

Machinery

Automatic industrial application system (SAPI system)
exclusively for use with RED DEMON products



Mechanical description:

- 80 x 80 x 3 laminated tube structure
- Motorised roller track
- Zinc coated rollers 80 mm in diameter
- 1/2 * chain operation
- 40 x 40 application hood of extruded aluminium
- Upper enclosure of hood made of iron plate painted with polyester epoxy resin
- Side enclosure made of polycarbonate
- Lower enclosure with stainless steel tray

Electrical description:

- Himel cabinet
- Frequency modulator
- Potentiometer to regulate speed, 1-10 scale
- Motor with ip 55 anti-deflagration protection
- 220v machine operation
- Gear selector
- Power rating 0.37 Kw

Pneumatic description:

- 19 liter A.E.B. tank equipped with safety valve
- 1-10 Bar pressure regulator
- Manometer indicator
- Ball valves
- 8 mm polyester air tube
- Feed tube for Red Demon product of fluoride resin



Spraying description:

Twelve C1 spray nozzles distributed in the shape of a square. Six nozzles are fixed and six adjustable, located three by three, and forming a spray tunnel. The three nozzles on the upper part move up or down depending on the thickness of the wood being treated, the displacement bar comes with a metric tape, and a knob for setting the position. The three nozzles on the right side are also controlled laterally depending on the width of the wood being treated, and equipped with a metric tape and knob for setting the position. The start up for operating the nozzles is done using the ball valves 1st upper/lower, 1st left side/right side, 2nd upper/lower and so on. With this spray system, the product is pushed towards the outside of the tank by using a pressure of under 0.3 MPa and does not come out mixed with air. Thus no misting is produced with the application occurring inside a closed hood and environmental pollution is nil.



Adjustments:

Adjustment of speed from 22.7 m/min up to 37.7 m/min using the potentiometer.
Amount of spray per nozzle 90 ml/min at 2 bar.

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Functional Description:

Filling the tank with Red Demon through the entry inlet and closing the inlet, paying special attention that it is tightly sealed.
Opening the pressure valve to 2 Bar (the tank is ready to work).
Adjust the support bars of the nozzles for height and width in millimetres using the tapes.
Select the command ball valves of the nozzles appropriate for the thickness and width of the pieces being treated.

Opening the main ball valve to allow Red Demon to enter.
Once the treatment is finished, the tanks holding the product must be left without pressure. Doing that requires closing the general ball valves for the air and product and using the safety valve to leave the tank without pressure. It is also necessary to close the access valves to the spraying mechanisms.



SPRAYING NOZZLES



SPRAYING TUNNEL