

YOUR TOP-TO-BOTTOM SOLUTION



Precise system operations, driven by state-of-the-art motion control communications combine to offer an industry-leading solution for medium- to high-ply cutting of flexible

material goods. Eastman's Multi-Ply Cutting (MPC) models have been uniquely crafted to automatically pull stacked material plies from the spreading table to a modular, bristle-block conveyor bed for reciprocating knife cutting of patterns.

Eastman's exclusive Intellicut™ knife control software increases the accuracy and integrity of the cut from top to bottom ply. High-strength "take-off fingers" smoothly transition the cut material stacks to a conveyor region dedicated to parts removal and bundling. The MPC models are engineered to perform without failure for accurate and repeated cutting of a variety of materials.

DESIGN & EFFICIENCY

- Automatic stack cutting minimizes manual labor and increases material utilization for more cut parts in less time
- Variable frequency drive control with Eastman's high-efficiency vacuum provides consistent material compression for the entire job while reducing power consumption
- Fast and simple replacement of consumable parts, minimizing downtime
- Touch-screen display and joystick are conveniently located on the cutting gantry for simplified operator use

TECHNOLOGY

- Networked machines can be accessed by Eastman technicians off-site in real-time for immediate troubleshooting and support
- Real-time diagnostics monitor all wires and signals, as well as motors
- Software algorithms identify components in need of maintenance or replacement and prompt the operator
- All motion control axes utilize precision rack and pinion drives
- Variable speed knife control allows for effortless onboard adjustments based on pattern and material requirements
- Adjustable software setting for blade sharpening

SAFETY

- Six remote emergency stops: two on cutting gantry, four system-mounted
- Additional gantry-mounted stop disks pause system operation until returned to neutral and reset. Operation can then be resumed from any position
- Tool head is equipped with plexiglass safety window to keep hands free of potential knife injury during operation
- Single turn-off point with a universal power system for lockout/tagout safeguards employees from unexpected start-up



FEATURES

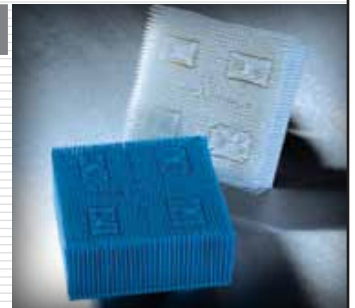
Tool Head

- **Reciprocating knife technology provides precise vertical stroke cutting**
- **Cutting ranges from 2 in. (5 cm) up to 2.75 in. (7 cm) of compressed material**
- **Equipped with a 4-stone, self-aligning and self-adjustable knife sharpener**
- **Intellicut™ knife control software ensures quality cuts from top to bottom ply**
- **Optional high-speed-single or dual pneumatic drill**
- **Air chiller with nozzle cools blade and lower guides (optional)**
- **Easy access to knife system and assembly parts simplifies daily maintenance procedures**



Bristle-Block Conveyor Bed

- **Cutting area is made up of long-lasting, durable bristle blocks**
- **Reciprocating knife blade penetrates bristle blocks without any damage to the cutting area**
- **Easy to replace, the bristle blocks snap-in and snap-out individually, featuring a unique design for maximum life**
- **Optional automatic bristle cleaning available during all conveyor moves**



OPTIONS

Additional Solutions

- **Lateral drive** | Motorized device for moving the system from one spreading table to another
- **Automatic bristle cleaner**
- **Resealer** | Seals cut areas to provide maximum hold down

Multi-Ply Technical Specifications

BASIC SPECIFICATIONS*		ENGLISH	METRIC
Please contact the factory for active cutting zone dimensions. Custom widths and lengths available.	Width	78 in.	1.98 m
	Length	6.5 ft.	1.98 m
	Drive System	Dual-X Axis, Y-Axis & Theta Axis. X & Y-Axis Rack & Pinion Drive, Brushless Servo Motors	
Maximum Thickness of Compressed Material	MPC-5000	2 in.	5 cm
	MPC-7000	2.75 in.	7 cm
POWER REQUIREMENTS			
Electric	Control Power	208/230/380/460/575V, 3 ph, 50/60 Hz, 9.0 kVA	
	Vacuum Blower	208/230/380/460/575V, 50/60 Hz, 30 HP, VFD control	
Pneumatic		90 psi	6.2 bars
SPEEDS			
Maximum Cutting Speed (Material Dependent)		Up to 40 in./sec.	Up to 60 m/min.
Maximum Conveyor Speed		8 in./sec.	12 m/min.
Maximum Acceleration		0.3 g	
Reciprocating Knife Speed		Variable up to 5,000 RPM	
ENVIRONMENTAL			
Compressed Air Consumption		21 CFM	
Sound Level		<76 dB(A)	
Operating Temperature		55 – 100°F	12 – 37°C
Humidity		20 – 80% (non-condensing)	

*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.