



Product Data Sheet

CON 1000-FL (+60°C)

Legend

CH	- Constant Humidity
AT	- Alternating Temperature
AHT	- Alternating Humidity and Temperature
AIR	- Forced air circulation
ADO	- Automatic door opening
CWC	- Controlled water condensation
KES	- Cabinet prepared for the Kesternich (SO ₂ gas) test
AWRF	- Automatic Water Refill

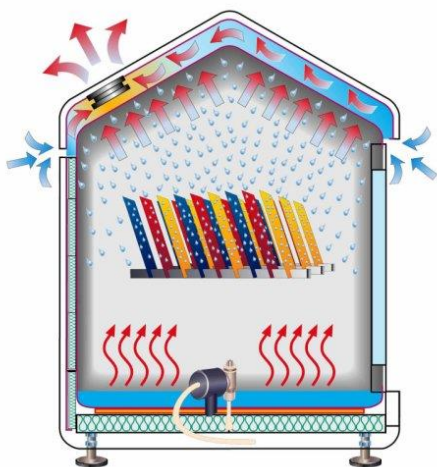


Figure 1 Patented Controlled Water Condensation (CWC) system



Product Description

This compact and easy to operate front loading corrosion test cabinet is 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 or ADO option are applicable for the additional water condensation tests:

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

The cabinets with the KES option are suitable for conducting Kesternich tests acc. to:

- DIN EN ISO 6988

All test cabinets of this type include the bench cabinet.

Order Information

Basic model: CON 1000-FL

Article numbers of various versions:

- V.705.061.020 (CH)
- V.708.261.020 (AIR)
- V.705.561.020 (AIR CWC AWRF)
- V.705.562.021 (AIR CWC AWRF KES)

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Specification subject to changes
Pictures might differ from original

Customer Benefits

- Cost effective solution for basic water condensation and SO₂ corrosion tests
- Compact front loading design with bench cabinet
- Patented VLM technology allows the best possible reproducibility of the temperature conditions being created in the test chamber regardless the environmental conditions and the geographical location – for this reason are the VLM corrosion test chambers an excellent choice for international corporations with test labs across the world
- Test chamber made of steel is more robust than the competitive products made of glass reinforced plastic – refurbishing an old VLM test chamber to a perfectly new condition is possible
- 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
- Test cabinet is made of recyclable materials (environmental friendly)



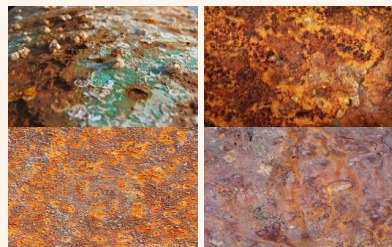
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Relevant Test Standards

Water condensation tests:

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



Jumo dTRON controller

The following accessories are included:

- 6 rods for supporting test specimen
- 2 m exhaust hose Ø 75 mm
- 2 m drain water hose Ø 32 mm
- 1 female connector for the compressed air hose (size no. 7)

Technical Specifications

Capacity	ca. 1000 L
Inner test chamber dimensions WxDxH1/H2	ca. 1400 x 800 x 920/1160 mm
Outer dimensions of the casing (overall) WxDxH	ca. 2160 x 980 x 2020 mm
Required power supply	230 V, 50/60 Hz, 1800 W
Materials used	test chamber is made of stainless steel and coated with ECTFE (Halar®), additional side walls made of special Polyethylene with milled openings for supporting rods
Heating	Flat Micanite heaters under the bottom of the chamber and behind the side walls for fast and uniform heat transfer
Sensors	Corrosion resistant and highly sensitive temperature sensors above the floor and under the roof
Cooling	Not available
Regulated humidity	Not available
Connectivity	Ethernet

Other specification

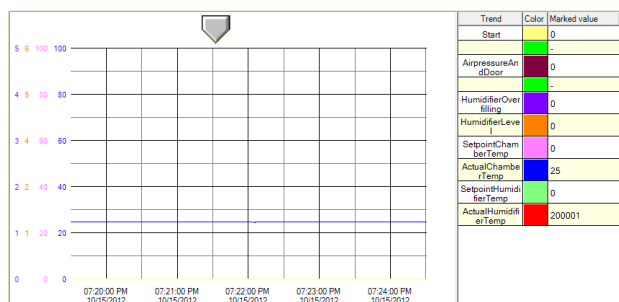
Purity demineralized water (only for AWRF option)	< 5 µS/cm (¾" outer diameter)
Tap water (AWRF option)	Always via Ion-exchanging cartridge (¾" outer diameter)
Compressed Air (AIR option)	6-8 bar (connection nipple size 5)
Waste water drain (AWRF option)	Pipe fittings (spiral hose ID 32mm)
Air exhaust diameter (AIR option)	Pipe fitting (75 mm external diameter)
Recommended accessories	Demineralized water plant, filter for compressed air, specimen racks

