Automatic dosing system complete, proportional and volumetric with two independent lines, for the preparation of release agents in water at constant dilution.

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DESCRIPTION OF THE EOUIPMENT

The system is compact and its handling is easy and intuitive.

It consists of a structure realized with a frame in aluminum extruded profiles and a stainless steel panel. On the structure you will find the following features installed:

- Electrical panel for the management of two independent lines for the dilution of the release agent
- Stainless steel panel where the two groups of independent mixing house, the air treatment unit and devices and valves for the operation and management of the system DUBAI.
- Stainless steel tank for the storage of diluted release agent.
- Two vertical multistage electric pumps
- Two accumulators with a capacity of lt. 20



Electrical panel It includes:

Interface Panel with the following functions:

- Setting the dilution rate from 0.1 to 5%.
- Meter totalizer and partial, with zeroing of the diluted product used
- Display of all alarms
- Read messages with the possibility of three different languages

Isolation counter power

Two inverters for the pressure adjustment on the pump discharge Two pneumatic valves for the interception of the delivery pressure

- 1. Electrical panel
- 2. Main switch
- 3. User Interface Panel touch screen
- 4. Controls for management system
- 5. Emergency button

Mixing group double

It manages the mixing of concentrate release agent with the water to supply the storage tank with diluted release agent

- 5. Two meter long suction tube for concentrate release agent complete with one way valve and filter
- 6. Ball valve for water connection (3-5 bars)
- 7. Pressure regulator with manometer and water filter
- 8. Two volumetric dosing pumps
- 9. Solenoid valve water control
- 10. Electronic measuring water flow
- 11. Transparent mixer static
- 12. Air treatment unit
- 13. Group solenoid valves for management control system



Storage tank release agent diluted

The stainless steel tank of diluted has a capacity of 150 liters and a large inspection cover provided with key lock.

This capacity avoids large amount of diluted product to remain unused for a long time, that could cause bacterial contamination or the formation of patinas on the surface of diluted and it also facilitates a fast cleaning to avoid the spread of fungus and contamination.

The fresh mixing diluted product is the most powerful.



Group pumps supply pressure release agent diluted

Consists of two vertical multistage electric pumps, one of which is on hold. They have a capacity of 150 lt. / min. each one accompanied by the expansion tank of 20 liters.

Inside this tank there is the levels control.

- 15. Expansion tank of 20 liters
- 17. Ball valve to intercept the supply of the diluted release agent

Operation

The operation principle is based on the proportionality between the passage of water and the dosed concentrated product.

This is done through the electronic flowmeter, which is accurate regardless of the water flow and gives its consent to the dosing pump to supply at each pulse 100 cc of concentrate. The diluted product flows into a transparent static mixer and then into the storage tank where two delivery pumps are connected that deliver independently on each line, to the spray system for dies. The amount of release agent to be diluted is handled by the operator that will set on the display of the control panel the required quantity of product.

There is also an additional level to manage superminimum and supermaximum levels The DUBAI can prepare80 liters / min of release diluted agent. The system DUBAI allows to choose which of the two lines to use or alternatively the intermittent use of the two lines referred to a number of liters of diluted release agent set. If the diluted arrives to the maximum level and the required amount is not produced, the system will remember the delivered dose and the lowering of the level will produce the amount missing to its achievement.

The system DUBAI manages a large number of alarms. We list the most important:

- Fault compressed air
- Fault of water supply
- Anomaly functioning metering pump and its cycle time
- Anomaly suction concentrated in the right amount
- Anomaly operation flow meter water

• Anomaly supply pressure of the diluted release agent Furthermore, activating the automatic switching for each line, in case of fault of that in operation, it is automatically switched to the other line.

The system DUBAI is equipped with two suction pipes of the concentrated product that detects the insufficient level or the end of the same.

Putting each of the two suction tubes in a container of concentrated product, at the end of the first container the tube will automatically switch to the second. In case the diluted arrives at supermaximum level and the required amount is not produced, the system will remember the delivered dose and with the lowering of the level it will produce the missing amount to its achievement.



14. Electric vertical multistage pump to supply pressure of diluted release agent

16. Pressure switch with two intervention levels minimum - maximum

On the start page of the touch screen there are the main operating parameters.

• Level release agent concentrated

• Water flow input

• Percentage of dilution of the release agent

• Delivery pressure of the diluted release agent

• Level of the diluted release agent

 Quantity of running water for each 100 cc. of release agent

 Value of depression detected during suction of release agent concentrate. It must be between the minimum and maximum values

Benefits

- Automatic production of release agent with rigorously constant dilution due to the chance of calibrate the metering pump according to the density of the product.
- Easy programming through PLC
- Low maintenance due to its reliability and robustness
- Production and constant amount of diluted release agent predefined by the customer depending on the needs of the case (start dies, press stops, frequent changes in dilution rate, etc.)

Connections

- Power supply 400 V AC three phases
- Compressed air at 6 bar by attack 1/4 "female with rilsan tube 6 mm.
- Clean water through a 15 mm int. diam. tube and a 1/2 "F

The panel of the system DUBAI should be strictly fixed at 30 cm. above the container of the concentrate

Dimensions

• Height 1.845 mm. • Width 1.385 mm. • Depth 943 mm.

ALWAYS REMEMBER THAT IT IS EXPENSIVE TO USE A FRAGILE AND UNRELIABLE DOSAGE SYSTEM



HIGH COSTS AND WORRY

REDUCE COSTS AND IMPROVE YOUR PROCESS WITH DUBAI

USE ORIGINAL PARTS ONLY



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