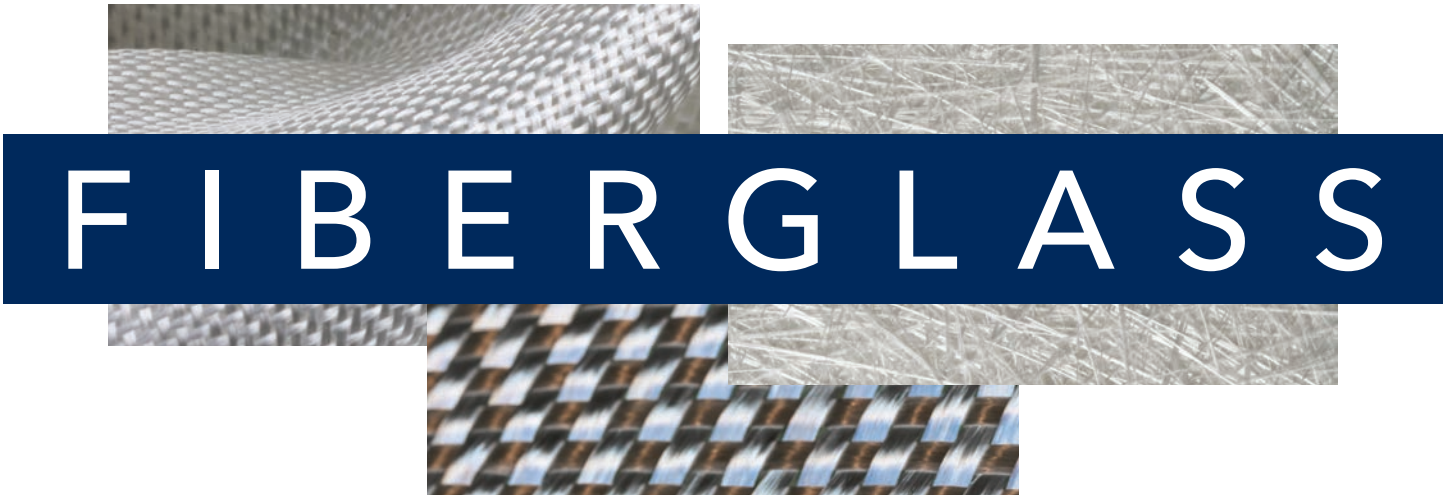
FIBERGLASS

Cut by an Eastman.

EASTMANCUTS.COM

Eastman®



FIBERGLASS

Manufacturers design with glass fiber reinforcements because it is light weight, low cost and provides high strength and chemical resistance for a variety of products.

Automated cutting of woven, stitched or bonded reinforcements saves time while minimizing labor, human error, and material waste.

Eastman automated systems are engineered in tandem with industry leaders who demand a reliable and repeated solution for single-to-low ply cutting of dry and prepreg glass reinforcements.

Eastman is committed to manufacturing industrial solutions proven to be simpler to operate, less expensive to maintain and customized specific to cutting and handling glass, carbon and aramid reinforcement fibers.

REDUCED LABOR | INCREASED QUALITY | IMPROVED MATERIAL UTILIZATION

Single to Low-Ply Cutting*

Eastman's automated single-to-low ply systems, the C125 conveyor and S125 static table, are engineered to suit virtually any flexible technical or industrial fabric at true operational speeds reaching 60 inches (152.4 cm) per second**.

CUTTING SURFACE

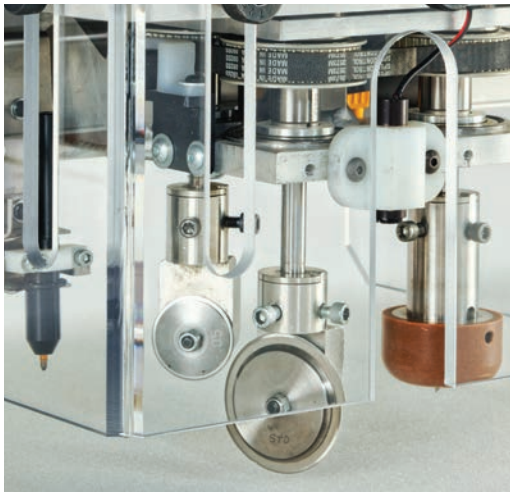
The conveyor cutting surface is a smooth, durable, high-durometer cast urethane conveyor belt that is easy to clean. It has proven reliable for up to 2,000+ hours of normal operation, with some customers testifying to more than four years of continuous use. Millions of holes are perforated in a random pattern, providing evenly dispersed vacuum flow. The static table features porous plastic, allowing the airflow to spread evenly to achieve maximum hold down during cutting.

