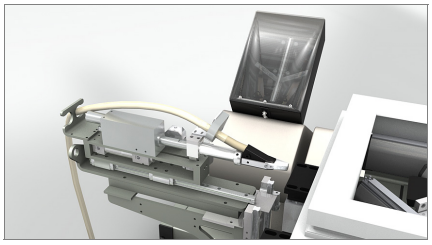
emmegi

en

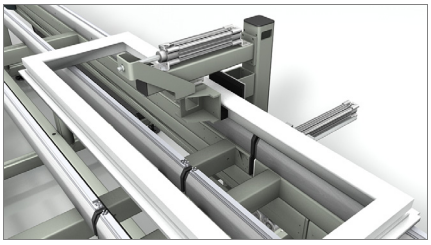
Aluminium

Steel

Pvc



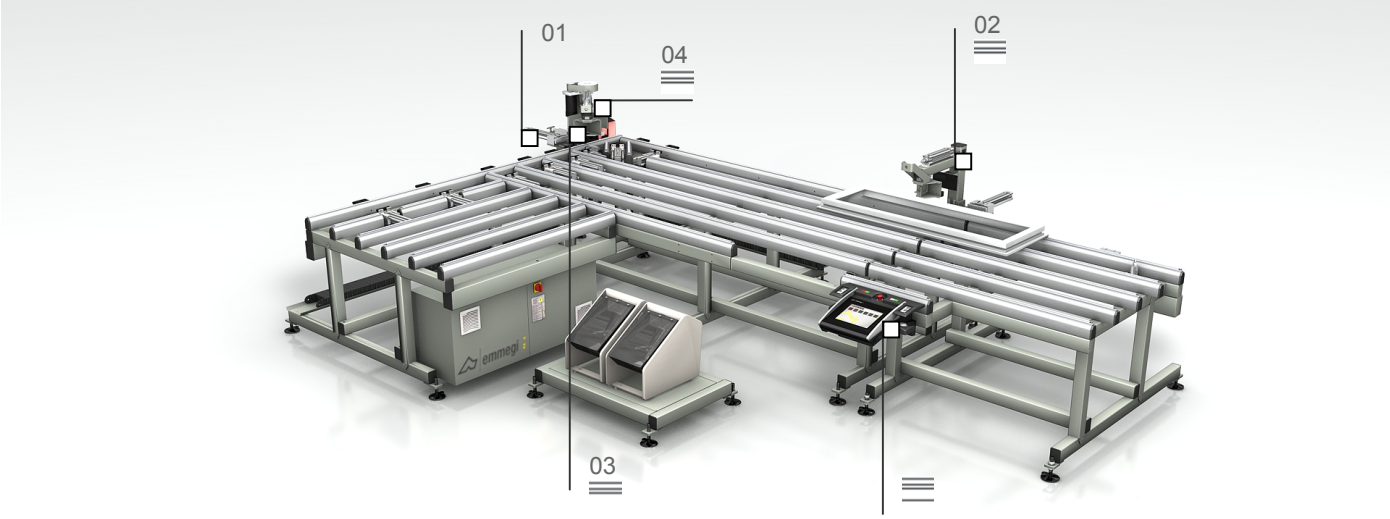
Automatic Screwdriver 01



Frame transfer 02

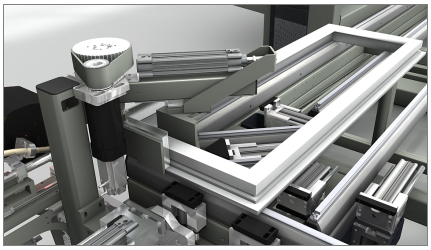
Insermatic V1

Automatic workbench for hardware assembly and screwing with computer vision

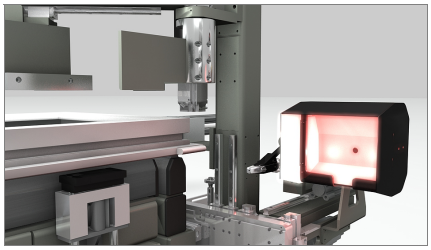


Automatic workbench with computer vision for the automated screwing of hardware with constant or variable step on door and window frames, with large work surface that allows large frames to be handled and rotated.
The INSERMATIC V1 allows you to work independently from the management system.
A computer vision device for holes detection scans the hardware and identifies the points in which the screwing station, subsequently, inserts the screws.
The "B" and "BA" models are equipped with a pre-assembly workbench with component selection systems, with a 21-place hardware storage unit complete with a CN shear for customised cutting and swarf collection drawer. The storage unit can be enlarged on demand to 42 places and can be supplied with an additional shear for variable hardware and LED identification system (optional).
The "BA" models are equipped with a transport system which allows for the automatic movement of frames from the assembly workbench to the hardware screwing workbench.

