

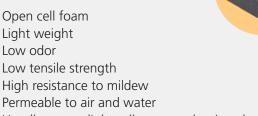
**CUSTOMER • HARDWARE • SOLUTIONS** 

Foam Fabrication

# **Foam Materials**

### **Polyether Polyurethane**

Usually cream, light yellow, or amber in color



# **Crosslink Polyethylene**

Micro-cell, closed cell foam Chemically stable Range of densities, able to support various weights Extremely smooth surface finish

#### **Reticulated Foam**

Acoustic or Filter Foam

Extremely open cell foam Highly porous and low density Energy and sound absorbent Vibration dampening Resistant to mildew Low thermal conductivity

#### **Expanded Polypropylene** & Expanded Polyethylene (EPP / EPE)

Closed cell bead foam Excellent energy absorption Impact, water, and chemical resistant Thermal insulation High strength to weight ratio Recyclable

#### **Fire Retardant Foam**

Chemically treated foam Slow burning or self-extinguishing



## **Polyester Polyurethane**

Open cell foam Low odor Light weight and exceptionally soft Excellent memory characteristics High tensile strength High resistance to mildew

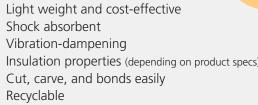
Uniform texture and density with no skin



# **Polyethylene Foam**

Permeable to air and water

Closed cell foam Insulation properties (depending on product specs)



#### **Anti-Static Foam**

Low range electrical resistance Usually pink in color Prevents and inhibits buildup of electro-static charges

# **Static Dissipative Foam**

Middle range electrical resistance Controlled transfer of static charges Offers great cushioning performance Permanent protection



#### **Conductive Foam**

Highest level of electrical resistance Excellent EMI shielding Ability to drain away electronic currents instantly



# **Capabilities**



### **Converting and Slitting**

Our horizontal bun cutter can accurately split soft polyurethane, elastomeric foams and gasket. Our Skiving saws do the same for the rigid polyethylene and crosslinked polyethylene up to 6 lbs/cubic foot densities.

These are computer controlled for repeatable precision and accuracy.

# Skiving



Used for horizontal cutting of hard foams up to 67" wide, 8" high, and any length. Our Skiving machine is computer controlled for accurate cutting.

# **Gluing and Assembly**

Adhesives are selected based upon material, bond, and planning assembly. Pressure-sensitive adhesives (PSA) are employed, hot melt glue as a spray, roller, and handgun application, heat welding for larger surfaces, and hot air welding for smaller areas.

### **CNC Routing**

The 3-axis CNC router is a high speed, large bed machine capable of accommodating most sheet materials. It includes a 7-station tool changer and an automatic measuring system. The tool changer minimizes setup and processing time. With the 18HP vacuum holding, materials are kept in place. The 12HP spindle drive can handle large diameter tool bits, reducing the tool paths and overall machine time.



### **Die Cutting**

Provides fast, simple and high-volume fabrication method to cut sheet stock. By adjusting the die and sheet thickness, a variety of shapes can be achieved. Foam is compression cut by driving the dies through.

Die cutting delivers one of the lowest cost methods with consistent quality.

# Convoluting

Our custom built convoluting horizontal saw transforms soft foam stock into "egg-crate" shapes.
Lightweight and flexible, the peaks and valleys created reduces the cushioning pressure, making it an ideal, cost-effective packaging solution.

# **Strip and Block Fabrication**

For simple geometric shape blocks, we use an arsenal of dedicated foam band-saws for quick and accurate cutting. Able to handle large stock to cut precise dimensions or angles and bevels with our tilting saw.



# **Applications & Services**



#### **Automotive**

Construction

**Electronics** 

**Industrial** 

**Medical & Dental** 

Military & Defense

**Retail & Consumer** 

**Sport & Leisure** 



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- Electromechanical Hardware
- Foam Fabrication

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