

*Cyclic Tests*

*Varying Climatic  
Conditions*

*Automotive Standards*

**Corrosion  
Testing  
Instruments  
Model 608 Basic**

**Operation**

**via**

**Siemens touch screen**



Fig.: Model 608 Basic with test chamber 1000 l and storage tank



**„dry heat“ as option**

testing equipment for quality management



**Technical Description**

**Tests in accordance  
with international  
standards**

## Purpose and application

Ferrous and non-ferrous metals are attacked continuously by humidity, acids, solutions, gases etc. It is therefore vitally important to choose the correct surface protection. There are many materials and qualities on the market and their properties must be properly assessed. Materials intended to prevent corrosion must be tested if failures are to be avoided. Furthermore the comparative quality control during production is of increasing importance. The best known processes employ spray vapour tests using various salt solutions as well as condensation water climates.

## Test principle

Aggressive solutions are turned into a vapour mist in accordance with the tests that are listed below. These vapours surround the specimens in the test chamber either continuously or in a cyclic manner. The corrosion resistance of the individual specimens is established on the basis of the difference in time before the first corrosive effects become apparent.

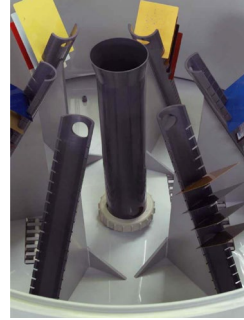
## Design

The ERICHSEN Corrosion Testing Instrument, Model 608 Basic, take full advantage of our wide experience in the construction of all kinds of testing equipment as well as of the information and worldwide feedback received from users. Made of impact resistant, eco-friendly polypropylene material each instrument forms a closed unit.

The **Corrosion Test Apparatus, Model 608-Basic**, consists of a test chamber, available either of 400 l, 1000 l or 2000 l capacity, and a built-in control unit as well as an external storage tank for the spray solution. The external storage tank for approx. 200 l salt solution allows continuous testing without attention over a period of up to a week. A dosing pump serves for an infinitely variable adjustment to achieve optimum consumption of spray solution.



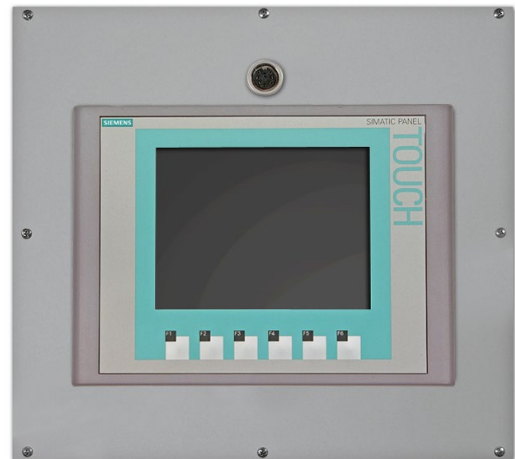
The scope of supply includes 3 specimen holder for weathering panels (per test chamber), with test capabilities of 18 test panels per specimen holder as well as condensate receptacles with U-stands made of acrylic glass.



Specimen holder for weathering panels      Condensate receptacles panels

The **control cabinet 608 Basic** is equipped with a **PLC (programme logic control) SIEMENS D7 200**. The test cycles as well as the test parameters are entered using the **SIMATIC touch screen**. Cyclic corrosion tests executed e.g. in accordance with the specification of VDA, VW or SWAAT, can be started in a user-friendly manner. By default, five programs for standard test sequences are provided. Program number 6 is available for customized programming. However, programs 1 to 5 can also be customized by the user to meet their specifications.

After placing the specimens and the condensation receptacles in the test chamber, the test takes place fully automatically.



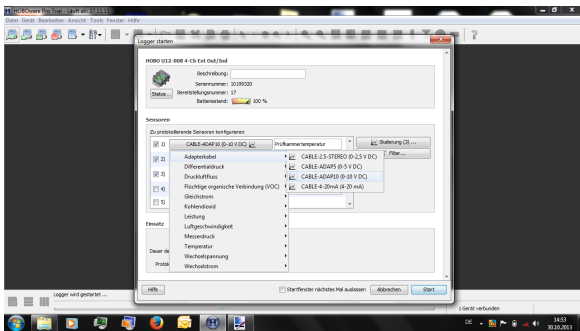
The top of the test chamber dome is pneumatically opened and closed so that both hands can be used to lodge the specimens.