Frame rotation 03



Computer Vision 04



Control 05

The pictures are provided by way of illustration only

Insermatic V1

Automatic workbench for hardware assembly and screwing with computer vision

01
Automatic Screwdriver

The V1 model is equipped with a screwing station, with the possibility of also inserting an additional loader (optional) for special screws.

02
Frame transfer

This system allows to transfer even large frames from the assembly bench to the screwing bench, and reposition them without any operator intervention, in the point in which hardware screwing takes place automatically.

03
Frame rotation

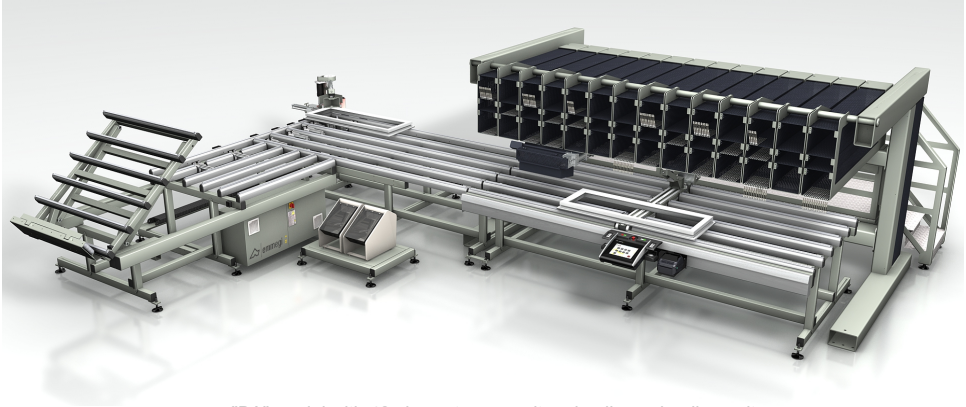
Frame rotation for sequential processing of the 4 sides is ensured by an automatic CN system. The device allows to rotate large frames and reposition them without any operator intervention, until hardware fixing on the entire board is complete.

04
Computer Vision

The V1 model allows you to work independently from the management system, as it does not require screw positioning coordinates transmission from the software.
A laser detection system of the hardware holes scans the profile and identifies the screwing points in which, subsequently, it inserts the screws.

05
Control

The ergonomic and extremely advanced control panel uses a 10,4” touch screen display and completely customised software and is full of functionalities developed specifically for this machine, in Microsoft Windows® environment.



"BA" model with 42 place storage unit and online unloading unit

MACHINE CHARACTERISTICS	
Number of controlled axes	**4**
X axis run – main screwing unit and computer vision scanning (m/min)	**3860**
Y axis run– frame pick up from assembly area (m/min)	**4870**
R axis run – frame rotation	**-5° ÷ 185°**
X axis speed – screwing positioning (m/min)	**45**
X axis speed – computer vision scanning (m/min)	**30**
Y axis speed – frame translation from assembly area (m/min)	**45**
R axis speed – frame rotation (°/min)	**2500**
Operating pressure (bar)	**6 - 7**
Air consumption (Nl/min)	**700**
Installed power (kW)	**8**
Maximum capacity (kg)	**240**
PRE-ASSEMBLY WORKBENCH (“B” and “BA” models)	
Hardware pre-assembly workbench	●
21 compartment hardware storage unit	●
42 compartment hardware storage unit	○
CN shear for hardware with constant step	●
Swarf collection drawer	●
CN shear for hardware with variable step	○
SCREWING UNIT	
Number of screwing units	**1**
Additional loader for screws of special length	○
PIECE LOCKING	
Frame locking system via pneumatic clamps	●
Minimum profile height (mm)	**34**
Maximum profile height (mm)	**120**
Maximum profile locking dimension (mm)	**170**
Minimum workable frame dimension - outer measurement (mm)	**400 x 400**
Maximum workable frame dimension - outer measurement (mm)	**1250 x 2500**
Maximum workable frame optional dimension - outer measurement (mm)	**1250 x 2700**
WORK SURFACES	
Contact surfaces covered with brushes	●
Work surface height (mm)	**905**

- ● included
- ○ available