

**WEATHER-
MASTER
523**

**"BASIC"
"SOLAR LOOK"
"THERMAL SHOCK"**



testing equipment for quality management

ERICHSEN

UV Accelerated Weathering Tester

**ASTM G 53
ASTM G 154
ASTM D 4329
ASTM D 4799
ASTM D 4587
SAE J 2020 and ISO 4892**

**For
Accelerated
Weathering Tests**

Purpose and Application

The **WEATHERMASTER 523** was mainly designed for accelerated weathering tests wherein specimens are simultaneously subject to simulations of various realistic atmospheric effects:

- UV-A irradiation
- UV-B irradiation
- condensation / thermic shock.

Hereby the specimens undergo forced stress conditions like sunlight, rain and dew, however, in a reproducible and optional variable manner.

The ageing process simulated in this way induces the known effects e.g. bleaching, loss of gloss, brittleness, blisters, damage underneath the coating, corrosion, reduction of adhesion, loss of protective function.

Through natural exposure these forms of degradation normally occur after months or years only. The specimens can be tested on one side only or on both sides; at option, simultaneously on one side using UV-A and on the other side using UV-B.

The product features thus determined in a short period of time by evaluating the test results enable adequate modifications for product improvement and development of new and better products with higher resistance against atmospheric exposure like UV-A and UV-B, rain and dew.

The fields of application of the **WEATHERMASTER 523** are as follows:

- Lacquer and paint industry
- Automotive industry
- Plastics industry
- Wood industry
- Adhesives industry
- Research institutes
- Universities / colleges for advanced technology.

Design and Function

The **WEATHERMASTER 523** is a footed cabinet with a housing made of stainless steel. It is equipped with an up-to-date touch screen control panel and an interface RS 232.

A user-friendly software for data transmission to a PC is available, too.

The UV irradiation is effected by 8 fluorescent lamps of 40 W each.

The **WEATHERMASTER 523** can be filled with tap water which is demineralised automatically (i.e. turned into distilled water).

The weathering tester complies with the specifications of the international standards: ASTM G 53, ASTM G 154, ASTM D 4329, ASTM D 4799, ASTM D 4587, SAE J 2020 and ISO 4892.

In accordance with the required exposures and their combinations, respectively, there are three different versions of Model 523 available at option:

- "BASIC"
- "SOLAR LOOK"
- "THERMAL SHOCK".

Features

- Filling with tap water possible
- Automatic water level control in the reservoir
- UV-A or UV-B irradiation system with 8 fluorescent lamps of 40 W each
- 8 test programmes in accordance with the specifications of the ASTM G 154 standard
- 1 customized programme including up to 50 settings and up to 1000 replications
- Digital, microprocessor-controlled temperature control using temperature probe PT 100, and with double PID control and automatic adjustment, reading in steps of 0.1 °C

Further Corrosion Test Instruments supplied by ERICHSEN:

Humidity Cabinet HYGROTHERM 519

for testing the reaction of corrosion protection systems to condensation exposure (constant and variable climates), with 300 l test chamber capacity

Humidity Cabinet HYGROTHERM 529

for condensed water tests in accordance with DIN EN ISO 6270-2, with 1000 l or 2000 l test chamber capacity

Corrosion Testing Apparatus for Salt Spray Tests, Model 606

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

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 610 E

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

Corrosion Test Instrument CORROCOMPACT 612

standard version for the implementation of salt spray tests, with 120 l, 450 l or 1000 l test chamber capacity

Corrosion Test Instrument CORROCOMPACT 614

comfortable version for the implementation of different salt spray and condensed water tests, with 120 l, 450 l, 1000 l or 2000 l test chamber capacity

Corrosion Test Instrument CORROCOMPACT 616

universal version for the implementation for the testing of varying climate conditions, e.g. according to VDA 621-415 or VW Specification, as well as many other options, with 450 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

HANDCUTTER 428

Test Panel Scratcher CORROCUTTER 639

Scratch Stylus acc. to Sikkens, Model 463

Multi-Cross Cutter, Modell 295/III

Please ask for our detailed leaflets and price lists