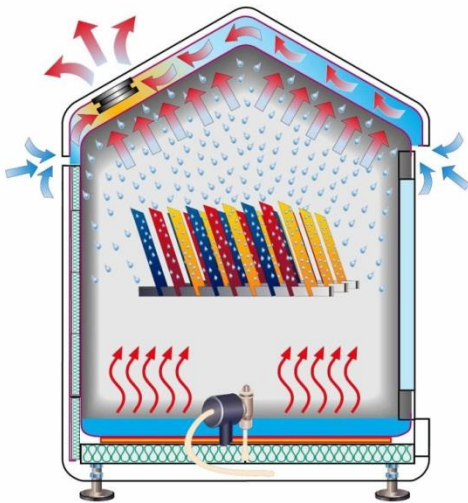


VLM Product Data Sheet

CON 300-FL (+50°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 – Chamber prepared for conducting Kesternich (SO₂ gas) test



Patented Controlled Water Condensation (CWC) system



Applicable for the following water condensation tests:

Constant Humidity (CH) test

- + DIN EN ISO 6270-2:2005
- + ASTM D2247

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

- + alternating temperature (AT)
- + alternating temperature and humidity (AHT)

The (KES) version is suitable for conducting Kesternich tests acc. to:

- + DIN EN ISO 6988

Order Information

Basic model: CON 300-FL

Article numbers versions:

- V.702.061.000 (CH)
- V.702.261.000 (AIR)
- V.702.061.005 (ADO)
- V.702.261.001 (AIR KES)
- V.702.161.000 (CH CWC)
- V.702.361.000 (AIR CWC)
- V.702.061.005 (ADO CWC)
- VA.702.400.000 (AWRF – Option for all types)

Sales & Support:

+49 5205 87963 0

Monday to Friday
8:00 am – 17:00 pm

VLM Labortechnik GmbH
Heideblümchenweg 50
33689 Bielefeld

info@vlm-labtec.com
www.vlm-labtec.com

Specification subject to changes
Pictures might differ from original

Product Description

These compact and easy to operate bench top cabinets are designed for conducting Constant Humidity (CH) and alternating temperature / humidity corrosion tests pursuant to the most common corrosion tests international DIN EN ISO 6270-2:2005 and ASTM D2247.

Customer Benefits

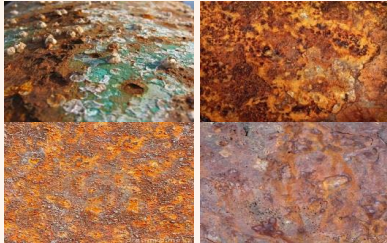
- + Cost effective solution for basic water condensation and SO₂ corrosion tests
- + Compact bench top design
- + The patented VLM technology allows the best possible reproducibility of the temperature conditions being created in the test chamber regardless the environmental conditions and geographical location – same type of VLM corrosion test chamber will produce same test results in any geographical region
- + The test chamber made of 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

CON 300-FL (+50°C)

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:

- + 5 rods for supporting test specimen
- + 2 m exhaust hose Ø 50 mm
- + 2 m drain water hose Ø 18 mm
- + 1 female connector for compressed air hose (size no. 5)

Technical Specifications

Capacity	ca. 300 L
Inner test chamber dimensions WxDxH1/H2	ca. 800 x 605 x 533/720 mm
Outer dimensions of the casing (overall) WxDxH	ca. 1100 x 680 x 890 mm
Required power supply	230V, 50/60Hz, 700W
Materials used	test chamber is made of stainless steel, bottom coated with ECTFE, side walls made of Polyethylene with milled openings for supporting rods
Heating	Flat Micanite heater under the bottom of the chamber for fast and uniform heat transfer
Sensors	<ul style="list-style-type: none"> - In basic type: 1x corrosion resistant and highly sensitive temperature sensor - In CWC type: 2x corrosion resistant and highly sensitive temperature sensors above the floor and under the roof
Temperature stability	±0,2 C°
Aeration (type AIR)	timer controlled built-in fan air flow ca. 16 m³/h
Timer	Two channel timer for automated switch over from heating to aeration mode
Weight	110 kg
Communication	RS 232 interface
Other specification	
Purity demineralized water filling volume fitting	< 20µS/cm ca. 3,5 L ¼" outer diameter Option: Automatic water refill
Tap water (connection type)	Always via Ion-exchanging cartridge (¼" outer diameter)
Compressed Air	6-8 bar (connection nipple size 5)
Waste water, drain	Pipe fittings (spiral hose ID 19 mm)
Exhaust pipe outer diameter	Pipe fitting (50 mm external diameter)
Number of supporting rods / max load	5 stainless steel rods coated with plastic / 30 kg each
Introduction of SO ₂	Self-closing inlet valve at the right hand side wall

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 (option)
- + Restricted access for authorised operators (security code)

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

- + CWC system is the 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 adjustable rotation speed for controllable drying of specimen in the Drying Phase

Operating system AIR

- + A fan with controllable RPM is used for the forced drying phase (Aeration) after the Constant Humidity phase

Optional: Operating system AWRF (Automatic Water Refill)

- + Automatic water refill inside the test chamber at the beginning of the test and water draining at the end of the test. Very useful with Kesternich (SO₂) tests and switching between CH, AT and AHT type of DIN EN ISO 6270-2.