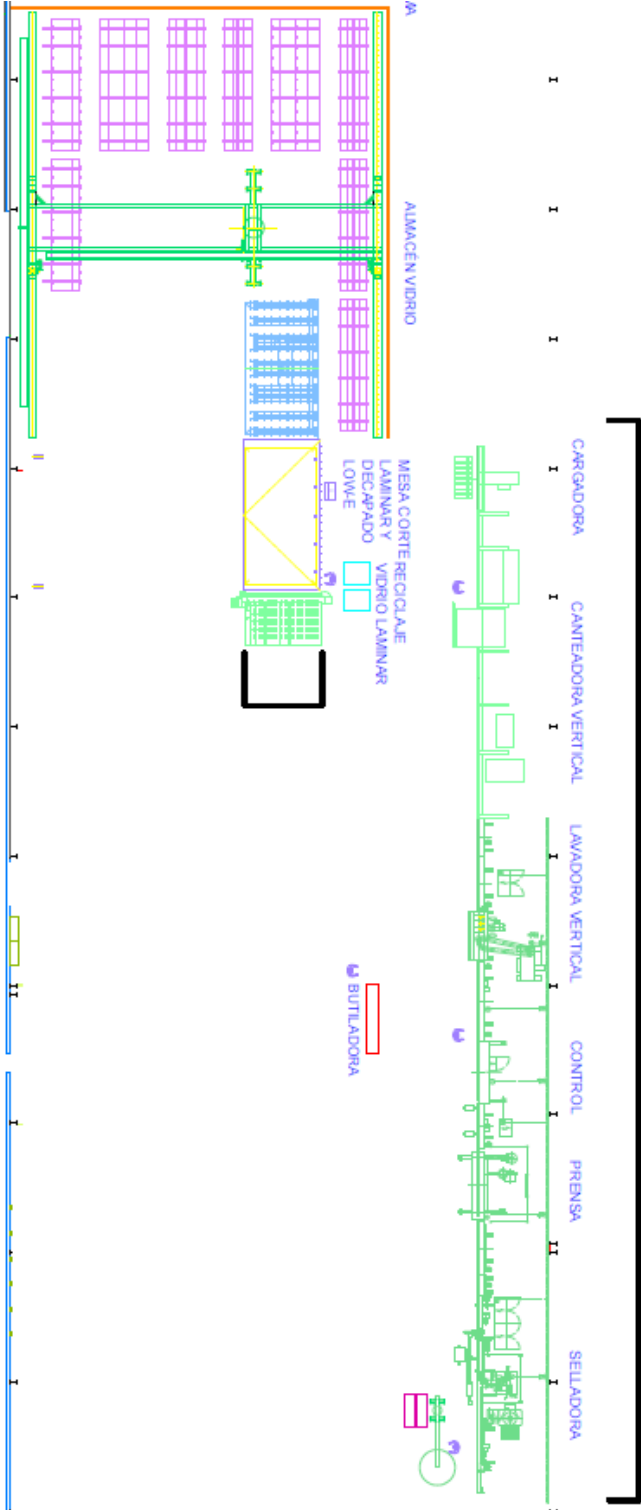


**BYSTRONIC GLASS LINE MACHINES**

The sale of the entire line is offered.



It is made up of the following machines, of which their current state of operation is described below:

**GLASS LOADER (BYSTRONIC) – AERIAL GATEWAY**

- All movement systems work in manual mode. In automatic mode it has been tested and is positioned correctly on each of the docks with the glass plate magazines. The same thing happens with the return to the tilting table (empty).
- You are unable to pick up the iron due to a problem with the motor brake on the transverse axis of the gantry (electric or mechanical). As soon as the iron is sucked, by not braking the carriage, it moves and does not follow the vacuum suction sequence because it stops detecting the gripping position.
  
- Status summary:
  - 1- Manual movement functions → OK
  - 2- Automatic Operation → NOK (with glass plate) but OK without piece.
  - 3- Control Software → OK (It is a desk with buttons, without HMi panel)



PICTURE

**TILT TABLE (BYSTRONIC 990337-6)**

- The movement depends on the glass loader and is done from the same control desk. It shares coordination signals between machines, so if the charger is not referenced, it does not tilt. It has been tested manually and it works. It has new rollers.
  
- Status Summary:
  - 1- Manual movement functions → OK (both table folding and plate extraction by rollers)
  - 2- Automatic Operation → not tested with a glass plate, because it does not have the permission signals from the loader.
  - 3- Control Software → OK (It is a desk with buttons, without HMi)



PICTURE

**CUTTING TABLE (BYSTRONIC)**

- It does the initial calibration correctly (reference to "0" point) and also the head movements. You have cut glass with correct measurements, configured from the Control Software (HMi). But loading any file via floppy disk from the floppy drive has not been tested (3 ½").
- There are several sizes of cutting rollers and spare parts.
- Status Summary:
  - 1- Manual movement functions → OK
  - 2- Automatic Operation → OK
  - 3- Control Software → OK (The HMi is a PC with MS-DOS operating system)



PICTURE

**GLASS CUT-OFF MACHINE (BYSTRONIC)**

- The control of the cylinders is done from an operator pedal next to the table (pneumatic). There are 2 cyclones that generate the air that comes out through the little holes in the table and allow the glass to be suspended in float.
  
