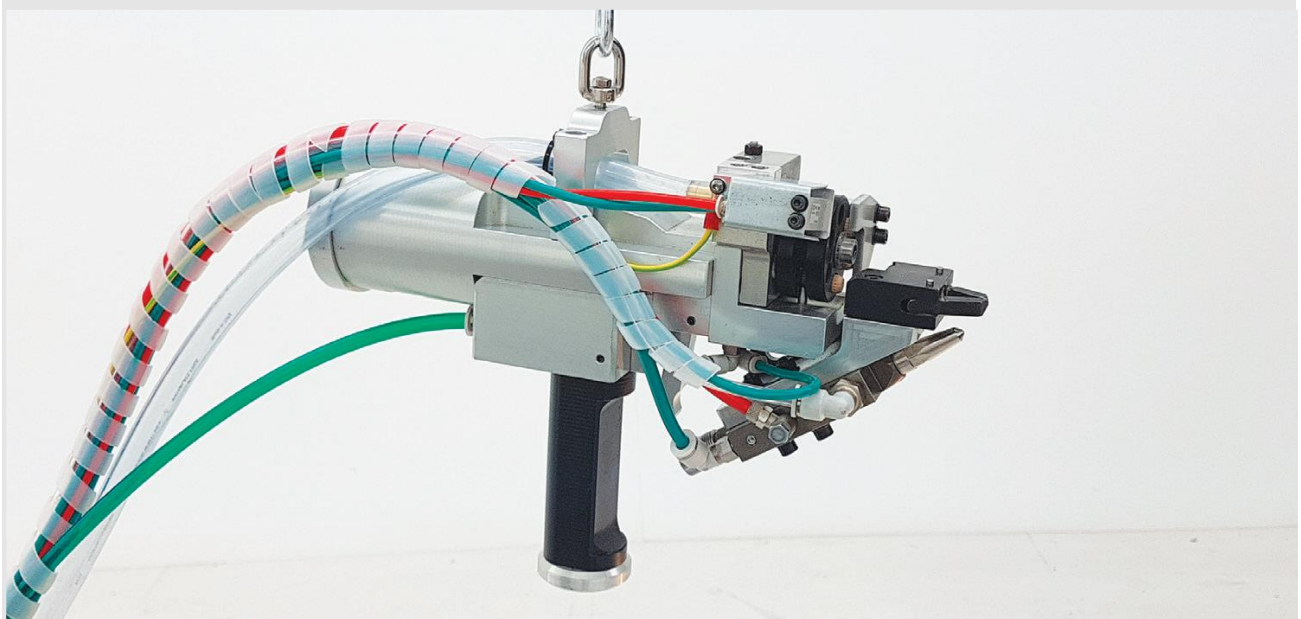


easySHOT

Stationary dowel inserting machine
with pneumatic gun for simultaneous operation
of glue application and dowel insertion





STATIONARY DOWEL INSERTING MACHINE WITH PNEUMATIC GUN WITH BALANCER FOR SIMULTANEOUS OPERATION OF GLUE APPLICATION AND DOWEL INSERTION

Description and technical features

A unique system that...

This manual dowel inserter machine allows to execute, through a sequence of automations, simultaneous operation of glue application and dowel insertion in pre-drilled panels, furniture components, small parts, solid wood components and wood construction components.

The dowels must be loaded up in the circular vibrator, which allows to direct the dowels, which are then cadenced and sent to the gun through a hose.

The dowel, by means of an air blow, is pushed into the drum charger into the gun and then, it is inserted through a cylinder that pushes it towards the dowel hole.

This is a unique system that, avoiding mechanical drives (usually used in other machines for similar applications), keeps out problems of dowel jams and next to this, proves to be very safe.

Before the dowel is shot, the glue - with a very fast operation - is applied by means of the gun positioned below the dowel duct passage. The glue flow/ amount can be easily adjusted through the adjustment knob onto the gun.

With the system "Sure Dowel Shot", easySHOT is also presenting the latest technology within the certainty of the quality of the final result of each single operation carried out cyclically.

