

BAVELLONI REV 370 SLH



The totally new and also revolutionary conception of the REV tables' series breaks the traditional mould of the cutting machines, placing this range of machines at the top in technology, performances and design. For a dynamic response of the axes the operational and control system of the machine is completely "digital", thus enabling a high control of the cutting speed and the cutting accuracy.

The innovative cutting line, consisting of only two elements, is the utmost expression of this highly technological range:

- **REV 370 SLH:** self loading cutting table
- **REV 372 R:** breaking table with unloading tilting forks

The technological core of this line is the self-loading table REV 370 SLH, assembling in it three functions:

- *Automatic loading of the glass sheet*
- *Cutting concurrent to the loading operation (patented)*
- *Automatic translation of the glass sheet toward the break-out table*

Structure and working plane

The extremely solid and reliable structure, as in the tradition of Bavelloni, is consisting of a fixed plane in tubular steel and covered with an anti-friction felt. Under this plane there is the fan for the creation of the air cushion and the carriage, equipped with telescopic arms, for the automatic loading of the glass sheets. Thanks to this (patented) innovation we have realized a highly productive cutting line that is indisputably more compact with respect to a traditional line consisting of three different elements (loader, table and break-out unit).

Cutting bridge

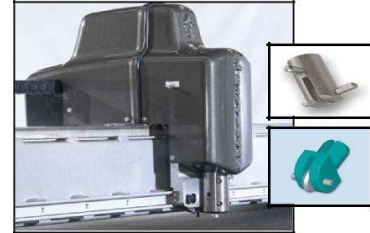
The cutting bridge, sliding on guides and high-section racks (50x50mm), is driven by an electric axis (Gantry axis) to ensure an absolute cutting accuracy. The two brushless motors are placed inside the same bridge to the benefit of a greater mechanical cover and of a sobriety in the design. The

specific and carefully designed structure of the bridge is the best compromise between lightness, for higher speeds and accelerations, and sturdiness, for constant cutting accuracy with any thickness.

Cutting head

The cutting head specifically designed to grant the utmost smoothness is equipped with the following devices:

- **potentiometer**
 - for the control of the head axis in order to avoid cuts outside the glass sheet or on broken sheet thus avoiding any possible damage to the head*
 - for the automatic reading of the glass thickness and consequent adjustment of the cutting pressure*
- **laser device enabling the following operations:**
 - automatic reading of the templates of any material (wood, paper, glass,...) even if positioned on the working plane at the same time*
 - electronic squaring of the glass sheet*
- **exclusive universal adapter to enable the operator to mount the coloured plastic wheel holder, easily recognizable and fit for low thickness instead of the steel wheel holder, which is more solid and precise and fit for high thickness**
- **exclusive "no-drop" system to have an uniform trickle of oil along the whole cutting path**
- **vinyl cutting blades**



REV 370 SLH is equipped with a controlled rotating axis head (C axis), driven by a BRUSHLESS motor for the execution both of straight and shaped cuts.

REV 372 R is a breaking table with a fixed plane, realized in tubular iron covered by antifriction carpet, under which there is the fan for the creation of the air cushion. The unloading of the cut glass sheets takes places by means of the tilting forks, which are driven by electric cylinders. Thanks to the elimination of the hydraulic components (oil pump, pipes, gaskets, solenoid valves,...) the electric drive guarantees the smoothness of the upward and downward movements.

Control panel

The control console, featuring a modern and ergonomic design, combines the might of a professional numerical control with the convenience of a PC working in Windows[®] (Microsoft) environment: the PC will be the only handy and easy interface between the operator and the machine.

The main features of the system are:

- **Programming on board the machine, while the control is managing the movements of the machine, the operator can easily work on the PC**
- **Simple and direct graphic interface**
- **USB port**
- **CD-Rom only for data reading**
- **Keyboard and mouse**
- **Possibility to network with other PCs**
- **Modem connection possibility to use assistance on line.**
- **Graphic and colour display**

The main possible functions are the following:

- **Visualized control of the cutting pressure**
- **Display of partial and total working times**

- **Graphic display of the cutting path**
- **Storage of 254 pressure values**
- **Diagnostics display with language messages**
- **Inlet/outlet diagnostics with language comments and utility**
- **CAD/CAM programs execution in hidden time while the machine is processing**
- **Access to the machine production statistics**
- **Guided and improved access to the machine parameters**

Electrical plant

*Electric installation carried out according to CE rules with from the machine separated power panel and with waterproof connectors and cooling system.
Standard voltage 400/50 Hz.*

N.B.: The glass rack is not included in the supply.

SC-PRO

Package consisting of different integrated software products directly on the PC positioned at the side of the cutting table. The optimization is based on a high-efficiency mathematical algorithm always ensuring a reduced gap.

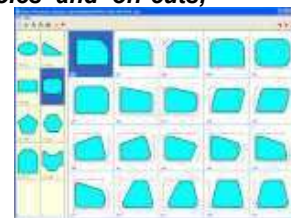
SC-PRO includes:

- **SC-Edit: program for the creation and modification of the optimizations:**

*Possibility to manually modify the optimizations Unlimited sizes optimization
Import of excel file format
20 high efficiency optimization algorithms Graphics sheet editor
Optimization printout
Label printing*

- **CAD Lite: “basic” but complete CAD program with the following functions:**
*Automatic reconstruction of the shape surveyed by laser
Creation of geometrical drawings
Import of format of other manufacturers*

- **SC-GEO: library of 350 parametric shapes, management of holes and off-cuts, nesting X/Y, symmetry X/Y, resizing X/Y, rotation and offset.**



Technical specifications

Overall dimensions	See lay-out
Max. workable dimensions of the glass sheet	3710x2600
Max.dimensions of the glass sheet (automatic loading)	3.710 x 2250mm (max 250kg)***
Min.dimensions of the glass sheet (automatic loading)	1500x1500 mm (max 165kg)
Thickness of glass sheet pack	1000 mm
Workable thickness	3÷19 mm
Weight	2600 kg
Tolerance of floor flatness	±10 mm
Installed power	21Kw
Absorbed power	11 kW
Max. speed	130 m/min
Max. acceleration	8 m\ s²
Cutting accuracy	± 0.25 mm
Straightness accuracy	0.3 mm
Squareness accuracy (area less than 1 sq.m)	1mm
Squareness accuracy (area more than 1 sq.m)	1.5mm
Storage ambient conditions (temperature/humidity)	max -20°C a +60°C - max 80% without condensate
Operational ambient conditions (temperature/humidity)	max +5°C a +45°C - max 80% without condensate

*** A specific optional kit allows to automatically load a max. glass height of 2500 mm