



# EMAR S.R.L.

## GLASS WORKING EQUIPMENT

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### **AUTOMATIC WASHING LINE FOR GLASS**

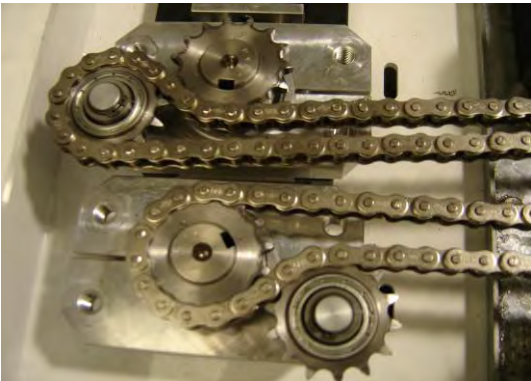
**Mod. M 2501 PA**

VOLTAGE	: 400 Vac. 3 phase + Neutral 50 Hz.
TOTAL POWER CONSUMPTION	: 36 Kw. 400 Vac. 50 Hz.
FUN MOTOR	: 15 Kw. 400 Vac. 3 phase 50 Hz.
WASHABLE GLASS DIMENSIONS	: Min. 450 mm. x 250 H mm. about : Max. 3500 mm x 2500 H mm. about
HOT WATER RESISTANCE	: 4.5 Kw. 400 Vac. 3 phase 50 Hz
GLASS WASHABLE THICKNESS	: From 3 to 24 mm. self-adjustable
PANEL PRESS THICKNESS	: 50 mm. about
WORKING SPEED	: from 3 to 10 mt./min.
WORKING DIRECTION	: from left to right
WORKING PLANE HEIGHT	: 600 mm. about
HEIGHT	: 3.500 mm. about
LENGTH	: 23.000 mm. about
WIDTH	: 1.600 mm. about
WEIGHT	: 9.000 Kg. about

Composed as follows:

- 01 Motorized entry with a length of 4 Mt. , 2,5 Mt. height, with clutched anticut vulcollan rollers, mounted on bearings and bushing . This module has a motor complete of reducer . Protections against access to the dangerous parts of the machine according to the EU norms.

*INCLUDED*



- 01 Washing machine with a length of 3,5 mt. and height of 2,5 mt., composed by 8 brushes with diameter of 180 mm. and stainless steel shafts . Upper drawing shafts in stainless steel, complete of four tanks with pumps, filters and inside in stainless steel. Water warm up of 4,5 kw. Pneumatic opening system of the drawing shafts and brushes, in order to work with bigger thickness. Fun is positioned in an insulator "box-aphone" with shutter system to stop the air in the case of the glass is stopped into the machine. Electronically speed adjustment from 3 to 10 mt/min. Protections against access to the dangerous parts of the machine according to the EU norms.

*INCLUDED*

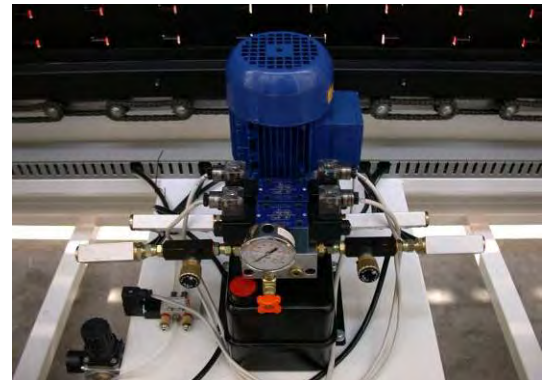
Optional low-e brushes  
Optional opening system over 24 mm

*NOT INCLUDED*  
*NOT INCLUDED*



- 01 Motorized exit with a length of 4 mt. and height of 2,5 mt., with clutched anticut vulcollan rollers, mounted on bearings and bushing. This module has a motor complete of reducer . Inspection glass control lights , stop-glass sensors . Protections against access to the dangerous parts of the machine according to the EU norms.

