

INFINITY-R



For over 30 years in machinery manufacturing, our premise has always been quality in our products. We know that perfection does not exist, but we are sure of one thing: we pursue it with perseverance and dedication.

In the last decade, our evolution has taken us to the technological pinnacle internationally, being, as of today, the first company to manufacture production lines in all the sectors we represent.

Thank you for trusting in our perseverance.



CEO - José Ferrando García

DESCRIPTION

Machine for making longitudinal cuts of the pile.

It can be fed from jumbo, roll, or pallet. Once cut, it deposits the folded fabric onto a cart, pallet, or trestle.

TECHNICAL FEATURES

- STRUCTURE

Formed steel structure. Currently, all Jofesa machines are manufactured with an electro-galvanized structure finish and baked lacquered paint.

Guide rail made of tempered rectified steel.

- CONTROL

New SYSMAC automation platform from OMRON. Currently, all Jofesa machines are installed with this new platform, from the smallest machines to the largest, with the same controller, which provides the speed, flexibility, and scalability necessary for today's industry.

This allows us to expand our machines without changing the installation. The controller, based on the new INTEL CPUs, integrates motion, logic, safety, and vision all programmed from the same software with cycles of 128 axes / 250 μ s.

In our machines, we have two communication buses:

- Ethercat (Ethernet-based Can): the fastest machine network on the market, which connects all machine devices without complicated wired installations.
- Ethernet-IP: a very robust and fast industrial Ethernet bus that connects the machine's touch terminals, from which all machine settings and parameters can be programmed and selected, and can be connected to our clients' networks to collect all necessary information (Industry 4.0).

Each module of the machine has its own control panel, communicating with the CPU via a single Ethercat cable. Both the servomotors, inputs, outputs, safety, vision of the machine, and all pneumatics are controlled via this bus.

The Sysmac platform also integrates the safety solution, where both the safety controller (specific safety CPU) and the safety inputs/outputs are freely distributed throughout the machine, simplifying installation and monitoring of safety states on the touch terminals.

User/machine interface via touch screen.

- **MOTORIZACIÓN**

The heart of our machines is the Accurax G5 servosystems, the perfect combination of control and mechanics. Motion control is mainly performed using servomotors; all drivers controlling the servomotors also incorporate a safety input according to performance level D of ISO 13849-1.

They are controlled by a Motilón Control CPU, allowing us to perform interpolations, cam tables, or electronically connect axes, making difficult tasks easier.

Moreover, where a servomotor is not necessary and a simple motor is sufficient, it will always be controlled by MX2 series drives, with open-loop torque control, allowing us to control them from speed 0, with safety inputs to disconnect motors when the safety devices are open.

- **DETECTION AND VISION**

LEUZE/KEYENCE detection system.

- **PNEUMATICS**

The control of pneumatic movements is also integrated, based on FESTO-MPAL terminals that are fully configurable and scalable, connected via the Ethercat machine bus. All solenoid valves can be manually activated from the machine's touch terminals, as well as adjusting actuation times.

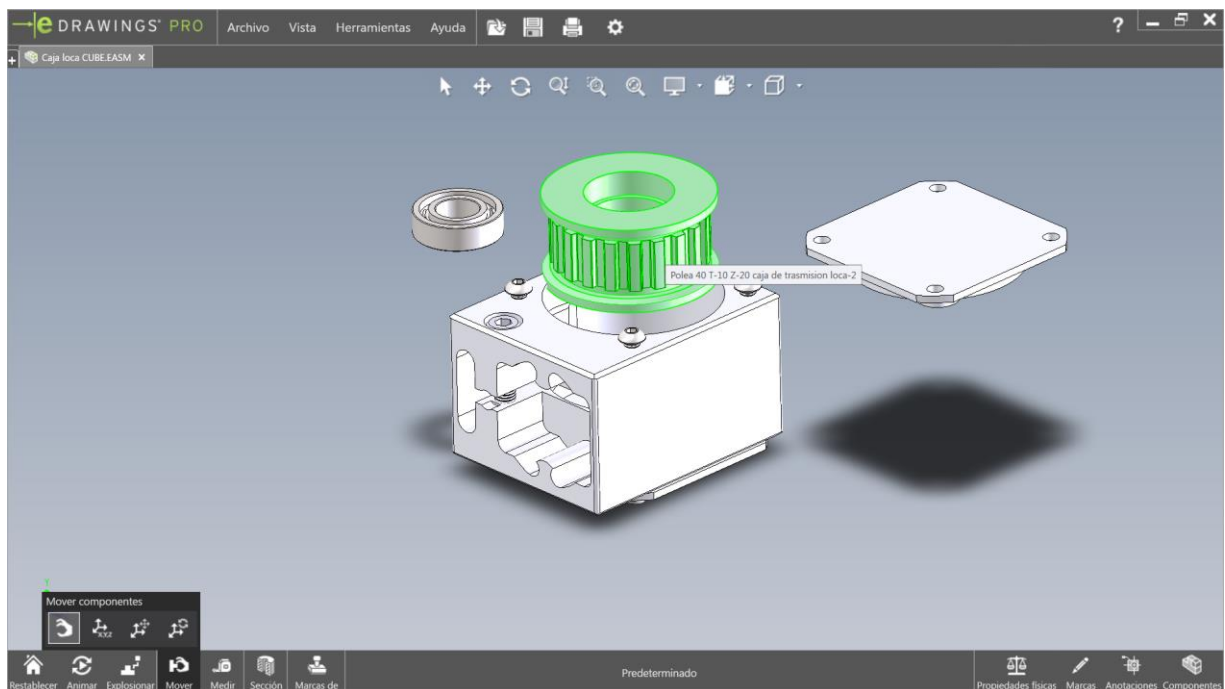
Approximately 90% of the pneumatic actuators are exclusively manufactured for the required actions, with a patented pneumatic system (COMPAC SYSTEMS) that optimizes space and application of the system, facilitating change and maintenance with a proprietary change system.

- SOFTWARE MAINTENANCE

All of this is managed with a single software from which everything is controlled, and from which we can access via the internet to monitor or make changes in the program or maintenance tasks.

- MANUALS AND REGULATIONS

Manuals and CE regulations are included along with a USB containing all the components of the machine in three dimensions, allowing maintenance and changes while visualizing components without needing to disassemble the machine.



PROCESSES

- Jumbo or PALLET, CART, or ROLL feeder.
- Feeder with compensator.
- Final/start roll splicing system with splicing machine and guide.
- Cutting system using a round blade under pressure.
- Longitudinal alignment of the pile.
- Capacity for up to 10 cuts in stock.
- Folding capability to book form.
- Capability for trestle folding.
- Capability for pallet folding.
- Meter programmer.
- Pallet width programmer.
- Width capacity: 2600-3600.
- Speed meter m/min.
- Internal parameter adjustment (screen).
- Manual parameter adjustment (screen).

PRODUCTION AND CONSUMPTION

- IDL-306 head splicing machine.
- Pneumatic pressure – 6 Bar.
- Voltage 220/380 v.

PLANS AND DIMENSIONS