## Accessories (optional)

- **Additional Function "dry heat"**  
Extension of a test chamber in rectangular design with the function "dry heat" up to +70 °C



- **Multi-channel Data Acquisition and Recording System HOBO UX120**  
including the required analogue signals for recording the test chamber temperature, humidifier temperature and spray pressure, data logger with 16-bit-resolution, USB interface port, memory for 1.9 million readings; including software for recording, monitoring and analysing of data, compatible with mit Windows 7, 8 und 10.



For further details and accessories please refer to our price list no. 608 Basic

## Technical Data

Power supply	230 V / 1~, N, PE 50 Hz
400 l or 1000 l with function „dry heat“	400 V / 3~, N, PE 50 Hz
2000 l with function „dry heat“	400 V / 3~, N, PE 50 Hz
	400 V / 3~, N, PE 50 Hz

Consumption max. 4.5 kVA

Compressed air connection  
Air pressure 5 - 7 bar

Air consumption during ventilation 15 l/min at 6 bar

(VE)Water connection  
Pressure 2 - 6 bar

Test temperature range from ambient temperature up to +50 °C

Floor load of the test chamber max. approx. 300 kg (special versions on request)

Capacity of the test chamber

400 l test chamber	approx. 100 test panels
1000 l test chamber	approx. 180 test panels
2000 l test chamber	approx. 400 test panels




## International Standards and Specifications

Continuous Salt Spray Tests			Condensation Water Tests	Varying Climatic Tests
DIN 40 046	ISO 1456	BS 3900/ F4	DIN EN ISO 6270-2	DIN EN ISO 11997-1 Zyklus B (based on VDA 621-415)
DIN EN ISO 9227	ISO 3768	NF X 41-002	DIN 50 958	
DIN 50 907	ISO 3769	JIS Z 2371	DIN 55 991	P-VW 1210
DIN 53 167	ISO 3770		ISO 3231	
	ISO 7253	SIS 184 190	ISO 11503	SWAAT
ASTM B 117	ECCA T 8		ASTM D 2247	
ASTM B 287				
ASTM B 368	DEF 1053 Meth. 24			
ASTM D 1735	DEF 1053 Meth. 36			
MIL STD 202 D	MIL STD 810 C			



**Order Information**

Figure	Ord.-No.	Description
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**Control Cabinets**

	29960031	<p><b>Corrosion Testing Apparatus, Model 608/400-Basic, 400 l test chamber volume,</b> with integrated control unit, external storage tank, 3 specimen holder, condensate receptacles and operating manual</p> <p>Dimensions: approx. 1700 x 1000 x 1300 mm (W x D x H) Test chamber opened approx. 1840 mm (H)</p> <p>Dimensions (inside): approx. 780 x 770 x 670 mm (W x D x H)</p> <p>Net weight: approx. 270 kg</p> <p>External storage tank: approx. 900 x 615 x 870 mm (W x D x H)</p>
	29970031	<p><b>Corrosion Testing Apparatus, Model 608/1000-Basic, 1000 l test chamber volume,</b> with integrated control unit, external storage tank, 3 specimen holder, condensate receptacles and operating manual</p> <p>Dimensions: approx. 2500 x 1000 x 1300 mm (W x D x H) Test chamber opened approx. 1840 mm (H)</p> <p>Dimensions (inside): approx. 1500 x 770 x 670 mm (W x D x H)</p> <p>Net weight: approx. 300 kg</p> <p>External storage tank: approx. 900 x 615 x 870 mm (W x D x H)</p>
	29980031	<p><b>Corrosion Testing Apparatus, Model 608/2000-Basic, 2000 l test chamber volume,</b> with integrated control unit, external storage tank, 3 specimen holder, condensate receptacles and operating manual</p> <p>Dimensions: approx. 3700 x 1000 x 1300 mm (W x D x H) Test chamber opened approx. 1900 mm (H)</p> <p>Dimensions (inside): approx. 2700 x 770 x 670 mm (W x D x H)</p> <p>Net weight: approx. 340 kg</p> <p>External storage tank: approx. 900 x 615 x 870 mm (W x D x H)</p>



**Accessories**

	04640017	<p><u>Specimen Holder for Test Panels</u> to supplement the three holders supplied as standard with the basic apparatus (18 test panels/holder)</p>
	02300132	<p><u>Specimen Holder for Bulky Parts</u> for holding larger finished parts, consisting of 4 upright tubes with holes and 8 support rails</p>

