Compact Corrosion Testing Instrument

Corrosion Testing Instrument Model 606-Basic







testing equipment for quality management



Technical Description

Salt Spray Tests and Condensation Water Tests 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.

Continuous Salt Spray Tests

DIN EN ISO 9227	ISO 1456	BS 3900/ F4
DIN 50 907	ISO 3768	NF X 41-002
DIN 53 167	ISO 3769	JIS Z 2371
	ISO 3770	
	ISO 7253	SIS 18/ 100

ASTM B 117

ASTM B 368 DEF 1053 Meth. 24 ASTM D 1735 DEF 1053 Meth. 36

Condensation Water Tests

DIN EN ISO 6270-2 BS 3900/ F4 DIN 50 958

DIN 55 991

Design

The compact Corrosion Testing Instrument, **Model 606-Basic**, to perform <u>salt spray and condensation tests</u>, is made of impact resistant, eco-friendly polypropylene material and is delivered in a <u>rectangular</u> design.

It consists of a test chamber, available either of 400 I, 1000 I or 2000 I capacity, and a built-in control unit as well as an external storage tank for the spray. The control unit is equipped with the necessary control instruments. The test chamber can be opened manually.

A dosing pump serves for an infinitely variable adjustment to achieve optimum consumption of spray solution. The external storage tank for approx. 200 I salt solution allows continuous testing without attention over a period of up to a week.

The scope of supply of each test chamber includes three specimen holders for weathering panels.



Control Instruments

For testing small quantities or small test specimens, the user has access to a corrosion testing apparatus in a modular design (cabinet unit) with 300 I test chamber volume. The large, transparent access door allows easy mounting of specimens, which may e.g. be hung from the delivered sample rods, to be exposed to aggressive salt spray for a certain period of time.

The integrated control unit with storage tank (about 125 I) is located in the base unit.

Technical Data

Capacity of the test chamber/

test panels: 300 I - - approx.12-100 pcs.

400 I - - approx.100 pcs. 1000 I - approx.180 pcs. 2000 I - approx.400 pcs.

Specimen holders for

weathering panels: 3 pcs.

(18 panels / holder)

Floor load of the test chamber: up to approx. 300 kg

Test temperature range: up to +50 °C

ambient temperature

Power supply: $230 \text{ V} / 50 \text{ Hz} / 1 \sim$

400 V / 50 Hz / 3~

Consumption: 300 I - approx. 1500 VA

400 I - approx. 2000 VA 1000 I - approx. 3000 VA 2000 I - approx.5000 VA

Compressed air connection: 4 - 10 bar

Air consumption: 6 Nm³/h

Water connection (pressure): 2 - 8 bar

Dimensions external

storage tank: approx. 800 x 630 x 700 mm (H)

(400 I/1000 I/2000 I version)

Ordering Information				
Figure	OrdNo.	Description		
ERICHSEN	03250131	Corrosion Testing Apparatus, Model 606/300-Basic, 300 I test chamber volume, with integrated control unit and storage tank, 7 sample rods, 100 S-hooks, 2 condensate receptacles and operating manual Dimensions Test Chamber: approx 760 x 540 x 1060 mm (W x D x H) Test chamber inside: approx. 700 x 500 x 770 mm (W x D x H) Control unit approx. 760 x 540 x 800 mm (W x D x H) Net weight: approx. 200 kg		
	02920131	Corrosion Testing Apparatus, Model 606/400-Basic, 400 I test chamber volume, with integrated control unit, external storage tank, 3 specimen holder, condensate receptacles and operating manual Dimensions: approx. 1400 x 1000 x 1450 mm (W x D x H) Dimensions (inside): approx. 780 x 770 x 670 mm (W x Dx H) Net weight: approx. 220 kg		
INCORD TO THE PARTY OF THE PART	02920231	Corrosion Testing Apparatus, Model 606/1000-Basic, 1000 I test chamber volume, with integrated control unit, external storage tank, 3 specimen holder, condensate receptacles and operating manual Dimensions: approx. 2250 x 1000 x 1450 mm (W x D x H) Dimensions (inside): approx. 1500 x 770 x 670 mm (W x D x H) Net weight: approx. 250 kg		
INCUSE:	24990031	Corrosion Testing Apparatus, Model 606/2000-Basic, 2000 I test chamber volume, with integrated control unit, external storage tank, 3 specimen holder, condensate receptacles and operating manual Dimensions: approx. 3500 x 1000 x 1450 mm (W x D x H) Dimensions (inside): approx. 2700 x 770 x 670 mm (W x D x H) Net weight: approx. 280 kg		
Accessories				
	04640017	Specimen Holder for Test Panels to supplement the 3 panels included with the basic equipment (for 18 test panels per holder)		
	02300132	Specimen Holder for Bulky Parts for holding larger finished parts, consisting of 4 upright tubes with holes and 8 support rails		

Figure	Ord-No.	Description
	21700132	Sample Holder Rack (height-adjustable) for test chamber in rectangular design; without sample rods and S-hooks (chamber volume 400 I = 1 rack / chamber volume 1000 I = 2 racks / chamber volume 2000 I = 4 racks) Dimensions: (W x D x H) approx. 740 x 670 x 650 mm
	21740132	Sample Rods (Ø 25 mm) Set per 5 pieces suitable for sample holder rack (OrdNo. 21700132)
	21740232	Sample Rods (Ø 12 mm) Set per 5 pieces suitable for sample holder rack (OrdNo. 21700132)
S	780103541	S-hooks suitable for sample rod (Ø 12 mm) (per 100 pcs.)
	21730132	Specimen Holder (horizontally) suitable for sample holder rack (OrdNo. 21700132) (for 23 test panels per holder)
	23520232	Specimen Holder for Test Panels (for 300 I version) (for 12 test panels per holder)
	27210132	Samples Grid (for 300 I version) Dimensions: (WxD) approx. 600 x 400 mm
	02300132	Samples Grid floor grid made of fiberglass with 4 feet, mesh spacing 40 x 40 mm, suitable for test chambers in rectangular design (chamber volume 400 I = 1 grid/ chamber volume 1000 I = 2 grid/ chamber volume 2000 I = 4 grids possible) Dimensions: (W x D) 680 x 760 mm
	09940132	Wastewater Lifting Unit for use in wastewater disposal below the flood level, if there is no floor drain available
	01590132 01590232	Water deionizer behropur® B10dN, max. flow rate 300 l/h Water deionizer behropur® B22dN, max. flow rate 500 l/h

The right of technical modifications is reserved. TBE 606-Basic $-\ \mbox{V/}2021$