Basic Specifications | C125 Conveyor System & S125 Static Table◊

Widths	Lengths
54 in. (1.37m)◊◊	8 ft. (2.44m)
60 in. (1.52m)	12 ft. (3.66m)
72 in. (1.83m)	16 ft. (4.88m)
78 in. (1.98m)	20 ft. (6.10m)
84 in. (2.13m)	24 ft. (7.32m)
108 in. (2.74m)	Additional lengths available
Additional widths available	

Speed Data - Maximum Levels	
Cutting & X/Y	60 in./sec. (152.4cm/sec.)
Acceleration	1.3 g
Conveyor	11 in./sec. (28 cm/sec.)
Environmental	
Compressed Air Consumption	15 CFM
Sound Level	<76 dB(A)
Operating Temperature	55 – 100°F (12-37 C)
Humidity	20 – 80% (non-condensing)

Fiber Orientation	Unidirectional, Bidirectional, Multiaxial, Custom
Construction	Woven, Stitched, Chopped Strand Mat, Preimpregnated, Coated



VERSATILE TOOL HEAD

The Eastman tool head is powered by its own brushless servo motor and independently controlled air supply. It comes equipped with two or three tool spindles, chosen from a vast catalog of over 60 inserts, allowing for an uninterrupted cut file. The ability to use any combination of tools increases production, flexibility, and minimizes downtime.

CASE STUDY | Throughput & Production Volume of Fiberglass

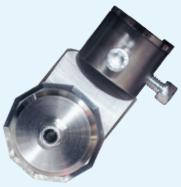
Four-ply - 1.8 ton/hour
Two-ply - 1.0 ton/hour
One-ply - 0.60 ton/hour
One-ply with marking - 0.45 ton/hour

*The number of plies is dependent on material, weave, density and thickness.
**Achievable speeds and accelerations are tool, material and thickness dependent. All indicated speeds, dimensions, weights and performance data are approximate and subject to change without notice.
◊Please contact the factory for active cutting zone dimensions. Custom widths and lengths available.
◊◊Static table only.

OUR EXPERTISE KNOWS NO BOUNDS.

Precision Tools & Blades

Compared to a reciprocating blade, the highlighted tools provide a cleaner quality of edge, minimizing fiberglass fragments. They're non-motorized, inexpensive, consumable blades with minimal maintenance. Blade exposure and pressure will vary based on material properties.

Round Knife	10-Sided Blade	Drag Knife
		
• Blade is designed to easily crush and break material containing glass fibers • Increased cutting pressure can extend blade life	• Engineered to cut through advanced textiles, like stitched fiberglass • Increased cutting pressure can extend blade life	• Optimal for small, intricate cuts • Can be used in combination with other knives for externals or larger panels
Materials		
Woven technical textiles, chop mat, carbon, glass and other dry reinforcements	Woven technical textiles, chop mat, carbon, glass and other dry reinforcements	Reinforcements impregnated with various resin systems or dry aramid
Specifications		
0.71 in. (18mm) 1.00 in. (28mm) 2.00 in. (45mm) 2.36 in. (60mm) 3.00 in. (75mm)	1.25 in (32mm)	30° 45° 55°
Blade Material		
Tool Steel	Tool Steel	Tungsten Carbide Steel
Options		
Depth Limiters Carbide Steel Blade	Depth Limiters	UHMD Coating Roller-ball Assembly
C125 & S125 Compatibility		
✔	✔	✔

Multi-Ply Cutting TALON

The Eastman Talon system is engineered to automatically pull stacked material plies from the spreading table to a modular, bristle-block conveyor bed for reciprocating knife cutting of patterns. Precise system operations with state-of-the-art motion control communications offer an industrial-strength solution.