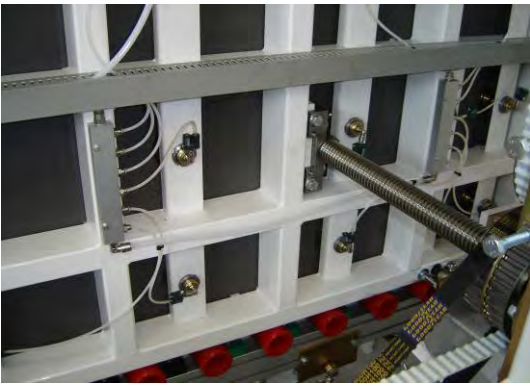
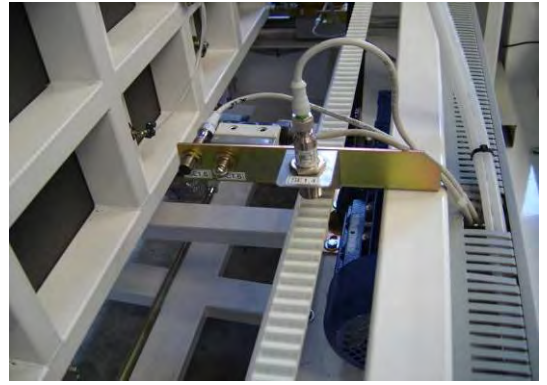
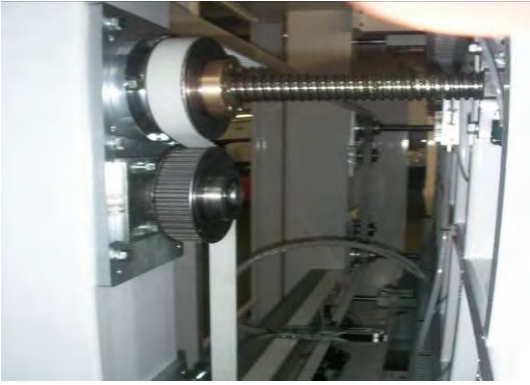
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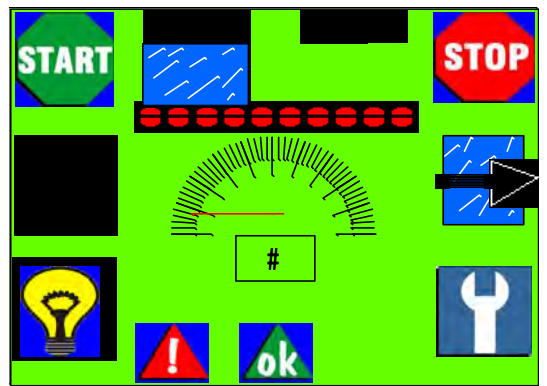
- 01 Motorized assembling station with a length of 4 mt. and height of 2,5 mt. , with double clutched anticut vulcollan rollers, mounted on bearings and bushing. This module has a motor complete of reducer. Inspection glass control lights , stop-glass sensors. Hydraulic system of positioning of the frame with a considerable precision. Everything is controlled by sensors that automatically recognize the glass thickness, so the operator doesn't have to regulate anything manually, but in the same time can work with different glass thickness. Acoustic and luminous indicator as requested by CE rules. Mechanical stop-glass block system to obtain a maximum precision during the working process. Protections against access to the dangerous parts of the machine according to the EU norms.

*INCLUDED*





**EASY TOUCH  
SYSTEM**



01 Panel press with a length of 3,50 mt. and height of 2,5 mt. with double clutched anticut vulcollan rollers, mounted on bearings and bushing. This module has a motor complete of reducer. Slipping system of the front plane mounted on sphere bearings. Movements through toothed pulley with belt. Sensors for glass presence and mechanic stop for a better working process. Electronic speed of the plane movements and detector system of the pressure power. This machine is able to identify the different glass dimensions and use only the necessary areas , allowing energy saving. Automatic system of suction glass. Air cushion on the back plane with shutter to block the air. The movements of the pressing system is gave by toothed belt that interact on the four mechanical pressure points, controlled by single electronic system. Thermic control of the motors with visualization on digital display. Emergency push button with security control unit to stop all moving parts of the line. Working speed controlled by PLC in order to optimized working process. Automatic panel assembling carry out inside the press with mechanical movements of the plane and automatic regulation of the pressing through electronic system according to panel dimensions. Regulation and visualization through **EASY TOUCH SYSTEM** control panel that allows the operator to control the working process, to regulate the times and control the single operation of each component. All controls in contact with operator are in safety low tension. Protections against access to the dangerous parts of the machine according to the EU norms.

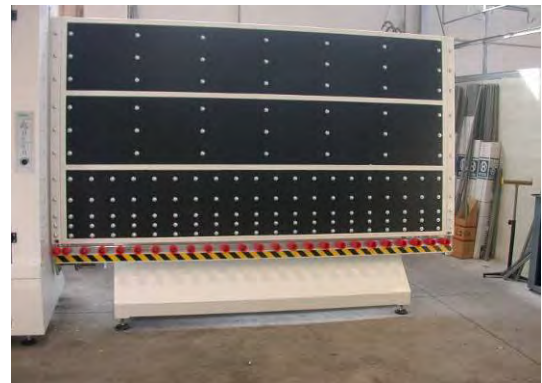
*INCLUDED*

Optional automatic system for triple glass  
Optional system for structural glass

*INCLUDED*  
*NOT INCLUDED*

01 Motorized exit with a length of 4 mt. and height of 2,5 mt. , with clutched anticut vulcollan rollers, mounted on bearings and bushing. This module has a motor complete of reducer . Protections against access to the dangerous parts of the machine according to the EU norms.

*INCLUDED*



Optional hydraulic tilting table system

*NOT INCLUDED*

Recommend the feed water of the washing machine having the following characteristics:

Conductivity	less than 10 uS (microsiemens)
Total hardness	less than 5 ° F (French degrees)
Salt content	less than 5 mg / L
Chloride	less than 5 mg / L
Iron	less than 0.05 ppm
Turbidity	less than 0.5 ftou

If the water values are higher than our advice, the final result of glass cleaning can be compromised. If necessary, on request, we can provide the equipment for water cleaning.