A barrier photocell (or presence sensor) controls the effective insertion of each dowel into the hole, checking each operation.

The PIZZI "Sure Dowel Shot" system assures and warrants that the dowel is inserted every time, checking the positive result of each single operation, also preventing misfeeds.

easySHOT is the ONLY machine that knows the dowel is there (dowel presence system) and then inserted, while all other machines assume the dowel is in position.

Through a PLC, it is possible to set up different parameters for glue application and dowel insertion.

The dowel insertion unit is set up for a single dowel diameter.

This unit is covered by the protection according to CE safety regulations.

The machine is set up with the following standard units:

- Frame in electro welded sheet metal, painted with epoxy powders, placed on castors, with working console and handle to make easy the directing of the machine;
- Operating gun, pneumatic, with balancer, very light and ergonomic;
- PLC and control panel placed at man height, in an ergonomic position;
- Vibrating electric feeder complete with unidirectional dowel bowl;
- High quality pressurized tank - in accordance with the CE and PED directives – for PVA glue (low viscosity), 8 kg capacity, maximum operating pressure 5 bar;
- High quality pressurized tank - in accordance with the CE and PED directives - for water (for the cleaning system), 8 kg capacity, maximum operating pressure 5 bar;
- Cleaning unit for the complete system (machine and gun) with button for washing off (glue / water);
- Movable support arm for pneumatic gun with balancer;
- Filter unit;
- Various drives and controls;
- Electric panel.

Production capacity

3.400 dowel insertions per hour

(Which means the complete operation of simultaneous glue application and dowel insertion).

DOWEL DIAMETERS

6 - 8 - 10 or 12 mm available

The machine – in standard configuration – is provided with a single dowel diameter only, the customer chooses the desired diameter among the four available options.

DOWEL LENGTH

25 mm/ min. - 80 mm/ max.

GLUE SPECIFICATIONS

Any PVA glue, in water dispersion*, specially formulated for the use of automatic machines for simultaneous glue application and dowel insertion.

* (Adhesives in dispersion, generally called emulsion, is an adhesive composed of an organic binder (mainly PVA) that is finely dispersed in water).

GLUE VISCOSITY (BROOKFIELD): 200-400 mPa s



PRESSURIZED TANK FOR GLUE: * no. 1 (8 Kg capacity)
PRESSURIZED TANK FOR WATER: * no. 1 (8 Kg capacity)
* Maximum working pressure of pressurized tanks: 5 bar.

Options

- Unit to have another (1) type / diameter of dowels (to have a second available dowel diameter).
Some parts must be set on the gun and others on the machine;
- High pressure pump for high viscosity glue.

For a correct and long-lasting use, the machine requires the following necessary connections:

- 220 volts / 50 Hz. Single phase (others available on request);
- Installed power 0,7 Kw;
- 6 bars of compressed / dry air.

