General Plastics Manufacturing Co. manufactures and supplies its signature LAST-A-FOAM® rigid and flexible polyurethane foam sheet stock, composite assemblies and finished custom parts for commercial, military and composite-manufacturing companies. We’re privileged to support engineers and design teams in these dynamic industries, providing top-quality, high-performance products, parts and service. General Plastics, a small business enterprise, is based in Tacoma, WA.

WHERE GREAT IDEAS TAKE SHAPE

Core Competencies:

- Rigid and flexible polyurethane foam manufacturing
- Machined parts and complex laminates
- Custom-molded parts using rigid or flexible foam parts
- Custom services: thermoforming, vacuum-bagging, testing services, material formability, CNC-machining, and composite assemblies

Differentiators:

General Plastics Manufacturing Co. works closely with design engineers from OEMs, and Tier 1 and Tier 2 companies for unique chemistry-based solutions.

- On-site R&D chemists and engineers with decades of experience in plastics chemistry and development of advanced materials
- Over 75 years’ experience fabricating high-performance parts for major aerospace and defense companies
- Extensive quality assurance program satisfies aerospace industry regulations, Nuclear Regulatory Commission and U.S. Department of Defense
- On-site chemical and mechanical testing laboratories, including FAA-approved burn test facility

Specialized Material Qualifications/Capabilities:

- RF line of high temperature, non-dispersive polyurethane foams for radomes and other insulative applications
- Dielectric materials for tunable dielectric properties with low loss for antenna applications
- Class A, E-84 flame specification compliant HD foams for construction market
- FST-OSU compliant PU-based foam for aerospace application
Products At A Glance:

**RIGID FOAMS** - LAST-A-FOAM® closed-cell, rigid foam products are cost-effective, versatile, strong and durable. They are manufactured using our unique chemical formulas to be exceptionally uniform and consistent in all physical properties.

LAST-A-FOAM® RF-2200 - This series provides an RF-transparent protective layer for radomes and antenna applications requiring optimal performance of insulation materials and extended processing capabilities.

LAST-A-FOAM® R-3300 - Machinable, hydrostatic pressure-resistant foams provide buoyancy for underwater flotation to depths of 1,200 ft, (uncoated foam) offering outstanding resistance to penetration by water and other liquids.

LAST-A-FOAM® FR-3700 - This flame-retardant PU foam is tougher and less friable than the FR-6700 which enables cutting of crisp edges, making it well-suited to machining complex shapes for composite cores.

LAST-A-FOAM® FR-4300 - The FR-4300 foam series is ideal for composite panel cores and other structures where compound-curved surfaces or other details can be made with low-cost heat-forming methods.

LAST-A-FOAM® FR-4500 - This high-density, ready-to-use tooling board series is tough, grain-free and machinable.

LAST-A-FOAM® FR-4600 - This fine cell polyurethane foam is perfect for prototypes and models, 3D displays, and tooling.

LAST-A-FOAM® FR-4700 - The FR-4700 is a high temperature tooling foam that supports prepreg composite layup tooling for applications up to 400° F.

LAST-A-FOAM® FR-4800 - High temperature, low CTE tooling board that supports applications up to 480° F, and continuous use temperatures up to 400° F. CTE is similar to that of aluminum.

LAST-A-FOAM® FR-6700 - Flame-retardant, aerospace-grade rigid foam for aircraft composite core withstands process temperatures up to 275° F.

LAST-A-FOAM® FR-7100 - Economical, uniform foam that is easily finished or painted for low-cost core applications, hand-carved models, prototypes, CNC-machined topographical maps, composite layup tools below 200°F and industrial patterns.

LAST-A-FOAM® R-9300 - Designed to support structural loads while insulating buildings, this product is provided in a high-density rigid cellular polyurethane block forms.

LAST-A-FOAM® TR-Marine - Our marine foam enables boat designers to replace wood components with a top-quality, non-decaying product fully compatible with fiberglass-laminating production methods.

**FLEXIBLE FOAM – SHEET STOCK** - Our open-cell, flexible polyurethane foams satisfy applications where energy absorption, fire retardancy, appearance and versatility are important. Available in multiple densities, these foams deliver efficiency while absorbing energy at a consistent, controlled rate.

LAST-A-FOAM® EF-4000 - This low density foam series is formulated to absorb significant energy while protecting payloads, such as missiles and nuclear submarine launch tubes.

LAST-A-FOAM® TF-5070 - The TF-5070 is highly resilient and offers comparable properties to the TF-6070 Series, except that it is flame-retardant, and a slightly higher foam density would be needed under equal circumstances.

LAST-A-FOAM® TF-6070 - Non flame-retardant, highly resilient foam designed for shock isolation of heavy objects when the supporting foam will be under long-term static stress.

LAST-A-FOAM® FP-8000 - These flame-resistant foams are ideal for use as lateral shock-isolation system due to its outstanding hysteresis combined with quick recovery.

Foam Comb Foam-Filled Honeycomb - The Foam Comb is a lightweight, multi-purpose urethane seal and filler used within the aerospace industry. It consists of a combination of flexible-foam and Nomex® honeycomb material.

**FLEXIBLE FOAMS - PARTS PROGRAM** - General Plastics’ flexible, self-skinning (also known as integral-skin) foams are flame-retardant, self-extinguishing, and can be custom-molded to customers’ specifications.

LAST-A-FOAM® WSF-1010 - This flame-retardant, durable, self-skinning foam is used extensively in aircraft flight decks and cabin applications. The LAST-A-FOAM® WSF-1010 Series is soft and pliable which makes it ideal for interior gap seals where aesthetics are important. This material is self-extinguishing and can be custom-molded to each client’s exacting specifications.

LAST-A-FOAM® WSF-1121 -Similar to WSF-1010, this series is also flame-retardant, durable, self-skinning foam but it is harder and more durable. It is used by aerospace manufacturers for molded and fabricated flight-deck padding and aircraft interior parts. It is self-extinguishing and can be custom-molded to specifications.