Process Control

- User friendly, microprocessor based JUMO dTRON controller
- Programmable timer function
- **Option:** VisiCORR® software for visualisation of test trends, only in combination with RS 232 (only monitoring and documenting the test)
- Restricted access for authorised operators (security code)
- Full overview of all digital and analog and digital inputs/outputs

Operating system AIR and AWRF

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



Visualisation of test results with VisiCORR software (option)

Operating system Constant Humidity (CH) with Controlled Water Condensation - CWC (according to ISO 6270-2 CH)

- CWC system is a patented VLM technology which regulates the temperature gradient of exactly $\Delta T=1^{\circ}\text{C}$ between the bottom and the roof of the test chamber – this is essential for an optimal condensation process in the test chamber at 100% RH regardless the environmental conditions outside the test chamber
- Flat heaters under the bottom of the chamber for uniform and rapid heating of the water in the trough
- Temperature stability in the chamber $\pm 0,2^{\circ}\text{C}$
- Air fan with manually adjustable rotation speed for controllable drying of specimens in the Drying phase



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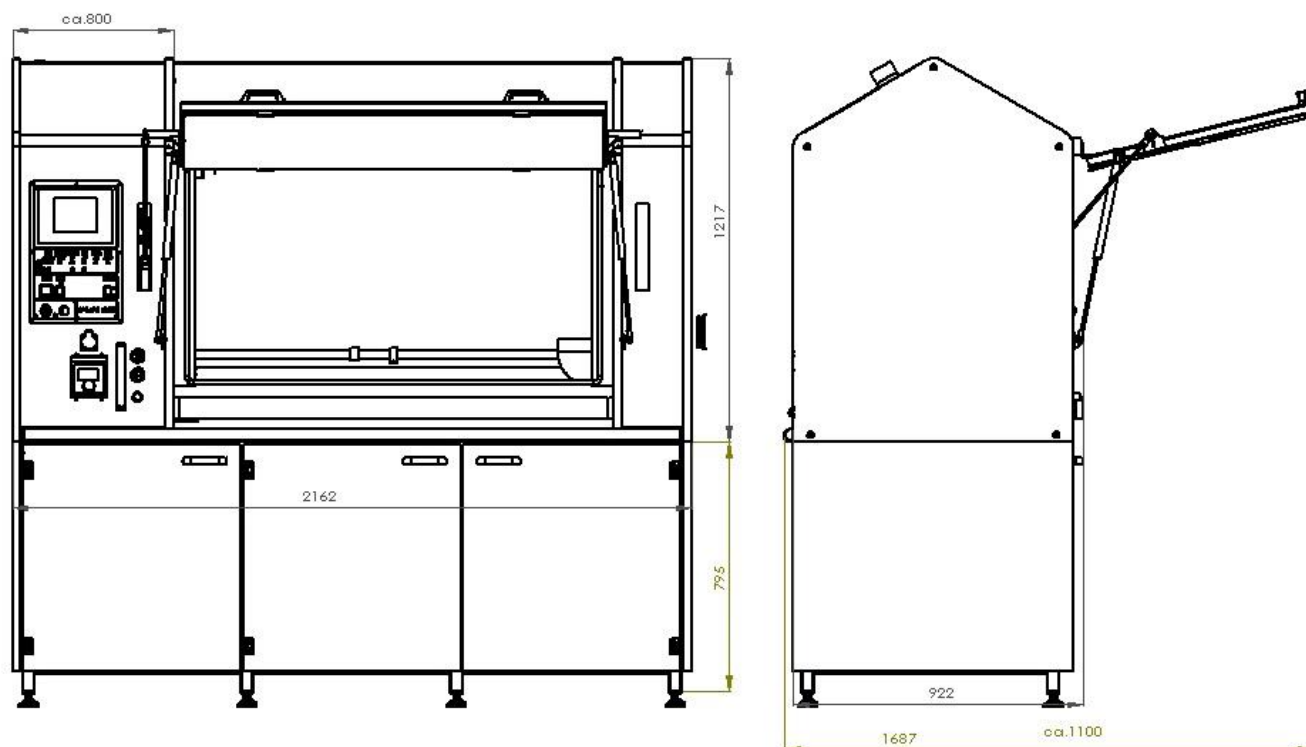


Figure 3 Mechanical dimensions CON 1000-FL