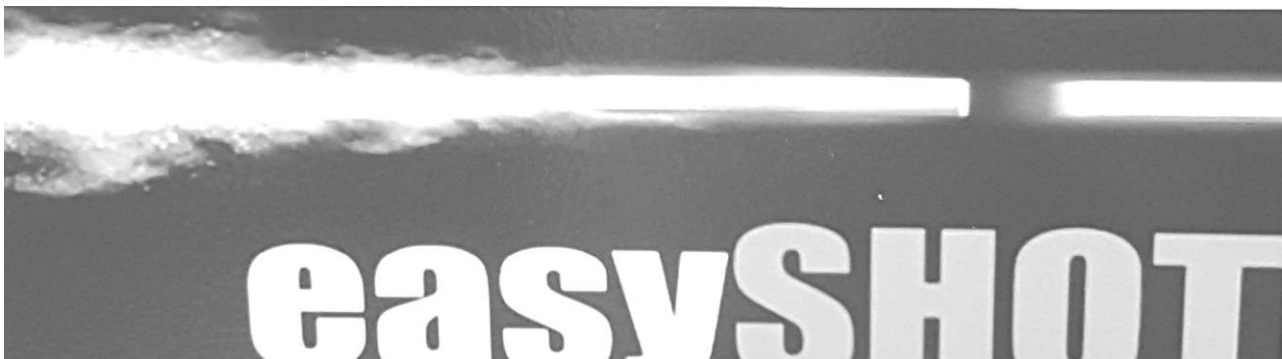
Technical details

MACHINE DIMENSIONS	900 x 800 x h 1.600 mm h 2.100 mm total, with movable support assembled
MACHINE DIMENSIONS WITH CRATE INCLUDED	950 x 850 x h 1.750 mm (wooden crate, with movable support disassembled)
MACHINE NET WEIGHT	310 kg
TOTAL WEIGHT (packaging included)	360 Kg



Benefits and plus points

- System of simultaneous glue application and dowel insertion, professional, efficient and very fast;
- Great saving of time and glue during the production process, shorter dead times, without cleaning problems;
- Processing times are drastically reduced (- 80%) compared to any manual application and to any use of traditional and obsolete devices;
- Cost-effective and fast dosing system, with simultaneous application of glue and dowel insertion, flexible, safe and clean;
- Glue amount and dowel insertion always accurate and constant;
- Operating gun, pneumatic, recoilless, extra light, ergonomic and comfortable;
- "Sure Dowel Shot" system, the latest technology that verifies and guarantees every operation of glue application and dowel insertion, to be sure of the final result of each operation carried out cyclically;
- Constant outstanding dowel length projection;
- Dowels are not inserted to the bottom of the hole, the outstanding dowel length projection is adjusted independent to the drilling depth;
- Stronger adhesion between all the glued parts and long-lasting quality of all the parts stuck together;
- Precise dowel insertion, with the certainty of always keeping the dowel on axis and with a constant directionality;
- Maximum cleaning during each processing stage compared to any manual application and to any use of traditional and obsolete devices;
- Great time saver compared to squeeze glue bottle and hammer;
- Always ready for use;
- Working in total security;
- High quality technology, which guarantees a long service life.



Unique features and plus points with PIZZI easySHOT only..., new, no other competitor can offer the following technology

- **THE DOWEL IS ALWAYS THERE!!!**

"Sure Dowel Shot" system, the latest technology that verifies and guarantees every operation of dowel insertion, controlling the effective insertion of each dowel into the hole, checking each operation, in order to be sure of the final result of each operation carried out cyclically.

The PIZZI "Sure Dowel Shot" system by means of barrier photocell (or presence sensor) assures and warrants that the dowel is inserted every time, checking the positive result of each single operation, also preventing misfeeds.

easySHOT is the ONLY machine that knows the dowel is there (dowel presence system) and then inserted, while all other machines assume the dowel is in position (image 1).

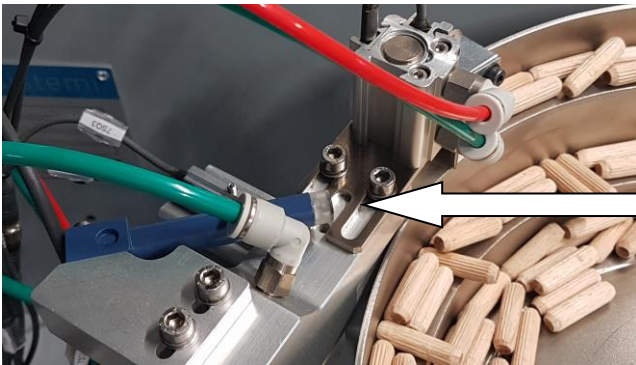


Image 1

"Sure dowel shot" system

- **NO DOWEL JAMS!!!**

- "Air blow dowel feeding systems for no dowel jams".

The dowel, by means of an air blow, is pushed into the drum charger into the gun and then, it is inserted through a cylinder (placed onto the gun) that pushes it towards the dowel hole.

This is a unique system that, avoiding mechanical drives (usually used in other machines for similar applications), keeps out problems of dowel jams and next to this, proves to be very safe (image 2).

