# Transportation Components



Specialists in precision molding of high-performance bearing-grade plastics in high volumes

When friction, sealing, dimensional stability and wear are crucial, rely on us. We'll deliver the high-performance seals, thrust washers, and other critical-to-function components your system needs to run smoothly and efficiently.

Precision
Plastic Seals

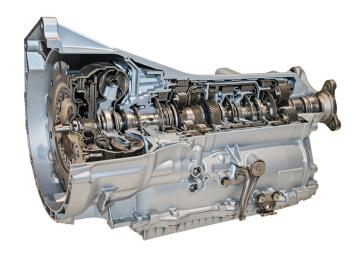


Thrust/Wear Components



Complex Geometries





Our experienced team of engineers and technicians will work closely with you to design, test and manufacture the tight-tolerance parts for your transmission, clutch and powertrain applications. And we'll do it with exceptional consistency – zero PPM – in high volumes at our state-of-the-art facilities.

We already produce more than 80 million precision plastic seals alone for the world's top transportation companies and original equipment manufacturers.





## Depend on us to meet demanding requirements in high volumes



### **Comprehensive facilities** and integrated capabilities:

- · Injection molding of engineered and high-performance plastics
- · Custom designed seal geometries
- · Metal to plastic conversions
- · High-performance bonding metal to plastic, metal to rubber, plastic to plastics and plastic to rubber
- · Custom material formulation
- · Insert molding

### **Superior engineering** and technical expertise:

- · Preliminary engineering assistance and mechanical design review
- · Mold design and development with complete prototype services
- · Design for Manufacturability (DFM)
- · Process engineering, including mold flow analysis, functional testing and leak testing
- · Non-linear FEA
- · Materials engineering, including specialty compounds

#### Robust quality and processes:

- · Global IATF Certification
- · Environmental Management System registered to the International Standards Organization series ISO-14001
- · Mature Lean Six Sigma program
- · Class 10,000 (ISO 7) and Class 100,000 (ISO 8) clean rooms

#### Contact us to learn more today!

**Minnesota Rubber & Plastics** 1100 Xenium Lane N Minneapolis, MN 55441

USA: 1 (800) 927-1422 Asia: +86-512 6273 2700 Europe: +33 (0)2 32 22 24 26



@mnrubber

in minnesota-rubber-and-plastics



For more than 70 years. Minnesota **Rubber & Plastics has helped** world-class organizations solve the most difficult sealing and component challenges.

We develop highly engineered, critical-to-function custom molded solutions for the Medical, Transportation, Water, and Food & Beverage markets.

We can support our customers wherever they do business - and our global footprint spans North America, Europe and Asia.

