PRODUCTION SERVICES
WHERE GREAT IDEAS TAKE SHAPE

www.generalplastics.com
General Plastics Manufacturing Company does far more than merely produce LAST-A-FOAM® rigid and flexible polyurethane foam sheet stock to OEMs and Tier 1 and Tier 2 companies. We also machine, fabricate and construct foam parts and assemblies to exacting customer specifications for diverse commercial, industrial, military and composite-manufacturing applications.

In-house fabrication services span full pattern-to-print production, CNC machining, thermoforming, complex laminating, molding, assembly, tooling and more.

Our production services team is also proficient in painting, adhesive bonding, potting and resin-infusion processes.

- Machined Parts
- Molded Parts
- Complex Laminates
- Custom Services
- Sheet Stock

The people of General Plastics stand behind our LAST-A-FOAM® materials and fabricated parts, ensuring unmatched performance and long-lasting value in any application. Earning your long-term trust drives everything we do:

- Supplying materials and parts of the highest quality and uniformity.
- Developing novel products and cost-effective approaches.
- Ensuring on-time delivery – and delivering exactly what we promise.

We're not just the premier high-density foam producer. **We’re also your partner** for custom machined and fabricated parts and assemblies.
MOLDED PARTS

General Plastics fabricates and machines custom-molded parts to customer specifications using high-density flexible and semi-rigid polyurethane LAST-A-FOAM® materials. Look to our unique foam formulations and proven pattern-to-print capabilities to satisfy your most demanding production requirements. Our high-capacity production facilities enable us to scale production to project needs – from a small, short-term run of specialty parts to an extensive, ongoing OEM parts program.

General Plastics Manufacturing Company is ideally qualified and equipped to manage all aspects of a molded foam part program. As your production partner, our seasoned estimators, CAD/CAM designers, procurement specialists, chemist and production staff will develop your custom program. Our team can support you with part, tool and mold manufacture, and production of parts through all phases to completion. When necessary, we will also custom-formulate appropriate foam systems to make just the part you need, with all the physical properties and other attributes you require.

We’ll recommend the optimal solution for density-to-part-weight control, void control, part consistency, surface quality and physical properties, all based on your specifications. Low scrap rates, competitive tooling costs and our collaborative approach make General Plastics a leader in molded part manufacturing.

In addition, count on us for any accessory items needed to complete your assembly: Metal brackets, clips, handles, other hardware, mounting fasteners, etc. We manufacture composite-laminate backing structures to provide support for foam parts if needed. To further streamline processes, we can also manage procurement and incorporate these items into your project if you desire.

Custom molding, fabrication and assembly services include:

- Pattern making
- Mold development services
- Prototype design and manufacture
- Tooling
- CNC machining
- Thermoforming
- Painting
- Adhesive bonding
- Prepreg, potting and resin-infusion processes

Our molded-part capabilities and facilities include:

- Part/tool manufacture based on specifications
- Model-to-print and pattern-to-print services
- Mold tooling manufacture
- Foam formulation with full QA documentation
- Dedicated assembly room for engineered parts
- Segregated, controlled-access ITAR assembly room for military parts

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General Plastics’ production services include standard and custom complex laminates. We are proficient in working with complex laminating processes and materials used in many different parts and assemblies. We have created laminate parts for diverse military, commercial, industrial, aircraft and marine applications.

If a project requires a particular service or equipment beyond our in-house capabilities, we tap a trusted, qualified corps of specialty subcontractors to fulfill that requirement and keep your job on track. The complex laminate parts you receive are backed by our stringent quality assurance program.

Our complex laminate capabilities include:

- Supplying sheet metal parts
- Adhesive bonding
- Painting
- Thermoforming
- Resin-infusion of laminate
- Prepreg part manufacturing
- Specialty coating
- Surface-treatment services
- Detailed parts assembly

We go above and beyond to ensure all your project specifications are met and that your job stays on track.
General Plastics offers large-scale capacity for converting polyurethane foam materials and other nonmetallic substrates into production parts for OEMs and Tier 1 / Tier 2 manufacturers. We can also supply aluminum molds for producing flexible foam parts.

Our production facilities include multiple sizes of CNC machines, including a 5-axis machine, to provide you with maximum cost efficiency. We can accommodate small – to large – dimension projects, easy and complex designs, and scale from prototypes to a high-volume run.

Knowledgeable customer service, CAD/CAM and CNC teams are committed to ensuring your success from concept to product delivery. Our CNC programming supports nearly any data file format. No data file? We can work from an adequately dimensioned part drawing or reengineer it from a sample part.

General Plastics has extra-large routers for large projects and various CNC machines, including a 5-axis machine, for intricate details and production work. We’re also equipped with a variety of non-CNC cutting equipment that can accommodate entire foam blocks so we can manufacture large volumes of foam shapes at minimal cost. In short: If your machined project can be transported over the road, we have the capabilities and facilities to handle it.

Your parts program requires accuracy, prompt service, consistent quality and cost-efficiency. Our CNC-machining services deliver on all that – and more. Why waste money and time shipping foam sheet stock or blocks – at full rate – to a third party to machine and re-ship them as parts to you? Let us produce, bond to size, and machine the foam to your exact specifications. We’ll ship your CNC-machined parts ready-to-use in far less time – and at a fraction of the shipping costs.
Let us mold, machine, and bond to your exact specifications, saving you time and money on your finished parts.

CUSTOM SERVICES

At General Plastics, you’re not limited to one-size-fits-all standard board stock or foam blocks. We have the in-house capabilities to fulfill special orders – just ask! Whether that means a custom formulation, providing material in a specific size or shape, pouring in place, or delivering material already machined and bonded for your application, we’re at your service. As your partner, we can satisfy your most stringent requirements while reducing your production time, transportation costs and material waste.

Custom Formulations and Dimensions

We often provide custom formulations to satisfy the exacting specifications and quality assurance requirements of our customers in the aerospace, defense, and nuclear transportation containers industries. We’re committed to supporting your ITAR and other regulatory requirements.

Your custom formulation with specific dimension requirements can be delivered within 6-8 weeks. Our standard polyurethane foam block size varies by product series and densities. Visit our website for our standard sheet sizes. Depending on your formulation and quantity needs, we can produce foam blocks that eliminate waste and shrink your shipping expenses.

Tap our chemistry team to assist in matching your specific technical properties. We can also develop color formulations based on your aesthetic or inventory needs.

Custom Bonding and Sizes

For large tooling and mold projects, we can securely bond foam blocks together and CNC-machine them to the dimensions you need – or CNC our foam to your specifications, and then bond it. If we can ship it over the road, we can deliver it ready for your application – even oversized foam pieces or finished large projects.

Scoring, Sealing, Drilling and Special Shapes

Save steps, time and effort: We can pre-score your foam for easy bonding to composite materials such as fiberglass laminating resins.

Have our production pros do the sealing and priming before your project leaves our facility. Receive our products at your facility or job site precision-drilled to your drawings or template, ready to use or install.

Need a special shape? No problem. Our facility is outfitted with everything from extra-large routers to CNC vertical milling machines, plus a variety of non-CNC cutting equipment to shape your foam.

Pour-in-Place Mold Services

Save on material waste and shipping with our pour-in-place mold services. We can pour a standard or custom LAST-A-FOAM® formulation directly into your container and deliver the shapes and sizes you need.
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