

SHEET LINES



“COVER SHEET SEMI-TRAIN 3300”

During the course of more than 30 years in the manufacture of machinery, our premise has always been the quality of our products. We know that perfection does not exist, but we are sure that we strive for it with perseverance and determination.

In the last decade, our evolution has taken us to the technological top at international level, being to date, the first company to manufacture production lines in all the sectors in which we are represented.

Thank you for trusting in our perseverance



CEO - José Ferrando García

DESCRIPTION

Machine for the manufacture, production and cutting of bed sheets.

Feeding from "Jumbo" roll with a useful capacity of 3.300 mm.

It uses 2 heads STICH-CHAIN or STICH-CANILLA, which makes up the 2 sides.

Cutting length programming up to 6000mm.

Knife cutting system

Wire breakage detection

End of piece detection

Stacking on trestle type hanger

TECHNICAL CHARACTERISTICS

- **STRUCTURE**

Formed steel structure. Currently all Jofesa machines are manufactured with structure finished in electrogalvanised and fire-lacquered paint.

- **LIGHTING**

Lighting with 5050 LED strip lights, with RGB colour change (green, blue and red) throughout the machine, which increases communication between the operator and the machine. Energy saving and environmental protection.

- **CONTROL**

Movement on ground hardened steel guideways.

New OMRON SYSMAC automation platform. Currently all Jofesa machines are installed with this new platform from the smallest to the largest machines with the same controller, which provides the speed, flexibility and scalability necessary for today's industry. This allows us to scale up our machines without the need to change the installation. The controller, based on the new INTEL CPUs, integrates motion, logic, safety and vision, all programmed from the same software with 128 axis / 250 μ s cycles. Our machines have two communication buses:

- Ethercat (Can based on Ethernet): the fastest machine network on the market, with which we connect to all machine devices without the need for complicated wiring.

- Ethernet-Ip: a very robust and fast industrial Ethernet bus to which the machine's touch terminals are connected, from which all the machine's settings and parameters are controlled, programmed and selected, and which we can connect to our customers' network to collect all the necessary information (Industry 4.0).

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

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

- MOTORISATION

The heart of our machines, the Accurax G5 servo systems, is the perfect combination of control and mechanics. The movements are mainly controlled by servomotors. In addition to the Ethercat bus, all drivers controlling the servo motors have a safety input in accordance with performance level D of ISO13849-1.

They are controlled by a motion control CPU, allowing us to perform interpolations, cam tables or electronically connect axes to axes, making even the most difficult tasks easy. In addition, where a servomotor is not necessary, a simple motor is sufficient. This will always be controlled by MX2 series drives, with open-loop torque control, which allows us to control them from speed 0, with safety inputs to disconnect the motors when the safeties are open.

- DETECTION AND VISION

Leuze/Keyence detection system.

- PNEUMATICS

Pneumatic motion control is also integrated, based on the fully configurable and scalable FESTO-MPAL terminals and connected via the Ethercat machine bus. All solenoid valves can be activated manually from the machine's touch terminals and the actuation times can be adjusted.

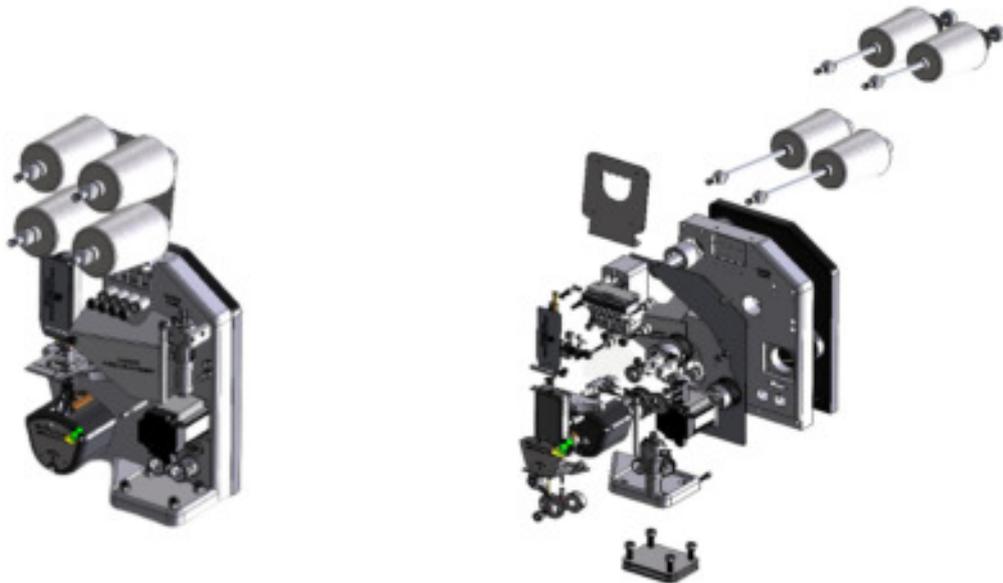
Approximately 90% of the pneumatic actuators are pneumatically manufactured for the required actuations, with a patented pneumatic system (COMPAC SYSTEMS) that optimises the space and application of the system, facilitating changeover and maintenance with its own changeover system.

