

ESU Efficient Screwdriving Unit

Reinforcement Screwing Station

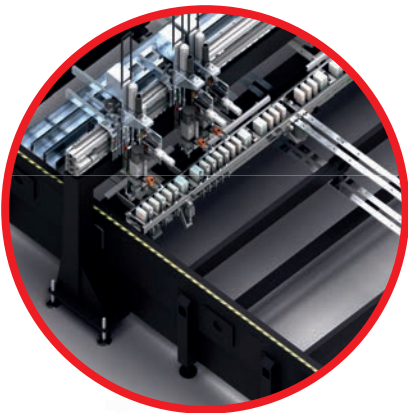
A machine dedicated to the fastening of reinforcements by screwing, which fits into the workpiece processing stages on the dynamic table. It is a CNC system with a fastening module that accommodates up to **4 screwing units with automatic screw feeding**, and operates on PVC profiles with the metal reinforcement already inserted.

The machine defines a fundamental processing step in **line with** a GRAF Synergy **Cutting and Machining Centre**.

Presentation

Speed and Speed and Cycle Time Reduction

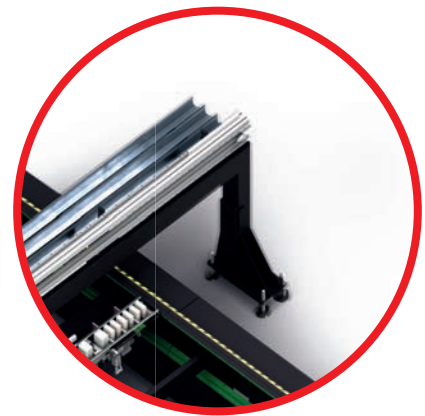
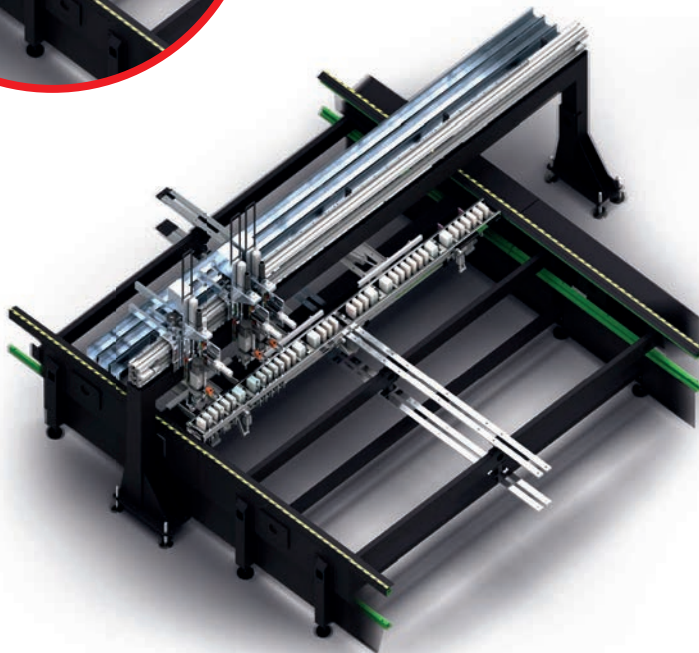
The zero-time screwing process is performed directly during the profile workflow on the dynamic table. The screwing of the reinforcements is carried out automatically and extremely precisely and accurately.



5 reasons to choose ESU

Innovate and Automate

1. **Extreme speed of execution:** enables high levels of productivity
2. **Extremely precise machining:** works on PVC profiles with the metal reinforcement already inserted.
3. **Control of all screwing parameters:** screw position, screw depth, torque and speed.
4. **Brushless electric screwdrivers:** speed, precision, silence and low energy consumption.
5. **High level of automation:** reduces workload as operator intervention is limited to filling the screw feeder.



Designed to ensure the best operation on the market and significantly reduce energy consumption, it is equipped with several **state-of-the-art solutions** such as silent screwdrivers that, being able to work alternately or simultaneously, **optimise activity according to the number of screws** to be inserted, and speed up the cycle time of each workpiece.

The ESU is equipped with modern **software that manages the system in the best possible way**, allowing precise control of every screwing parameter, such as position, screw depth, torque and speed, leaving the operator with only the task of replenishing the screw feeder.

Specifications

Dimensions

Length	4.500 mm
Width	1.800 mm
Height	2.700 mm
Weight	2.500 Kg

Details

Power installed	6 Kw
Power supply	400 V
Air consumption	200 Nl/min
Min. Exercise pressure	7 bar

Operational Characteristics

Work module

Structure

Carpentry bridge and the possibility of inserting up to 4 vertical screwdrivers driven by brushless electric motors.
Automatic software-controlled longitudinal movement according to X axis.
Software-controlled automatic transverse positioning of screwdrivers on Y-axis.

Preps

Screwing reinforcements.

Technical Characteristics

Operators only for supplying screws

Cuttable Profile Dimensions

Module of load and unloading

In combination with dynamic table.

Length	350 / 4.000 mm
Width	40 / 130 mm
Height	40 / 120 mm

Optional

Additional loaders for various screw sizes
4 screwdriving units