

# RUST TESTING in HUMIDITY CABINET

- Conforms to ASTM D1748 and FTM 791-5329
- Automated Water Level Control
- Automated Hood Opening with Timer
- Capacity for 33 Test Panels
- Temperature Stability of  $\pm 0.5$  °C

**Model 423** Humidity Cabinet conforms to the design and specifications of ASTM D1748 and FTM 791-5329 test methods for measuring rust protection of metal preservatives. The rack rotating at  $0.33 \pm 0.03$  rpm has a capacity for 33 test panels. The cabinet's humidity environment is maintained at  $48.9^{\circ}\text{C} \pm 1^{\circ}\text{C}$  by a digital indicating controller. Air flow to the 20 spargers below the water level is metered at  $31 \pm 1$  cu ft/hr by a float in glass tube flowmeter (mass flow controller is available as an option).

A secondary controller of the water temperature acts as a safety over temperature limit in the event of primary controller failure.

The bath and internal construction is all stainless steel. The outside cabinet construction is of anodized aluminum frame and painted aluminum panels. The cabinet is mounted on lockable casters for ease of positioning in the lab. The distilled water level within the bath is automatically maintained at 8 inches. The bath has a 94 liter capacity. A pan collects the drippings from the test panels and is drained to the outside.

The light weight, hinged cover has two layers of airplane cloth (as specified by ASTM D1748). As an option for Model 423 humidity cabinet, a timer and mechanism is provided that automatically opens and closes the cover to the specified angle of opening and for the required exactly 15 minutes and 5 minutes every day at the same time of day (except Saturdays and Sundays). An alarm alerts the operator as the

## Also for Methods:

ASTM	D1748
FTM	791-5329



▲ Model 423

cover is opening. This feature assures that the test method is followed more carefully, relieving the operator from this repetitive task.

**Model DB-1** is the panel draining box as is specified in Fig A1.4 of ASTM D1748 test method. For an extended useful life, it is constructed of anodized aluminum for the frame and painted aluminum side panels. It conforms in all other respects to ASTM D1748 method.

## ► ACCESSORIES

Part No.	Description
AH-1	Automated Hood Opening Mechanism with Timer
HC-1	Replacement aluminum oxide air diffuser stone.
HC-2	Replacement airplane cloth for the cover of Model 423.
HC-3	Aluminum oxide (240 grit) cloth for panel preparation.
HC-4	Steel test panels with 51 x 102 x 3.2 mm dimension and a weight of 110 grams. The panels are fabricated from open-hearth, "killed" type low carbon, No. 4 soft temper, cold rolled steel.
HC-5P	Polymethyl methacrylate dummy panels.
HC-5S	Stainless steel dummy panels.
HC-6	Stainless steel suspension hooks for the test panels.