- SOFTWARE MAINTENANCE

All this with a single software from which absolutely everything is controlled and from which, through the internet, we can access to monitor, make changes in the programme or maintenance tasks.

- MANUALS AND REGULATIONS

Manuals with CE standards and also including a CD with all the components of the machine in three dimensions, which allows maintenance and changes to be made, visualising the components without having to dismantle the machine.



- STICH-CHAIN SEWING GROUPS - Heads - 2 - 1.5 (Optional 1)
 - Machine developed by Jofesa Imagine Systems, SLU, with all the needs required for automation.
 - Quick connection and head exchange in 3 minutes.
 - Repair of any element in no more than 5 minutes
 - No oil sump (oil mist lubrication)
 - Air cooling of the needle
 - Pneumatic foot lifter
 - Integrated thread detectors.
 - Integrated thread holders.
 - Integrated positioning.
 - OMRON G5 Servo Motor
 - Speed 4000 rpm. 2 chain pins.

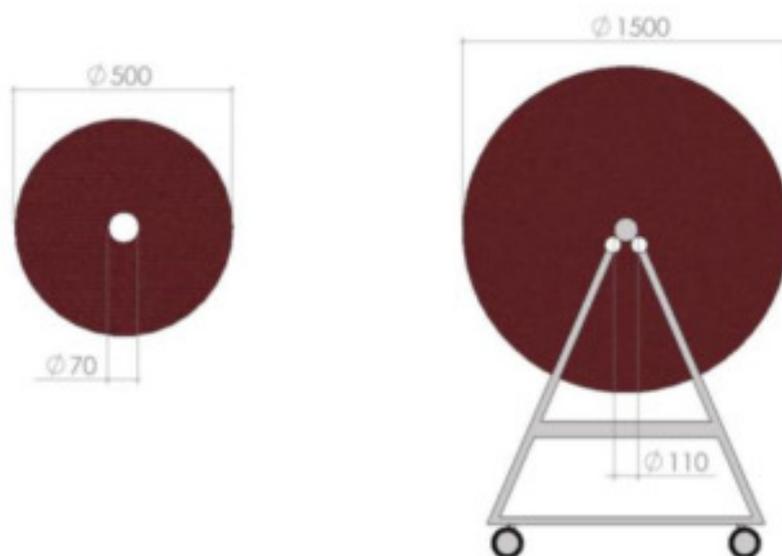
- STICH-CANILLA SEWING GROUP (Optional 2)

- INTERFACE AND SCREEN TOUCH
 - Touch screens (1 unit in machine) on which it is controlled:
 - Cutting length
 - m/m stitch
 - Machine speed
 - Selvedge width
 - Tucked fabric
 - Primary pleats
 - Secondary pleats
 - Bundle units
 - Piece count
 - Production per hour
 - Consumption level, etc...

- INTERNAL SETTINGS (For maintenance managers with password)
 - Adjustments of sensors, times, speeds, limitations, etc...
- CONFIGURATIONS Activate and deactivate items such as:
 - Fabric detectors
 - Yarn detectors.
 - Activate and deactivate heads
 - Colour centring devices (if fitted)
 - Aligners, etc...
- MANUAL MOVEMENTS
 - Fabric feed, reverse, raising and lowering of sewing rollers.
 - Labelling, cutting, sharpening
 - Tape feed
 - Folding, etc...

MEASUREMENTS, PRODUCTION AND CONSUMPTION

FABRIC FEEDER FOR 500 m/m diameter ROLLS (for jumbo rolls 1.500 m/m diameter with external stand).



SIDE CLEANERS FROM 20 TO 100 m/m WITH WASTE EXTRACTOR (if fitted).



- PRODUCTION

- Fabric capacity 3300 mm
- Cutting length programming 6000 mm
- Output approx. 250 pcs/h with cutting length 2200 mm.

PLANS AND BOUNDARIES

