YOUR GUIDE TO: WATERJET CUT FOAM & OTHER FOAM PRODUCTS

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Waterjet Cutting & Returnable Packaging

Amatech offers Waterjet Cutting of non-metallic materials such as XLPE foams and HDPE. It is accurate and consistent. Our waterjet foam cutter is computer-driven and is capable of producing intricate shapes and profiles. Waterjet cutters are extremely easy to set up and program. Efficient nesting software is used to maximize material yields which lowers cost. We can enable design changes to be made from prototypes to final products resulting in shorter lead times.

How Can Waterjet Cutting Benefit Your Customer?

- Precise cutting to meet specifications
- **e**
- Lower shipping and storage costs
- Compound angle cutting
- Shorter lead times
- Maximize yields
- 3-dimensional cutting abilities
- Produces no heat damage to workpiece
- Provides additional protection with shipping and storage
- Meticulous detail in design and implementation
- Highly effective in protecting parts in transit and storage for industries such as automotive
- Environmentally friendly



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FOAM OPTIONS

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Foam Rails in Tote

Foam Rails in Tote

This pack features our 5 axis waterjet cut rails from XLPE gray foam. These foam rails are glued to a plastic corrugated pad and inserted into a molded hand held tote.



Foam Kitting Pack

Foam Kitting Pack

This is a tote waterjet cut and glued together to create cells for multiple parts. This is commonly called a kitting pack. It can be inserted into a molded tote or polyurea coated for additional strength.



XLPE Foam Pads

XLPE Foam Pads

These are foam pads that have cavities in the top layer for part location. The layers of foam are PSA glued together and are available in common colors.



Foam in Plastic Corrugated Tray

Foam in PP Corr tray

This is a plastic corrugated tray with XLPE waterjet cut foam glued to hold trim parts for the automotive industry. This pack will fit into a bulk container and stack multiple layers.



PE Foam Endcap Set

PE Foam Endcap Set

This is a foam endcap set waterjet cut from PE foam. We can do many variations of endcaps to support and protect products being shipped.



Pads with Foam

Pads with Foam

We can produce pads with foam that are waterjet cut to fit many size totes and orientations of a product. We have the capability to tether top layers of dunnage so they do not get lost.





Foam Assembly in Bin

Foam Assembly in Bin

This foam assembly was designed to fit three layers into a tote/bin. The foam was waterjet cut so the automotive handles are packed, nested to maximum amount of parts in limited space.



Foam Assembly in Bin

Foam Rail Set in Bulk Container

This is a plastic corrugated pad with XLPE waterjet cut foam rails glued and specially designed to support Class A surface parts. We design and produce many variations of foam dunnage for containers.



Polyurea Coating On Foam

Polyurea Coating

We use Polyurea coating on foam packaging to create membranes on dunnage that protects your components. This is ideal for the products that require extra cushioning for a delicate, expensive product. We understand that our customer needs exceptional packaging so that products arrive as expected, right from one assembly line to the next. Polyurea provides impressive protection from water, scratches and a bumpy ride to its destination.



FOAM MATERIALS

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Foam Materials

Our foam materials can be sawcut, waterjet cut, and diecut to meet your needs.

Polyurethane Foam

Common Names: Polyurethane foam, Urethane foam, Polyether foam, Polyester foam

Description: Polyurethane foam is an open cell material that is primarily used to protect and support lighter weight, delicate products with high fragility. This foam provides excellent cushioning and can be fabricated to meet your specifications. Convoluted cut foam is also available in many sizes.
Uses: We use Polyurethane foam in expendable packaging (one time ship - not returnable) that utilize convoluted cut foam (egg crate), sawcut pads and blocks, and waterjet cut pads.
Physical Properties: Polyurethane foam comes in 2 primary types, polyether and polyester. Densities available are 1# up to 2# with differing ILD values. Thickness available can be from .25" thick up to 10" thick. Colors are Charcoal (gray) and Natural (White)

Foam Materials

Polyethylene (PE) Plank Foam

Common Names: PE Foam, PolyPlank, Polylam, PE Plank Description: Polyethylene (PE) Foam is a closed cell material that is easy to fabricate and is both resilient and non-abrasive. PE Foam can provide excellent shock and vibration protection during shipping.

Uses: Polyethylene (PE) Foam is used for packaging applications such as endcap sets for shipping packages, support and/or filler foam on returnable dunnage. We integrate PE foam into our divider and partition systems. We can also waterjet cut all PE foam to customize to our customers specifications.

Physical Properties: Polyethylene (PE) Plank foam is a closed cell, extruded material. Densities available are .9#, 1.2#, 1.7#, 2.2#, 4#, 6# and 9#. Standard thicknesses are 2" and 3" but can be custom cut down or heatwelded to any thickness needed.Common colors are Gray (.9# only), Green (1.2# only), Blue (1.7# only), White and Black. All PE plank standard size sheets are 24x108 & 48x108 OD.

Foam Materials

Crosslinked Polyethylene (XLPE)

Common Names: XLPE, Crosslink Foam, Crosslinked Polyethylene, Closed cell foam

Description: Crosslinked Polyethylene (XLPE) is a closed cell foam characterized by extremely small cells that give the material a smooth and soft feel and resistance to water. XLPE offers superior durability and top of the line Class A protection. EVA Ethyl Vinyl Acetate foams are available also.

Uses: We heavily use XLPE foam for many different applications to hold and protect parts from packing and shipping damage. We waterjet cut XLPE to custom form to parts that require class A surface protection for returnable packaging in multiple industries like Automotive, Appliance, and Medical.

Physical Properties: Crosslinked Polyethylene (XLPE) is a closed cell foam that is soft and moisture resistant. Densities available are 1.5#, 2#, 3#, 4#, 6#, 8#, and 9#. Standard

thicknesses are 2", 3", and 4" but can be custom cut down to any thickness needed. Common colors are Charcoal (Black), Gray, and White. Cutting tolerance is +/-.125"

