

Cofomegra Corrosion Box / Sulfer Dioxide Cabinet



Stock Code: MA765

Manufacturer: Cofomegra

Model: C200/400

Year of Manufacture: 2010

Serial: 382

New or Used: Used (Second Hand)

Work Envelope (WxDxH mm): 610 x 610 x 610

Process Stages: Sulfer Dioxide / Condensation Testing

Other Info: This is the enhanced model

External Dimensions (WxDxH): 1320 x 780 x 2910

Corrosionbox Salt Spray Cabinet Principle of functioningSalt Spray Test.

Atomising the salt solution with compressed air the spray-nozzle produces a corrosive fog. The air pressure in the spray nozzle is adjusted via the pressure regulator.

The humidify supplies the spray nozzle with warm saturated compressed air. The humidifier is supplied with air and de-ionised water, whereby the air is filtered through an air/oil scrubber beforehand.

The salt solution is proportioned via the dosing pump into the spray nozzle and the quantity is adjusted via the pump speed.

The chamber temperature is controlled via the PTC temperature sensor in the corrosion chamber.

Condensation Test.

To perform the condensation test the humidify and the spray nozzle are not in operation. The bottom of the chamber must be filled with water up to the water outlet. The water on the bottom is heated creating a damp heat atmosphere in the test chamber.

Prohesion Test.

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The test consists of cycles of 1 hour fog and 1 hour dry off. During fog period no heating is applied to the test chamber and air haven't to be humidified. During dry-off period the chamber is purged with heated air. Within 3/4 h from the fog period all visible moisture is dried off the specimens and the test chamber temperature shall reach 35°c

Features

Adjustable foots to level the chamber. Salt solution level sensor. When in the tank the salt solution is near to end, a message on the display will inform the operator. Connection between solution tank and metering pump, inside of the salt solution tank there is a filter. Front door, access to the test chamber. Salt tank solution, 260-litre capacity. Level meter of salt solution. Spray nozzle. Panels holder rack. Shield to avoid samples direct spraying. Fog drain to be connected to a chimney. Air inlet. Press Purge push button to introduce fresh air for fast fog evacuation before door opening. Heated air is introduced during dry phase of Prohesion cyclic test. Spray nozzle pressure regulator, the correct value is about 1 bar. Control panel Water level sensor inside of the test chamber, if the water level is below the minimum the test is interrupted and a message ask to feel manually the water in the chamber Chamber drain tap in order to blow off the liquid inside the test chamber. Chamber heaters, a red pilot shows when the heating elements are on. Salt solution tank tap in order to blow off the salt solution. Chamber temperature sensor. Dosing pump. Its function is to proportion the salt solution to the spray nozzle. The pump must be inspected frequently (see 11.3). The dosing pump speed can to be adjusted using a screw driver. Moisten. The compressed air, when the solenoid valve Y1 is open, crosses the pressure regulator and enters into the bottom of the humidifier across a scrubber. The compressed air from the upper side of the humidifier goes to the nozzle spray. There is a pressure gauge to monitor the current pressure on the control panel. Air heater. Its function is to heat the air during dry phase of Prohesion cyclic test. The air temperature depends from the air supply pressure and the position of the regulating potentiometer positioned on the air heater. Thermostat protection. If air temperature rise up to 80oC the thermostat trip out disabling the heater. Humidify by pass. When rise is in the vertical position (Salt) air will pass through the humidifier before reach nozzle; this is required by Standards for salt spray. When lift is in the horizontal position (Prohesion) air reach directly the nozzle, air without humidity is required by Standard describing Prohesion test conditions. One way valve. Positioned at the end of air heating circuit, its function is to avoid that corrosive fog reaches the heating component. Valve can easy inspected unscrewing the cap with red ring. Solenoid valves. Y1 is the air compressed inlet valve, it is always opened during salt tests. Y2 is the water inlet valve, it is opened only during the automatic filling of the humidifier. During this operation the test is suspended. Y3 is the air compressed inlet valve to the chamber to remove the fog from the chamber. Only when the test is interrupted pressing Purge is it possible to open this Y3 valve. Electrical circuits board. Fuses holder (see electrical diagram). Test chamber water level sensor. It will open electro valve M to refill the bottom of the test chamber when water level is too low. Solenoid valve. Water level sensor N will open this valve to refill the test chamber bottom when water level is too low. Technical data

- Test chamber dimensions, dome not included: W. 1100 X D. 800 X H. 1120 mm.
- Capacity: 6 racks, up to 150 test panels size 150 x 60 mm.
- Test temperature range: ambient up to 55oC.
- Electrical data: 230 Vac 50/60 Hz, 13 A max (16 A max, with Prohesion option).
- Fuses: 230 Vac, 2 x 20 Amp.; 24 Vac, 1 x 6 A.
- Compressed air supply: 3-6 bar.
- Compressed air consumption (Salt spray): approx. 4 Nm³/h./h.
- Demineralised water consumption: approx. 0.3 l/h.



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Noise level

The continuous noise level emitted from the instrument does not exceed 70 dB(A).

View Cofomegra Corrosion Box / Sulfer Dioxide Cabinet on our web site at

<https://www.rileysurfaceworld.co.uk/machines/30800.htm>

PHOTOGRAPHS TAKEN PRIOR TO REFURBISHMENT.