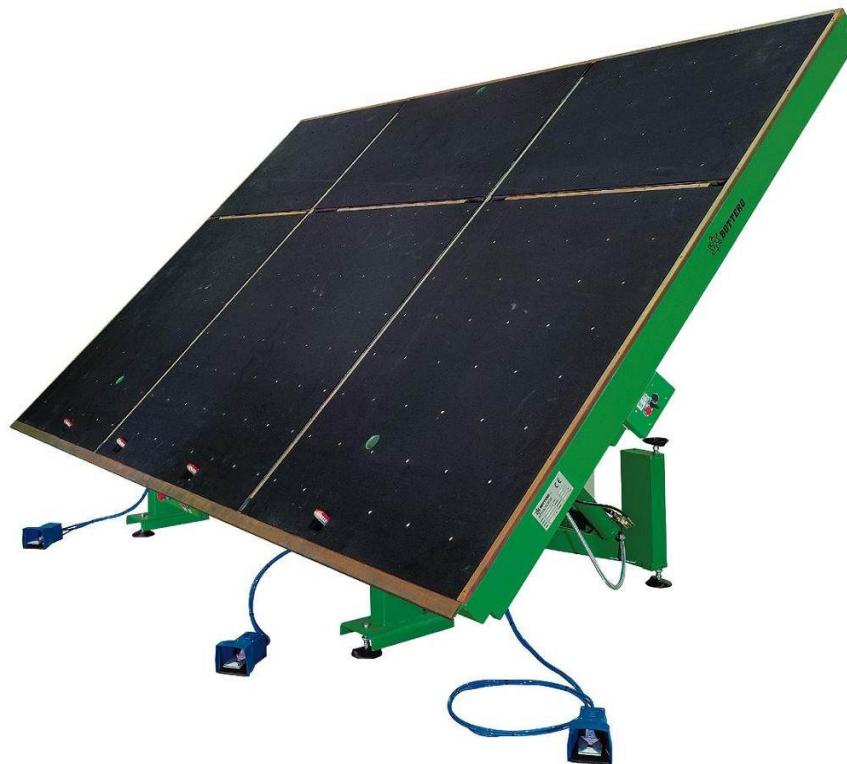


103BBM

Loading, breakout and working machine for flat glass



MAIN FEATURES

Machine for the handling, loading and breakout of flat glass sheets.

Hard frame made of electro-welded steel tubular pipes ensure a working surface high rigidity.

Tilting or fixed working table.

With optional tilting surface, the work top is controlled by hydraulic cylinders that make it possible to reach the sub-vertical position to simplify the manual loading of the sheet of glass.

If tilting, the machine is equipped with pneumatically activated loading lugs, with “dead centre” cam and a pneumatic solenoid valve with bistable logic.

The lifting system is intrinsically safe: in case the supply tubes are damaged, the movement is immediately stopped.

A perfect planarity and a drastic friction reduction that makes all the glass handling operations easier, are ensured by a powerful air cushion made by centrifugal fans fixed under a wooden plan. The plan is composed by natural felt covered panels, that are assembled on a pre – machined frame.

Quick shut-off valve insuring the maximum air cushion reactivity.

The working table edges are made of solid wood to enable the glass manual breakout.

Wooden coated breakout bars assembly (option), inserted in the working surface, with pneumatic foot pedal controls located close to the relevant bar.

KEY:

Jumbo = 103BBM-Jumbo

Regular = 103BBM-Regular

TECHNICAL SUMMARY			Jumbo	Regular
Maximum glass size	mm		6100 x 3355	3810 x 2750
Glass Thickness range	mm		2 ÷ 25	
Working table tilting (With optional tilting surface)			Hydraulic	
Maximum tilting weight (With optional tilting surface) (Down / Up)	kg		1260 / 1000	660 / 660
Working table			Synthetic fiber carpet (PES) covered working table, accurate in flatness and free of obstacles to the glass.	
Air cushion device + Fast air cushion closure			Air cushion device for the pneumatic support of the glass Fan-integrated system to quickly decrease the power of the air cushion.	
Breakout-bars			3 + 1	2 + 1
			Pneumatic pedal-controlled breakout bars	
Noise	L_{eq}(A)	dB(A)	73 ± 2	
	L_w(A)	dB(A)	***	

GENERAL PERFORMANCES	Jumbo	Regular
Air cushion power	240 mm minimum of water column	
Tilting motion operating time (With optional tilting surface) (Up + Down)	s	45

SAFETY FEATURES	Jumbo	Regular
Hydraulic tilting (With optional tilting surface)	Flexible pipes protected by cut-prevention steel plait. Safety valves on the cylinder breeches (if one pipe loses pressure the cylinder automatically stops)	
Electromechanical safety	Hardware security systems through special safety modules	

INSTALLATION AND CONDITIONS OF USE		Jumbo	Regular
Overall dimensions	mm	See layout	See layout
Max Weight	kg	2000	1500
Working table height	mm	930 +/- 40	
Installed Power	KVA	5.25	3
Additional power (With optional tilting surface)	KVA	3	
Air Consumption (max)	NL/min	70	
Compressed Air Features		Filtering: 5 microns Dew point: + 10°C ambient temperature	
Power supply		<ul style="list-style-type: none"> - Voltage: 400 V (+/- 10%) 3Ph + PE (system TN) Frequency 50 Hz o 60 Hz Or Voltage: 200V-240V (+/- 10%) 3Ph + PE (system TN) Frequency 50 Hz o 60 Hz Or Voltage: 440V-600V (+/- 10%) 3Ph + PE (system TN) Frequency 50 Hz o 60 Hz - Compressed Air: Min. pressure 7 Bars Dew point < 5° 	
Stocking, temperature and moisture		From – 5° to + 55°, Reference pressure 1 Bar 90% of relative moisture at 20° (Without condensation) 50% of relative moisture at 40° (Without condensation)	
Use, temperature and moisture		From + 5° to + 40°, Reference pressure 1 Bar 90% of relative moisture at 20° (Without condensation) 50% of relative moisture at 40° (Without condensation)	

AVAILABLE OPTIONS	Jumbo	Regular
Residual current device for compatibility with TT power systems	Main switch with residual current device for compatibility with TT power systems	
Glass Pushing Device (With optional tilting surface)	Couple of pneumatic cylinders that ease the glass loading with the aid of one Bottero grab	
Additional breakout bar	1 breakout (longitudinal bar)	---
Double Bar Control	Second pneumatic control of breakout bar via comfortable pedal on the ground.	
Loading Lugs (Standard supply with optional tilting surface)	Pneumatically activated lugs for loading sheets of glass, with "dead centre" cam and a pneumatic solenoid valve with bistable logic (without consent the valve does not move).	
Manual Reference Lug	3 + 1	2 + 1
	Reference lug (s) for manually squaring the sheet of glass	
Glass Unloading Roller	Roller(s) to simplify the unloading of the sheet of glass	
Tilting Unit	Unit made up of two hydraulic cylinders that make it possible for the work top to reach the sub-vertical position, to simplify the manual loading of the sheet of glass.	

PROJECT AND PRODUCTION STANDARDS

Adopted Standards

The machine is designed, built and installed in consideration of the safety standards in force.
Importance is placed upon the following aspects:
Easy approach.
Workstation ergonomics.
Easy access to parts requiring maintenance.
Reliability of the machine and its components.
Reduced noise levels.
Power savings.

The following versions are available:

**Arrangement in compliance with the European Standard and CE mark
Guideline 2006/42/CE
Guideline 2004/108/CE
IEC EN 60204-1
EN ISO 12100**



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