

**Compact  
Corrosion Testing  
Instrument**

**Corrosion  
Testing Instrument  
Model 606-Basic**



**Model 606-Basic, 400 l**



**Model 606-Basic, 1000 l/2000 l – with external storage tank**



**Model 606-Basic, 300 l**

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 184 190 |

|             |                   |
|-------------|-------------------|
| 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 salt spray and condensation tests, is made of impact resistant, eco-friendly polypropylene material and is delivered in a rectangular design.

It 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. 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 l 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 l 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 l) is located in the base unit.

## Technical Data

|   |   |
|---|---|
| Capacity of the test chamber/<br>test panels: | 300 l - - approx.12-100 pcs.<br>400 l - - approx.100 pcs.<br>1000 l - approx.180 pcs.<br>2000 l - approx.400 pcs. |
|---|---|

|  |                                |
|--|--------------------------------|
| Specimen holders for<br>weathering panels: | 3 pcs.<br>(18 panels / holder) |
|--|--------------------------------|

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

|                         |                                     |
|-------------------------|-------------------------------------|
| Test temperature range: | up to +50 °C<br>ambient temperature |
|-------------------------|-------------------------------------|

|               |  |
|---------------|--|
| Power supply: | 230 V / 50 Hz / 1~<br>400 V / 50 Hz / 3~ |
|---------------|--|

|              |   |
|--------------|---|
| Consumption: | 300 l - approx. 1500 VA<br>400 l - approx. 2000 VA<br>1000 l - approx. 3000 VA<br>2000 l - approx.5000 VA |
|--------------|---|

|                            |            |
|----------------------------|------------|
| Compressed air connection: | 4 - 10 bar |
|----------------------------|------------|

|                  |                      |
|------------------|----------------------|
| Air consumption: | 6 Nm <sup>3</sup> /h |
|------------------|----------------------|

|                              |           |
|------------------------------|-----------|
| Water connection (pressure): | 2 - 8 bar |
|------------------------------|-----------|

|                                      |   |
|--------------------------------------|---|
| Dimensions external<br>storage tank: | approx. 900 x 615 x 870 mm (H)<br>(400 l/1000 l/2000 l version) |
|--------------------------------------|---|

## Ordering Information

| Figure  | Ord.-No. | Description   |
|---|----------|---|
|    | 03250131 | <p><b>Corrosion Testing Apparatus, Model 606/300-Basic, 300 l test chamber volume,</b><br/>with integrated control unit and storage tank, 7 sample rods, 100 S-hooks, 2 condensate receptacles and operating manual</p> <p>Dimensions<br/>Test Chamber: approx.. 760 x 540 x 1060 mm (W x D x H)<br/>Test chamber inside: approx. 700 x 500 x 770 mm (W x D x H)<br/>Control unit approx. 760 x 540 x 800 mm (W x D x H)<br/>Net weight: approx. 200 kg</p> |
|    | 02920131 | <p><b>Corrosion Testing Apparatus, Model 606/400-Basic, 400 l test chamber volume,</b><br/>with integrated control unit, external storage tank, 3 specimen holder, condensate receptacles and operating manual</p> <p>Dimensions: approx. 1330 x 1000 x 1300 mm (W x D x H)<br/>Test chamber opened approx. 1840 mm (H)<br/>Dimensions (inside): approx. 780 x 810 x 670 mm (W x D x H)<br/>Net weight: approx. 220 kg</p>                                  |
|  | 02920231 | <p><b>Corrosion Testing Apparatus, Model 606/1000-Basic, 1000 l test chamber volume,</b><br/>with integrated control unit, external storage tank, 3 specimen holder, condensate receptacles and operating manual</p> <p>Dimensions: approx. 2130 x 1000 x 1300 mm (W x D x H)<br/>Test chamber opened approx. 1840 mm (H)<br/>Dimensions (inside): approx. 1500 x 810 x 670 mm (W x D x H)<br/>Net weight: approx. 250 kg</p>                               |
|  | 24990031 | <p><b>Corrosion Testing Apparatus, Model 606/2000-Basic, 2000 l test chamber volume,</b><br/>with integrated control unit, external storage tank, 3 specimen holder, condensate receptacles and operating manual</p> <p>Dimensions: approx. 3370 x 1000 x 1300 mm (W x D x H)<br/>Test chamber opened approx. 1900 mm (H)<br/>Dimensions (inside): approx. 2700 x 810 x 670 mm (W x D x H)<br/>Net weight: approx. 280 kg</p>                               |

### Accessories

|   |          |  |
|---|----------|--|
|  | 04640017 | <p><u>Specimen Holder for Test Panels</u><br/>to supplement the 3 panels included with the basic equipment<br/>(for 18 test panels per holder)</p> |
|  | 02300132 | <p><u>Specimen Holder for Bulky Parts</u><br/>for holding larger finished parts, consisting of 4 upright tubes with holes and 8 support rails</p>  |

| Figure  | Ord-No.   | Description  |
|---|-----------|--|
|    | 21700132  | <u>Sample Holder Rack (height-adjustable)</u><br>for test chamber in rectangular design;<br>without sample rods and S-hooks<br>(chamber volume 400 l = 1 rack / chamber volume<br>1000 l = 2 racks / chamber volume 2000 l = 4 racks)<br>Dimensions: (W x D x H) approx. 740 x 670 x 650 mm        |
|    | 21740132  | <u>Sample Rods (Ø 25 mm)</u><br>Set per 5 pieces<br>suitable for sample holder rack (Ord.-No. 21700132)  |
|    | 21740232  | <u>Sample Rods (Ø 12 mm)</u><br>Set per 5 pieces<br>suitable for sample holder rack (Ord.-No. 21700132)  |
|    | 780103541 | <u>S-hooks suitable for sample rod (Ø 12 mm)</u><br>(per 100 pcs.)   |
|    | 21730132  | <u>Specimen Holder (horizontally)</u><br>suitable for sample holder rack (Ord.-No. 21700132)<br><br>(for 23 test panels per holder)  |
|   | 23520232  | <u>Specimen Holder for Test Panels</u><br>(for 300 l version)<br>(for 12 test panels per holder)   |
|  | 27210132  | <u>Samples Grid</u><br>(for 300 l version)<br><br>Dimensions: (WxD) approx. 600 x 400 mm   |
|  | 21990132  | <u>Samples Grid</u><br>floor grid made of fiberglass with 4 feet, mesh spacing<br>40 x 40 mm, suitable for test chambers in rectangular design<br>(chamber volume 400 l = 1 grid/ chamber volume 1000 l = 2 grid/<br>chamber volume 2000 l = 4 grids possible)<br>Dimensions: (W x D) 689 x 765 mm |
|  | 09940132  | <u>Wastewater Lifting Unit</u><br>for use in wastewater disposal below the flood level, if there is no<br>floor drain available  |
|  | 01590132  | <u>Water deionizer behropur® B10dN, max. flow rate 300 l/h</u>   |
|   | 01590232  | <u>Water deionizer behropur® B22dN, max. flow rate 500 l/h</u>   |

The right of technical modifications is reserved.  
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