

Test Climatic Chamber of Temperature and Relative Humidity



General Description

Our Equipments with Temperature Control (cooling/heat) and Humidity are conceived for to simulate the more several environmental conditions then it could generate in the nature, in the same way so accelerated environmental conditions to be inspired in the industrialized world (DIN, UNE, MIL, ASTM, IEC, Automotive Norms and Pharmaceutical Norms - ICH/FDA).

Each enterprise is a world and the essay it carry out are differents according to manufactured product and the sector where it going runs. Evidently the Climatic Chambers it isn't all identical neither to be useful for it same. It has necessary, well to know of precedence what's the customer like to essay and which are the characteristics of that essay: **to adapt the Chamber to Customer, and not the Customer to the Chamber.**

Temperature Homogeneity: $\pm 1^{\circ}\text{C}$ to empty ($\pm 2^{\circ}\text{C}$ to full load with spacial distribution map of thermocoupled according to ASTM Norms).

Humidity Homogeneity: $\pm 2\%\text{HR}$ to empty ($\pm 3\%\text{HR}$ to full load with spacial distribution map of thermocoupled according to ASTM Norms).

Air Circulating in forced treatment intervening motor-fan installed at the bottom of the Chamber (number of motor-fans according to model). For to avoid its calorific dissipation the motors are installed outside of the chamber.

Heating system for blindage electric resistances and finlikes of high power of calorific dissipation and totally manufactured in **stainless steel**. Its installation is easy accessibility to supply its maintenance.

Electric cupboard justly installed and protected where installed too the electric

components, all the electronic elements of power, safety and control. Everyone of electric components, all justly identified, insulated and protected according to Current International Norms with regard to Electric Safety and Electromagnetic Compatibility (EMC - Emission and Immunity).

Measuring of Temperature intervening Thermocoupled type PT-100 Ohm., DIN Class A.

Measuring of Humidity intervening capacitive Thermocoupled, that not required maintenance of match neither periodical feeding water.

Safety system intervening an independent thermostat for over-temperature with disconnected the heating system.

Configuration the alarms to different thresholds.

DYCOMETAL characterized its Chambers according to two discernments: ITS CONSTRUCTION AND ITS REGULATION.

Construction

COMPAC/ MONOBLOCK: Chiefly robust, the Compact or Monoblock Chamber Construction are manufactured on a **steel-tube structure** and externally intervening veneer **zincate steel**, with acrylic painting dried to furnace in bright gray colour according to **RAL-9002**, internal in veneer **AISI 304 (18/8) stanless steel**, polished, calendar, antimagnetic, completely tight and without inner solder. Small lattice of protection the motor-fan in stainless steel. Door painting according to **RAL-5021**. Hinges and inclosures chromated.

Doors with/ without observation window.

Thermic isolation developed for halfrigid panels of expanded polyurethane of hig density and very low thermic conductivity coefficient, exempt of fluorchlorine hydrocarbons, asbestos and lead and mercury oxides according to current environmental norms concerning to installation of acoustic-thermic isolations.

Standardize models of variable capacities since 81 liters (MINITEST) until 2000 liters.

Volume available	Inside dimensions (mm)			Outside dimensions (mm)*		
(liters)	High	Width	Depth	High	Width	Depth
81	450	450	400	1150	680	800
125	500	500	500	1200	730	900
180	600	600	500	1700	820	900
300	700	700	625	1850	850	1025
480	800	800	750	1970	1020	1150
648	900	900	800	2000	1100	1225

1000	1000	1000	1000	2150	1220	1425
1500**	1000	1000	1500	2150	1250	2000
2000**	1000	1000	2000	2150	1250	2425

* Variations according to temperature range.

** Model available with 1 or 2 doors.

Temperature range from -70°C to 150°C (be able to arrive, optionally, to 180°C) and relative humidity from 15% to 98%H.R., (according to psychometric diagram).