## Accessories

Figure	Ord.-No.	Description
	21700132	<p><u>Sample Holder Rack (height-adjustable)</u> for test chamber in rectangular design; <u>without</u> sample rods and S-hooks (chamber volume 400 l = 1 rack / chamber volume 1000 l = 2 racks / Chamber volume 2000 l = 3 racks possible)</p> <p>Dimensions: approx. 740 x 670 x 650 mm (W x D x H)</p>
	21740132	<p><u>Sample Rods (Ø 25 mm)</u> Set per 5 pieces suitable for sample holder rack (Ord.-No. 21700132)</p>
	21740232	<p><u>Sample Rods (Ø 12 mm)</u> Set per 5 pieces suitable for sample holder rack (Ord.-No. 21700132)</p>
	21730132	<p><u>Specimen Holder (horizontally)</u> suitable for sample holder rack (Ord.-No. 21700132)</p> <p>(23 test panels /holder)</p>
	780103541	<p><u>S-Hooks</u> suitable for sample rods (Ø 12 mm) (per 100 pieces)</p>
	21990132	<p><u>Samples Grid</u> floor grid made of fiberglass with 4 feet, mesh spacing 40 x 40 mm, suitable for test chambers in <u>rectangular</u> design (chamber volume 400 l = 1 grid / chamber volume 1000 l = 2 grid / chamber volume 2000 l = 3 grid possible)</p> <p>Dimensions: (W x D) 689 x 765 mm</p>

## Accessories

Figure	Ord.-No.	Description
	09940132	<u>Wastewater Pumpout Unit</u> for use in wastewater disposal below the flood level, if there is no floor drain available
	01590132  01590232	<u>Water deionizer behropur® B10dN</u> max. flow rate 300 l/h  <u>Water deionizer behropur® B22dN</u> max. flow rate 500 l/h

For further accessories please refer to our price list no. 608 Basic

***Further Corrosion Test Instruments supplied by ERICHSEN:***

**Humidity Cabinet HYGROTHERM 519 / 519 Smart / 529**

for humidity tests in accordance with international standards,  
with a semi-automatic control system or in fully automatic version (519/519 Smart)  
or consisting of a control unit with a separate test chamber (529)

**Accelerated Weathering Instrument BANDOL WHEEL® 532**

in a compact design for acceleration of natural weathering,  
optional for „dry“ or „wet/dry“ weathering cycles

**Corrosions Testing Apparatus for Salt Spray and Condensation  
Water Tests , Model 606**

cylindrical or rectangular version, with 400 l, 1000 l or 2000 l test chamber capacity

**Corrosions Testing Apparatus (compact design) for Salt Spray and  
Condensation Water Tests, Model 606-Basic**

rectangular version, with 400 l, 1000 l or 2000 l test chamber capacity and  
300 l capacity (cabinet unit)

**Corrosions Testing Apparatus for Alternating Tests, Model 608**

e.g. in accordance with VDA 621-415 or VW Specification  
with 400 l, 1000 l or 2000 l test chamber capacity

**Corrosion Test Instrument CORROTHERM 610**

simple, inexpensive test instrument, approx. 400 l or 1000 l volume

**Corrosion Test Instrument CORROTHERM 610e PLUS**

semi automatic version with programmable Micro Controller and LCD,  
with 400 l or 1000 l test chamber capacity

**Corrosion Testing Instrument to carry out Tests in Altering Climates  
as well as various Salt Spray and Condensation Water Tests, Model 618  
incl. interface for connecting an Air Conditioning Unit**

with 400 l, 1000 l or 2000 l test chamber capacity

**SOLARBOX, Model 522**

Light exposure test apparatus, with optional microprocessor controls  
and programmable flooding system as well as interface RS232C

***For the specimen preparation we recommend the following instruments/tools:***

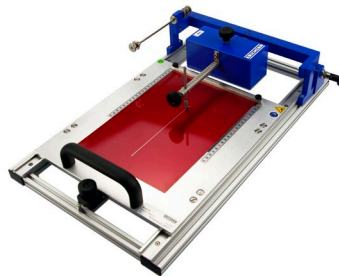
**Scratching Tool acc. to van Laar, Model 426**

**SCRATCHMARKER 427**

**Automatic Milling Machine  
CORROCUTTER Smart 638**



**Test Panel Scratcher CORROCUTTER 639**



**Scratch Stylus acc. to Sikkens, Model 463 // Model 463-Pro**

**Multi-Cross Cutter, Model 295/III**

***Please ask for our detailed leaflets and price lists.***