- Status Summary:
  - 1- Manual movement functions → OK
  - 2- Automatic Operation → OK
  - 3- Control Software → OK (does not require HMI)



PICTURE

**CARGADOR LINEAL (POSICIONADOR VR 2.30 Nº 226.0727)**

- The automatic arm with suction cups would be responsible for taking each cut glass from the support (easel) and placing it on the conveyor (destined for the washing machine). But the machine came with a non-original screen because it broke down and does not work automatically. Certain sequences and configurations would have to be reprogrammed in the HMI and PLC program to readapt it. Although in manual mode with the program loaded, they move all the drives. If an original touchpanel is obtained, the original program is available to work correctly.
  
- Status Summary:
  - 1- Reprogram HMI screen because you need to buy the original screen if it is found and download the original program (we have got it), because right now it makes inverted movements in manual, but it does not work in automatic.
  - 2- Automatic Operation → NOK
  - 3- Control Software → OK (if you purchase an original HMI screen)





PICTURE

**ROLLER TRAIN (from loader to washing machine)**

- Works correctly. It is activated when a glass is placed on the start sensor, and transports it to the entrance of the washing machine. It is linked to the control of the loading arm and the washing machine, through coordination signals.
  
- Status Summary:
  - 1- Manual movement functions → OK
  - 2- Automatic Operation → OK
  - 3- Control Software → OK (does not require HMI)



PICTURE

**OSMOSIS, DOSING AND FILTRATION PLANT**

- Both the generation of osmosis water from mains water and the treatment by dosing the washing product with algaecide work correctly. Filtration also works using sand filters and their respective recirculation and impulsion pumps.
  
- Status Summary:
  - 1- Manual movement functions → OK
  - 2- Automatic Operation → OK
  - 3- Control Software → OK (does not require HMI)



PICTURE

**WASHING MACHINE (LENHARDT)**

- It is composed of:
  - o Entrance transport to washing machine TB BR 2.70 1.70 VL 1AS N° 231.1505
  - o Inlet transport to washing machine TB BR 2.70 2.50 VL 1AS N° 231.1396
  - o Washing machine GW D 2.30 0.00 VL 3B15 No. 251.0419
  - o Transport stand TB LK 2.50 3.70 VL 2AS N° 212.1439
- Dirty glass has been tested and washed and dried correctly. However, the rear door seals need to be replaced because they are cracked and leaking water.
- Status Summary:
  - 1- Manual movement functions → OK
  - 2- Automatic Operation → OK
  - 3- Control Software → OK (panel with buttons, without HMI)





PICTURE

**GLASS INSPECTOR (VR 2.30 2.90 VL OP 1AS inspection station No. 226.0727)**

- Glass has been passed and both glass detection with specific presence sensors (glass cells) and transportation to the next station works. The lighting works too.
  
- Status Summary:
  - 1- Manual movement functions → OK
  - 2- Automatic Operation → OK (the interpretation is by the operator)
  - 3- Control Software → OK (does not require HMI)



PICTURE

**GLASS SEALING DISPENSER (BUTYL)**

- It is a simple machine in which all the elements work, but it needs a thorough general cleaning, because the product and the started cartridge were left for a long time.
- After cleaning, it requires mechanical dosage adjustment according to the mixture and product used.
  
- Status Summary:
  - 1- Manual movement functions → OK
  - 2- Automatic Operation → Not tested because it has not been cleaned
  - 3- Control Software → OK (does not require HMI)



PICTURE

**FLAT PRESS (ZP 2.30 N° 234.0517)**

- It is composed of:
  - Transport stand with measuring system TB LK 2.50 2.10 VL 1AS N° 212.1423
  - Flat Press ZP 2,30 3,10 VL SP 1AS N° 234.0517
  - Transport stand TB BR 2,70 2,50 VL 1AS N° 212.1451
  - Transport stand TB BR 2,70 0,90 VL 1AS N° 212.1452
- The operator has to insert the first glass by hand and then has to glue the frame at this point to the 2nd glass of the sandwich and when it enters the press, he vacuums the first and takes it (operator's side) and then passes the 2nd with the frame stuck and the one behind it sucks it. Then he lines them up and glues them together with pressure.
- It has two control desks for this (with screen) where all the recipes of the different references are configured, to control the actual tightening value (after having previously measured the thickness of the sandwich). One at the beginning and one at the end.
- Status Summary:
  - 1- Manual movement functions → OK
  - 2- Automatic Operation → Not tested.
  - 3- Control Software → Both HMi operator panels works properly.



PICTURE

**SEALING MACHINE (LENHARDT - VA 1K-V 2,30 3,80 VL REC PU N° 233.0421)**

- It is the one that dispenses the sealing paste along the edges of the glass sandwich.
- The manual movements of each movement unit work, but the usage parameters have not been configured because no putty has been drawn through the nozzle. The machine manages to successfully carry out the automatic calibration sequence of the axes that it initially performs.
- Requires thorough cleaning of the entire dosing circuit.
- The PC touch screen is damaged. A monitor has been connected from the outside and a mouse to replace it.
  
- Status Summary:
  - 1- Manual movement functions → OK
  - 2- Automatic Operation → Not tested.
  - 3- Control Software → It has a PC with OS Windows XP.



Summary of glass line machines status

Date: 22/02/2024



PICTURE