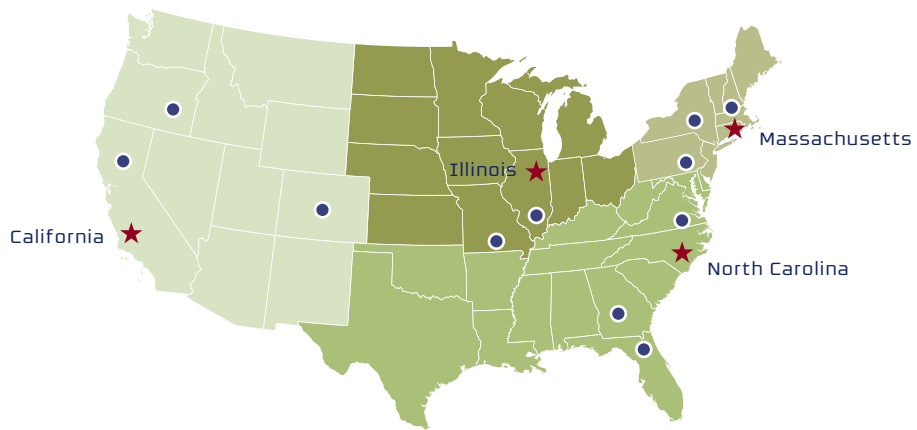
tstar.com

TriStar



Engineered Plastic Solutions™

The Advantage is closer than you think.




tstar.com 1.800.874.7827


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PERFORMANCE PLASTICS

Exclusive Rulon Partner



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