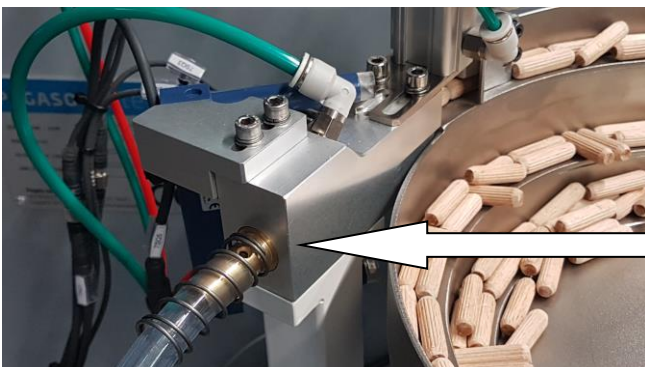


Image 2

"Air blow dowel feeding Systems, for no dowel jams"

- Micrometric glue flow adjustment onto the gun (image 3).

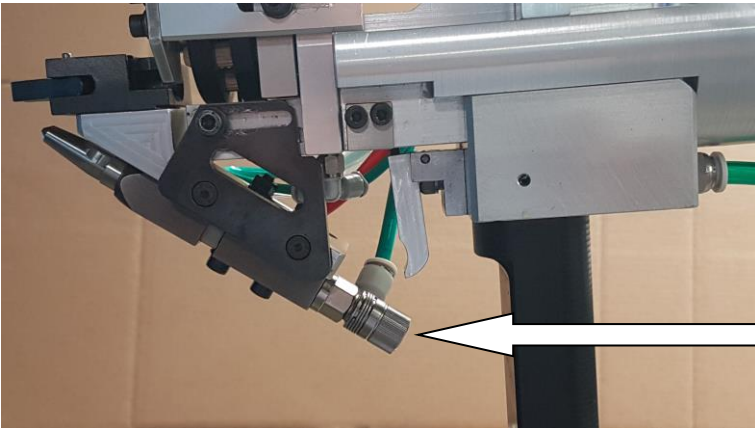


Image 3

Micrometric glue flow adjustment onto the gun

- PLC and control panel placed at man height, in an ergonomic position (image 4).



Image 4

PLC and control panel placed at man height, in an ergonomic position

- Balancer for movable support arm for pneumatic gun (image 5).



Image 5

Balancer for movable support arm for pneumatic gun

- RJ45 interface for network cable for remote assistance (image 6).

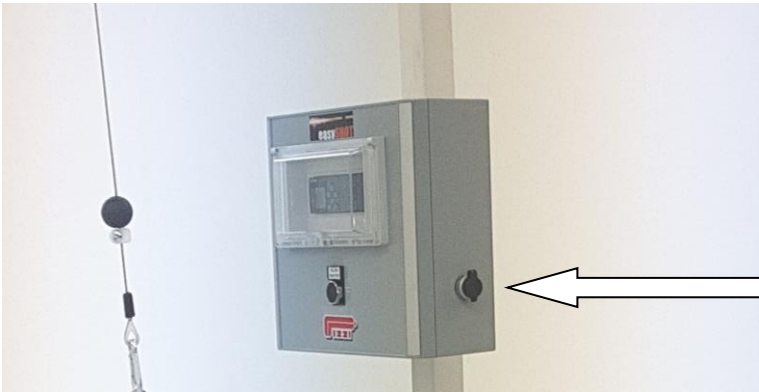


Image 6

RJ45 interface for network cable for remote assistance

- Heavy-duty, high-quality pressurized tanks - in accordance with the CE and PED directives – for PVA and for water (for the cleaning system).
(1) Steel tank of high thickness, fundamental to a pressurized system, (2) strong anticorrosion coating (sides + bottom) of the tank, very durable, (3) inside the tank, there is a plastic canister where to pour the glue in, a long time-tested user-friendly concept to grant a clean professional working, (4) lid in thick brass, chromed-plated, fundamental to a pressurized system;



(1)



(2)



(3)



(4)

- Very easy to move and to direct compared to other machines on the market, heavy, unstable and therefore, difficult to move.



100%
MADE IN ITALY



People. Technology. Innovation.