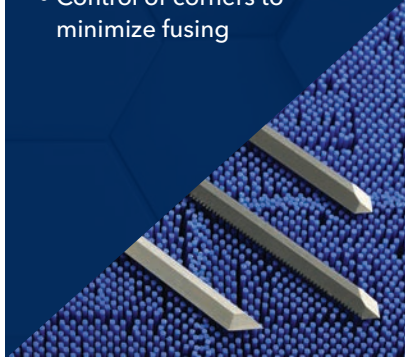
CUTTING CAPACITY

1.18 in. (3 cm) or 3 in. (7.5cm) of compressed material goods*

*material dependent

TOOL HEAD

- Reciprocating straight knife
- Precision knife control software ensures quality cuts from top to bottom ply
- Several tool options, serrated blade recommended for glass reinforcements
- Typically uses plastic film overlay and paper underlay for cutting
- Single coated diamond disc provides the perfect cutting edge
- High-speed-single or dual pneumatic drills
- Internal crank cooling system reduces heat and wear/tear
- Easy access to knife system and assembly parts simplifies daily maintenance procedures
- Direct drive knife system for fewer moving parts and less wear and tear
- Blade wear monitor
- Control of corners to minimize fusing



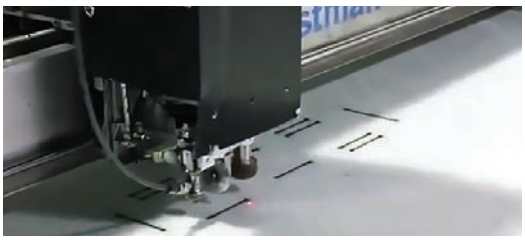
This is your Eastman.

A variety of optional accessory equipment offers maximum adaptability for any Eastman system, providing additional tools to streamline associated processes in your operations. Matched to specific customer needs, Eastman has a solution for nearly every cutting requirement.

Specialized solutions for:

- Marking and labeling pattern pieces
- Lofted materials
- Thick or rigid materials
- Sealed edges
- Angled cuts
- Custom machine widths and lengths

MARKING & LABELING



Eastman's various JetPRO inkjet systems are Drop-on-Demand (DOD) printers which convert TEXT entities from a drawing file and prints them directly with the printing head mounted on the cutting gantry. The result is very fast throughput compared to traditional pen or airbrush.

Eastman's exclusive EasiMark® airbrush marking system is also available. The airbrush technique provides identification for parts, sewing, seam allowances, etc. The airbrush ink is offered in permanent and washable ink.

REWINDERS

Manage long cut pieces with ease and minimize labor by streamlining your material handling operations after cutting. Eastman rewinder nodes work in synchronization with the conveyor cutting system to roll up cut pieces onto a core as they convey off of the cutter. Waste material continues to move along the system or drop into a collection bin. The rewinders are particularly useful when cut parts exceed the table length and become difficult for operators to collect manually.

SOFTWARE

The brain of the cutting system is Eastman's Windows based cutPRO software. Eastman's copyrighted, user-friendly, software allows real time viewing of the tool path during the entire cutting phase. The software is easy to configure and calibrate making for efficient operation and higher uptime. Additional design and nesting software is available.

FEEDING SYSTEMS

Introduce rolled fabrics to the cutting table in a relaxed or tensionless state with precise edge control. A full range of options in a variety of widths for numerous roll capacity specifications, Eastman manufactures in tandem with industry requirements to ensure streamlined, accurate and controlled material feeding enters the machine.

INTERNATIONAL COMPLIANCE RATINGS

The operating computer, and control cabinet are housed in independent enclosures that are sealed to offer dust and water resistant protection in harsh or high particulate environments. Additionally, cabling connectors, servo motors and display components meet recognized international protection rating requirements for the composites industry.

ISO 9001 CERTIFIED | MADE IN USA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About Eastman

One hundred thirty years ago, Eastman introduced the world's first electric cloth cutting machine, revolutionizing the textile industry in the process. Today, we continue to deliver engineering based cutting innovations that make real differences to our clients' productivity. As a fifth generation, family-operated business devoted to excellence, our promise is to craft reliable, quality, American-made solutions. In other words, your Eastman product is guaranteed to meet your precise production requirements.

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