

## Automatic Cutting Line for Continuous Fabric



**AC335XL**

### Technical Specifications:

TYPE	MAX FABRIC WIDTH	MAX CUTTING LENGTH	MAX FABRIC TRAVEL LENGTH	CYCLE TIME	MAX STACKING
AC327E	27 inches [700 mm]	48 inches [1,230 mm]	68 inches [1,730 mm]	6 seconds	68 x 27 inches [1,730 x 700 mm]
AC335E	35 inches [900 mm]	62 inches [1,600 mm]	84 inches [2,150 mm]	6,5 seconds	84 x 35 inches [2,150 x 900 mm]
AC335XL	35 inches [900 mm]	78 inches [2,000 mm]	100 inches [2,554 mm]	6 seconds	100 x 35 inches [2,554 x 900 mm]

### Hourly Production with one person, up to:

AC327E	2 strands	2,400	7,200	1,200	1,200	-
AC335E	2 strands	2,200	8,800	2,200	1,100	1,100
AC335E	4 strands	4,400	17,600	4,400	2,200	2,200
AC335XL(★)	4 strands	4,800	19,200	4,800	2,400	4,400

(★) AC335XL available also with 5 and 6 strands feeder.

## The right way to cut

# AC3 LINE

The newly developed AC3 Line represents the “state of art” from bierrebi and is the most technically advanced, most automated, highest production capacity system offered for tubular knit fabric.

While the basic operation on the AC3 Line remains the same as the current generation, the machine has been completely renewed and enhanced with new software and mechanical operating systems, electronics, dimension and style.

The machine produces up to 20% more than the previous model running at the same cycle time while consuming significantly less energy and requiring much less maintenance.

## Machine

- Industrial pc with increased computing power and reduced number of electronic boards.
- Touch screen display allows for more user friendly operation with messages in preferred languages and customized input data display.
- Ethernet connection allows for instantaneous updating of program files, centralized data collection and uploading of files directly from the QSC (Shape Cad System).
- Configurable production data input and collection specific to the plant's needs.
- Programmable access level for the prevention of alarm intervention by unauthorized personnel.
- Customized display allows for personalization such as company logo, style, lot and sub-lot information, etc. displayed on the screen.
- All mechanical movements are achieved with encoder controlled electric axis and guides for more stop/start precision and speed.
- All motors are ‘brushless’ servo-drive motors for more precision less maintenance and less power consumption.
- High resistance polyurethane toothed belts are enclosed inside dust-proof covers and allow for more precise and faster movements while eliminating the need for lubrication.

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## Feeder

- Independent control of all setting parameters for each feed position, ( fabric strands) optimizes individual control of each fabric strand.
- Feeding belt linked in electrical axis with machine which allows for a better fabric handling and improves accuracy in cutting operation.
- Increased space between each feeding units to allow for a better and more accurate fabric bundles placement.
- AAQT (Automatically Adjustable Quarter Turner) allows for width adjustments without the removal of AAQT from machine.
- Available in four, five or six strand versions (number of strands depends on fabric weight and other factors).



### **Table for blades shaping**

Designed to facilitate the preparation of cutting blades.  
A simple device, extremely fast to learn.

### **Table for pattern preparation and polymerization**

Whoever is involved becomes an expert maker of cutting shapes in a very short time. Blades are simply glued to shape-holders, this ensuring extremely fast style and size changing.



### **Shapes storage rack**

Designed for functional filing and fast style/size change-over.



