

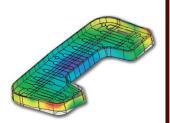
Defense & Aerospace Division











Plastic Innovations

for Defense and Aerospace

Our Vision

RTP Company will use our sixty plus years of **independence** and **technology** in thermosets and engineering thermoplastics to be a materials leader in the defense and aerospace industries. We will accomplish this by forming strategic relationships with defense and aerospace OEMs, processors, and engineering materials suppliers worldwide. We will address these industries long (and short) term initiatives using RTP Company's engineering resources and materials technologies.

RTP Company Technologies

Long Fiber Compounds

- Replace metal and consolidate parts using strong, lightweight materials
- Increased impact strength and flexural modulus compared to other plastics
- Superior stiffness, toughness, dimensional stability, creep and fatigue performance over short fiber reinforced thermoplastics

Density Reduction Technology

- · Glass bubble compounds reduce weight while maintaining good surface appearance
- Foaming concentrates allow weight reductions of up to 20%

EMI/RFI Shielding

- · Inherent EMI shielding technology
- Eliminates need for expensive secondary coatings
- · Helps minimize weight
- · Allows complex contours, part consolidation, and fastening options

High Gravity Compounds

- Custom formulated with densities of 2.0 to 11.0 g/cm³
- · Environmentally friendly alternative to lead
- · Perceived value of metal without machining
- · Corrosion resistant
- · Extremely tight density control



Defense & Aerospace Division

RTP Company

580 E. Front Street Winona, MN 55987 Tel: (800) 433-4787 (507) 454-6900

Manufacturing Facilities:

Winona, MN
Sauk Rapids, MN
South Boston, VA
Fort Worth, TX
Indianapolis, IN
Monterrey, Mexico
Beaune, France
Ladenburg, Germany
Singapore
Suzhou, China
Shenzhen, China





FAR Burn Testing

EU Directives

RoHs Compliant

Industry Initiatives (Aerospace)

- · Weight-Out
- Metal-to-Plastic Conversion
- · High Modulus/Shear Strength Materials
- Custom Colored, High Temperature, OSU Materials (FAR 25.853)
- Lightning Strike
- ECO/Green Initiatives/Zero-Landfill

Applications (Aerospace)

- Interior Components (Seating, Air Handling, Brackets, Fasteners)
- Exterior Components (Doorframes, Covers, Access Panels)
- Engine Components (Nacelles)

Industry Initiatives (Defense)

- Weight-Out
- · Metal-to-Plastic Conversion & Part Consolidation
- · ECO/Green Initiatives/Lead Replacement

Applications (Defense)

- · Mil-Spec Lightweight Fasteners
- Radomes
- UAV/RPA/UCAV
- Electronic Housings
- Training Targets
- · Gun Stocks
- Munitions

RTP Company R&D Capabilities

- · 30+ Development Engineers located around the world
- · Wide range of technical backgrounds including four Ph.D's
- · Easily accessible to the customer and quick response time
- Dedicated R&D facility allows quick scale-up from research to production

RTP Company CAE Capabilities

- Extensive CAE capabilities including Moldflow® Plastics Insight & NEiNASTRAN®
- · Over 50 years of combined technical experience
- Extensive understanding of how fiber orientation affects molding and mechanical performance
- · Ability to provide data to customers for Moldflow or Structural analysis

Why RTP Company

RTP Company's Defense and Aerospace Division is the only independent materials company with focus on new and unique materials and process solutions for defense and aerospace industries.



RTP Company • 580 East Front Street • Winona, Minnesota 55987 www.rtpcompany.com