

Applicable Test Standards

Water condensation tests:

DIN EN ISO 6270-2:2005
BS 3900 F2
BS 3900 F15
ASTM D2247



Legend

CH - Constant Humidity
AT - Alternating Temperature
AHT - Alternating Humidity and Temperature
AIR - Forced air circulation
AWRF - Automatic Water Refill

Order Information

Basic model:

CON 1000-TL

Article numbers versions:

- V.705.065.050 (CH)
- V.705.465.050 (AIR, AWRF)

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Specification subject to changes

Pictures might differ from original

Product Description

These compact and easy to operate top loading corrosion test chests are designed for conducting standard water condensation tests according to the most common international test standards such as:

- DIN EN ISO 6270-2:2005 (CH) constant humidity
- DIN EN ISO 6270-2:2005 (AT) alternating temperature
- ASTM D2247

Cabinets with AIR option are applicable for the additional water condensation tests:

- DIN EN ISO 6270-2:2005 (AHT) alternating temperature and humidity)

Customer Benefits

- Cost effective solution for basic water condensation corrosion tests (CH, AT, AHT)
- Compact top loading (chest) design
- The Köhler- VLM technology allows the best possible reproducibility of the temperature conditions
- The test chamber with the bottom made of stainless steel is more robust and less susceptible for damages compared to the competitive products made of glass reinforced plastic
- Lower cost of ownership compared to the competitive products where the test chamber is made of glass reinforced plastic (shorter test periods, better energy efficiency, easier for service and maintenance, longer life cycle, more resistive to mechanical damages)
- User friendly control system with preconfigured test parameters
- The test chest is made of recyclable materials

CON 1000-TL (+55°C)

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Figure 1 Jumo dTRON controller

Accessories Included

- 6 rods for supporting test specimen
- 2 m exhaust hose Ø 75 mm
- 2 m drain water hose Ø 18 mm
- 1 female connector for compressed air hose (size no. 5)

Technical Specifications

Capacity	ca. 1000 L
Interior dimensions test chamber (WxDxH1/H2)	ca. 1425 x 800 x 690 / 1005 mm
Outer dimensions of the casing (overall) WxDxH	ca. 1895 x 890 x 1265 mm
Required power supply	230 V, 50/60 Hz, 1400 W
Materials used	The walls of the chamber are made of Polypropylene while the bottom is made of stainless steel and coated with ECTFE. The walls have milled openings for supporting rods
Heating	Flat Micanite heaters under the bottom of the chamber for fast and uniform heat transfer
Sensors	- 1x corrosion resistant and highly sensitive temperature sensor
Temperature stability	±0,5°C
Aeration (type AIR)	timer controlled built-in fan (capacity ca. 16 m ³ /h)
Timer	Two channel timer for automated switch over from heating to aeration mode
Weight	250 kg
Max operating temperature	+55°C
Other specification	
Purity demineralized water / filling volume / fitting	< 5 µS/cm / ca. 3,5 L / ¾" outer diameter Option: Automatic water refill
Tap water (connection type)	e.g. via Ion-exchanging cartridge (¾" outer diameter)
Compressed Air	6-8 bar (connection nipple size 5)
Waste water, drain	Pipe fittings (spiral hose ID 18 mm)
Exhaust pipe outer diameter	Pipe fitting (50 mm external diameter)
Supporting rods / max load	Stainless steel coated with plastic / 30 kg load each

Process Control

- User friendly, microprocessor based controller (Figure 1)
- Programmable timer function
- Restricted access for authorised operators (security code)

Operating system Constant Humidity (CH) according to ISO 6270-2

- Flat heaters under the bottom of the chamber for uniform and rapid heating of the water in the trough
- Temperature stability in the chamber ± 0,5°C
- Parameters for standard water condensation tests are already preconfigured

Operating system AIR and AWRF

- **Option:** System for forced ventilation (AIR) with a variable speed fan for drying test specimens with environmental air
- **Option:** Automatic water refill (AWRF) system suitable for AHT type of condensation test