# AC LINE - ACCESSORIES

## Quarter Turners

**Manual  
Adjustable  
Quarter  
Turner**



**Automatic  
Adjustable  
Quarter  
Turner**



**Quarter  
Turners  
Storage  
Rack**



## Automatic Cutting Line for Lace



**AL017**

### Efficiency Through Cutting

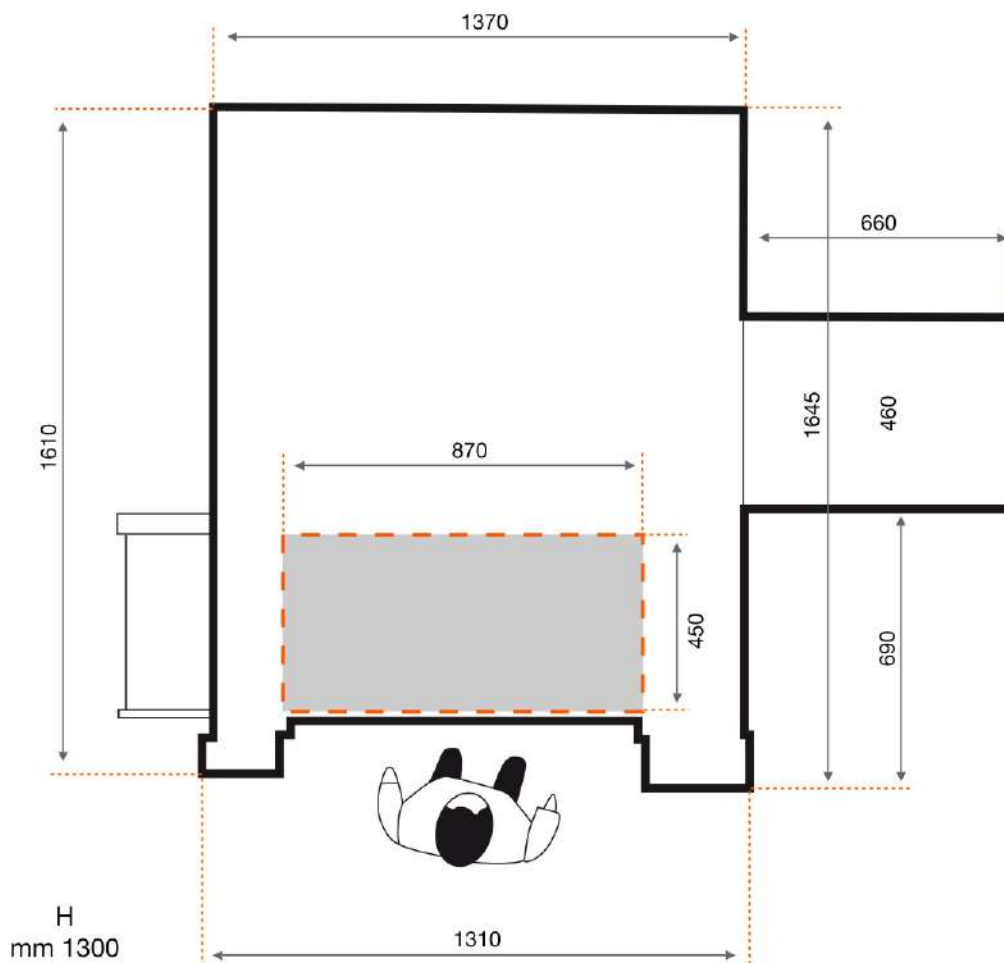
Lace difference in pattern repetition, width and height, irregular scallops, need for mirror-image cutting and pattern matching.

These are the main problems when cutting lace:  
all of them highly efficiently solved by the automatic cutting room **AL017**.

This system totally eliminates laying-up, pinning and marking by cutting and stacking.  
according to pre-selected quantities totally automatically.

## The right way to cut

# AL017



## Time, Fabric, Space

This is where the **AL017** best expresses its saving and efficiency potential. The totally automatic cutting process **AL017** guarantees a drastic reduction of all waste (with constant repeated accuracy).

## Autospot 6

A unique laser spot system that enables automatic placement for pattern matching. The repeated cutting quality is always maintained at the highest level. Up to **1000** styles permanently in memory, available at the press of a button.

## Robotic Feeding

A device that automatically feeds lace. This eliminates the operator from the cutting process. It also guarantees dimensional matching for the cut components, including when there are variations in the width of the lace.

## Table

All-in-one table for blade and pattern preparation and polimerization.



## Shapes Storage Rack

Designed for functional filling and fast style/size change-over.



# AL LINE - ACCESSORIES

## Feeding Robot

A device with automatically feeds lace.  
This eliminates the operator  
from the cutting process.  
It also guarantees perfect  
central placement.



## Led spot 3

A laser spot system for pattern matching.



## Autospot 6

A unique automatic laser spot system which  
enables automatic placement for pattern matching.  
Up to 1000 styles permanently in  
memory, available at the touch of a button.



## Roll Feeder



## The unique cutting system for non-woven fabric

The new AC, Automatic Cutting Systems can now be equipped with a new "ROLLER FEEDER", which has been specifically developed for feeding four layers of non-elastic material, such as non-woven fabric, in roll form.

**The right way to cut**

## Technical Specifications

- Full rolls can have a maximum diameter of 25" (635mm) with 3" (76-mm) inner paper core.
- Each roll is loaded onto an independently driven, inline roll-feeding-shaft which deposits the fabric onto a synchronized material feeding belt for a horizontal transport into the cutting area.
- The belt allows for the simultaneous feeding of all four fabric layers with uniform tension and alignment together without any influence by the distance of each roll to the machine.
- Independent roll drives are achieved with inverter controlled three-phase AC motors capable of reversal rotation and accurate feed rate without regard to the rolls outer diameter.
- Roll shaft with integrated pneumatic bladder insures a firm grip of the roll and is inflated/deflated by means of an air valve conveniently located at the front of the shaft.
- Accurate roll alignment is achieved with manually adjustable deadlocks, which are placed on the side opposite to operator visual inspection of alignment is added by gridlines.
- The roll radius control accurately feeds the material without additional tension.
- The belt movement is controlled by a brushless moter and allows a perfectly synchronised feeding, in phase with the machine's trolley movement.
- Optic sensors are used for the detection of product presence and ensure the correct control to manage the end of material condition.
- The roll movement is assisted by a vertical balancer, which can be equipped with replaceable cylinders in order to give the proper tension and the right direction to the feeding material.
- Inductive proximity sensors are used to control the balancer position and to properly manage the remaining end of material condition, the use out adhesive tape bonding the material's inner flap to the paper core saves operator time.
- The un-feeding function allows reversal of the roller direction in order to reroll all remaining material in cases where production needs to be stopped before all material is used.
- A fiber optic intelligent node connection for each layer of material provides for independent operation and adjustment of setting parameters.
- An independent display for each layer provides for faster settings and operation.
- A phased-stop provides protection and control in the case of the end of material condition or for inspection as per operator decision.
- Safety is ensured by closing of the rear area with two illuminated mushroom buttons and by two longitudinal optical barriers protecting the remaining perimeter surface.

**We would be pleased to work on specific projects according to customer requirements**