

- We export our machines in :**
- Australia
 - Argentina
 - Algeria
 - Brasil
 - Bulgaria
 - Canada
 - Cyprus
 - Chile
 - China
 - Colombia
 - Czech Republic
 - Dubai
 - Ecuador
 - Egypt
 - El Salvador
 - England
 - Germany
 - Greece
 - Guatemala
 - Hungary
 - Honduras
 - India
 - Israel
 - Jordan
 - Malaysia
 - Marocco
 - México
 - Peru
 - Poland
 - Portugal
 - Kenya
 - Korea
 - Romania
 - Russia
 - Serbia
 - Syria
 - Slovenia
 - South Africa
 - Sultanate of Oman
 - Spain
 - Sri Lanka
 - Tunisia
 - Turkey
 - USA
 - Venezuela



Technical components utilized		
PC - PLC and electronics	SIEMENS	made in Germany
Brushless motors and drivers	SIEMENS	made in Germany
Electric components	SIEMENS	made in Germany
Electric brakemotors	MGM	made in Italy
Electric motors	CME	made in Italy
Pneumatics valves	SMC	made in Japan
Pneumatics	CAMOZZI	made in Italy
Bearing elements	SKF	made in Germany
Linear actuators	ROLLON	made in Italy
Coaxial gear reducers	WITTENSTEIN	made in Germany



GIORI s.r.l. - Via Francesca 2942 A / B - 51036 - Larciano - Pistoia - Italy
www.giori.it - info@giori.it



Automatic line for the production of Loop Mops





Loop Matic

The Loop Matic is an automatic line for the production of loop end mops, consisting of:

- Cyclon Loop machine.
- TR4 carousel unit for the automatic transfer of mops.
- Kentucky4 Loop machine.

Maximum production capacity:

- 5 mops / minute for narrowband mop with a double stitch,
- 4 mops / minute per broadband mop with two double stitching,
- 3 mops / minute per wideband mop with three double seams,

The modularity of the Loop Matic allows it to be integrated with a NEMO unit placed in line with the Kentucky4 Loop unit. With the addition of the NEMO system (optional), the line is capable of automatically producing both loop-end and cut-end mops.

In the case of Cut End Mop production, the LOOP MATIC line can be combined with a horizontal flow pack machine (optional).

The production line does not require the use of labor.

A central CPU controls communications between the various units that make up the line.

Loop Matic is equipped with a remote technical assistance system with direct connection to the internet via an Ethernet cable, a solution which allows for an excellent and rapid after-sales assistance service.

Cyclon Loop automatic machine including:

Cyclon Loop :

The Cyclon Loop machine is equipped with a rotting arm driven by a brushless motor which distributes the cotton threads on two units equipped with chains for the advancement of the threads. The chain mechanisms are adjustable in width for changing the lengths of mops being produced.

As the cotton yarn is wound, it is placed and advanced on the chain mechanisms. Two spools feed polyester cloth ribbon to the ends of the yarn which is automatically stitched by two double needle sewing machines.

It is possible varying the distance between the catenaries to obtain different mop widths.

Two mobile mechanisms equipped with pneumatic scissors cut the two polyester side bands for separating one mop from the next

A second automatic scissor system separates and cuts one mop assembly from the next assembly

Unloading of Mop Sub-Assemblies to the Transfer Carousel is fully automatic

Note:

Folding the ends of the bands and securing the chain stitch seams with a lockstitch sewing machine is an operation to be carried out manually separately from the machine.

TR4 - Automatic mop transfer carousel including:

The Carousel system include either 4 or 2 stations which index either 90° or 180° respectively.

Carousel stations consist of 2-up arms tooled with special pliers for picking and placing wound mop sub-assemblies

Carousel station arms actuate in and out from the carousel chassis; Arms extend to the outer position when picking Mop Sub-assemblies from the Cyclone and placing Mop Sub-assemblies onto the K-4 machine. Arms are retracted when the carousel is indexing from station to station.

Movements of the Carousel axes are achieved by Asynchronous motors equipped with inverters or by Brushless motors with Drive units

The Carousel machine control act as the central control managing all activities between the Cyclone and K-4 assembly machines



Kentucky 4 Loop:

Kentucky 4 Loop Finished Mop Assembly Machine including:

Kentucky4 Loop is equipped with a loading conveyor belt on which Looped Mop Sub-assemblies are placed

The conveyor belt transfer Mop Sub-assemblies to the gripping location of the Insertion Unit

An electric actuator tooled with a special gripper mechanism positions the Mop Sub-assembly longitudinally where the Central Band is formed

Custom mechanism loads, cuts, and applies the Central Band in the center of the Mop

The Central Band material is fed from a motorized unwinding reel; both narrow and wide bands can be fed from this system

Automatic labeling system including printing, loading, cutting and application of labels to Mops; adjustments for this system can be made directly at the machine touchscreen HMI

Electric actuator with custom end of arm tooling transfers Mops from Banding station to Sewing station

The Auto Sewing Station including:

