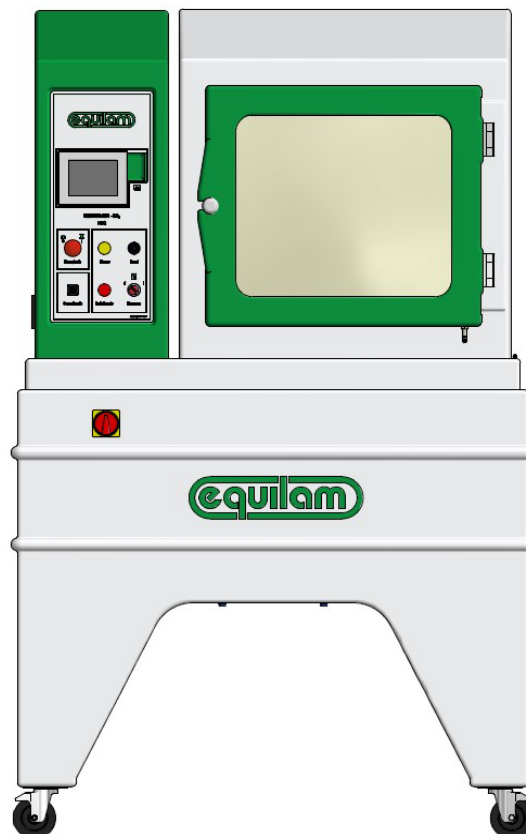


Humidity Test Chamber – KEQUM 300

- Built in fiberglass with special resin of high chemical and temperature resistance (inert material), externally and internally.
- The KEQUM 300 was designed with an air jacket and thermal insulation, ensuring great temperature homogeneity in the internal test chamber providing a final realist result.
- The equipment guarantees great electrical energy savings as part of ecologically correct equipment line.(GREEN).

US PATENT # 10371623

The KEQUM 300 was developed to test metallic or non-metallic samples, in a humid atmosphere of constant water condensation or in alternating atmospheres to identify the appearance of corrosion, blisters, loss of color and brightness on coatings and defects in whole products or in parts



Equipment construction details

- ✓ Control Panel: Built with PLC (Programmable Logic Controller), with 5.7" color touch screen;



- ✓ DEI water tray of the test cabinet built in inert material (non-metallic) with a volume of 2 liters, includes safety system, for lack of water in the tray and overheating. Cooling realized by air circulation;

- ✓ Front door according to technical standards, with tempered glass;



- ✓ 8 Test specimen supports in 12 mm round bars of non-metallic material;



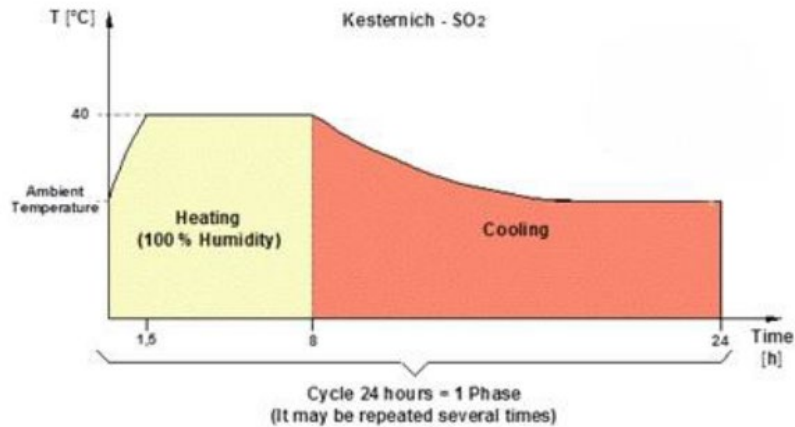
- ✓ Supervisory System, we have 2 types (optional):
 - Via RS 232 or USB, needs a PC connected full time.
 - Via SD Card, all acquisition will be done in the SD card of the touch screen.



- ✓ Fully automatic cycle without human interference according to the following standards:

DIN 50017

DIN EN ISO 6270-2 CH, AHT, AT



- ✓ Internal test cabinet built in fiberglass with no metallic part, ensuring test performance;
- ✓ Allows visualization of executed and programmed modes, records and displays date and time of executed alarms;
- ✓ Program Loops: 20 modes, with repetitions 100 times for each program;
- ✓ Events: ON/OFF outputs - 220 Volts - 10A;
- ✓ Resolution: 0.1°C;
- ✓ Independent Auto Tuning for each mode;
- ✓ Independent P.I.D (Proportional Integral Derivative) temperature and relative humidity control system for each mode and ramp mode, to meet the standard;
- ✓ Preventive and corrective maintenance function indicates on the screen, avoiding unscheduled downtime;
- ✓ Scheduling function with date and time to start the test;
- ✓ Graphical function, with a simple touch on the panel, allows the operator to graphically visualize the test parameters ON LINE, on the Touch Screen;
- ✓ Timer with indication of test time and interruption time;
- ✓ °C or °F temperature unit selection on the display.

Technical Specifications

- ✓ Internal Cabinet Temperature: Amb. Temp. +7.4°F(+4°C) - +140°F (+60°C) – others consult us
- ✓ Labs Conditions Temp.: +62.6°F(+17°C) - +82°F (+28°C)
- ✓ Temperature homogeneity of the internal enclosure: +/- 1°C;
- ✓ Relative humidity of the internal cabinet: 95% ~ 100% ;
- ✓ DEI water volume of the internal tray: 0.44 gal (2,000ml), with constant level;
- ✓ After the end of each round the tray solution is automatically discarded and the next round starts automatically, without human interference;
- ✓ Operating voltage: 208 ~ 230 Vac - 60Hz - 10A ;
- ✓ Internal test cabinet volume: 66 gal (300 liters) ;
- ✓ Internal dimensions: W x D x H (mm) = 28.4"x 20.1"x 35.1" / 29.9"(720 x 510 x 890 / 760 mm);
- ✓ External Dimensions: W x D x H (mm) = 47.2"x 47.2"x 77.9" (1,200 x 1,200 x 1,980 mm);
- ✓ Net weight: 143.4 lbs (65 kg).
- ✓ We point out that the equipment was designed to meet the "GREEN PERFORMANCE" sustainability requirements, reducing the cost of electricity.

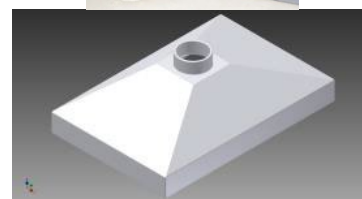
Optional Accessories

EQOP. 0005 Support for special specimens, according to drawings.

EQOP. 0006 01 piece - Specimen holder, for plates with 15° or 30° inclination - 300 liters chamber.



EQOP. 0011 Fiberglass hood with smooth finishing internally and externally, facilitating cleaning.
Net weight: 44.09 lbs (20 kg).



EQOP. 0012 WEG (IP 64) with fiberglass sirocco. 1,940 CFM
Weight 88.1 lbs (40 kg)



EQOP. 0013 DI Water assembly includes: activated carbon water filter, DI column, LED water quality indicator.



EQOP. 0014 Spare column for the spare DEI.

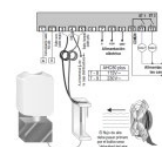


EQOP. 0015 Spare active carbon filter.

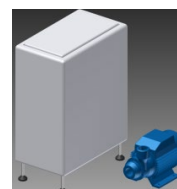


EQOP.0035 Access door with 2" diameter, for the passage of cables.

EQOP. 0047 Digital Relative Humidity Indicator.



EQOP. 0112 Condensate drain compartment, with pump, for chamber drain.



EQOP. 0113 Security cabinet composed of polycarbonate doors and sides, air intakes, 130.66 CFM motor, smooth fiberglass hood on both sides.



EQOP. 0153 Dynamic sample holder, conforming to standard, ASTM D1748.

NOTE: If you are interested in other special items, we are at your disposal for further consultation.

Recommendations - Facilities for installation

DEI Water	0.44 gal (2,000 ml) per 24-hour cycle
Energy	208 ~ 220 Vac – 10A – 1 – 60Hz
City Water	For cleaning
Exhaustion	Air of the room where the equipment will be installed
Drain	1" drain (must be sent for sewage treatment)

References for corrosion standards

SALT SPRAY	SALT SPRAY CASS	SALT SPRAY ASS	CCT / ACCT	HUMIDITY	KESTERNICH	CORRODKOTE
ABNT NBR 8094	ABNT NBR 8824	ABNT NBR 8823	ASTM G 85	ABNT NBR 8095	ABNT NBR 8096	ABNT NBR 9100
ASTM B 117	ASTM B 368	ISSO 9227 ASS	PV 1210-W	ASTM D 1735	ABNT NBR 10580	ASTM B 380
ISO 9227	ISO 9227		GM 9540 P	ASTM D 2247	ASTM G 87	DIN 50958
JIS Z 2371			SAE 1563	DIN 50017	DIN 50018	
BSI 7479			CCT 1 – HONDA – NISSAN	DIN EN ISO		
ANFOR A05 101			CCT 4-HONDA- NISSAN			
MILS			CCT – HONDA			
			VDA 621-15			

Note: We recommend that for each equipment its respective solution is used, i.e. never use a Salt Spray chamber as a CASS - ASS - Kesternich (SO₂) chamber or as a Wet Chamber, because there is chemical contamination, distorting the final result of the test. See Item 4.6 of ISO Standard 9227.

Note 1: Our equipment comes with Instruction, Installation, and Maintenance Manuals, which we believe are sufficient to get it up and running. We are at your disposal for additional information or help. If necessary, we can perform on-site assembly and training services (expenses not included in this estimate).

Note 2: Appearance and specifications of the equipment are subject to change without notice.