



DIN Equipment



ISO Equipment

**Washability and
Scrubbing
Resistance Tester
494 MC-Basic
DIN / ISO**

**Operation via
touch panel**

Stroke path 300 mm

**DIN - up to 3 tests
simultaneously**

**ISO - up to 3 tests
simultaneously**



testing equipment for quality management

ERICHSEN
since 1910

Technical Description

**DIN 53 778-2
DIN EN ISO 11998**

**For the determination of
the washing and scrubbing
resistance as well as
cleanability of dispersion
paints**

Purpose and Application

The **ERICHSEN Washability and Scrubbing Resistance Tester, Model 494 MC-Basic**, is mainly intended for the determination of the washing and scrubbing resistance as well as cleanability of dispersion paints (specifically "wall paints"). The wide range of its adjustable parameters allows also some further tailored/customized testing matters (for example for testing cleaning agents/solutions, etc.) as well.

Principle of Test

In the above standard applications a matt black PVC foil will be coated, and - if required - soiled in a defined manner. After clamping into the device it will be exposed under the influence of a washing liquid the stress of the moving scrub body:

a) Test in accordance with DIN 53 778- 2 *)

The scrub body is a defined pig bristle brush, which is charged with 250 g. The washing fluid is continuously fed by a micro dosing pump. Whether the contamination has been removed or the coating is scrubbed through to the substrate, will be checked after an agreed number of scrubbing cycles.

*) withdrawn, replaced by DIN EN ISO 11998



b) Test in accordance with DIN EN ISO 11 998

The scrubbing body is a defined type of abrasive pad loaded with 135 g, which is moistened prior to the test only once with a defined quantity of the washing fluid. After scrubbing strain (200 double strokes) the mass loss per unit area of the coating and the average layer thickness loss will be determined.



Design and Operation

The instrument (attached with leveling feet) has a top cover plate on which the steel trough for the testing performance is placed. Further, it is equipped with two specimen clamping devices. A high-precision step motor operated by a microcontroller allows a periodic linear movement of the drive frame which holds/guides the abrasion bodies, with a high repeatability. The swivel-mounted frame for inserting the abrasion bodies is designed for holding/guiding up to three of them. Due to this up to three parallel abrasion tests are possible. For tests according with DIN EN ISO 11998, the supplied ISO adapter has to be mounted (Mod. 494 MC-Basic-ISO).

The operation / controlling the stroke (start, stop, reset) via touch panel is comfortable.



Technical Data

Dimensions (WxDxH) (590 x 370 x 280) mm

Weight (net) approx. 22 kg

Power supply (100 - 240) VAC
(External wide-range power adapter) (47 - 63) Hz,
24 VDC / 3 A

Stroke rate 5 - 40 double strokes/min

Stroke path 300 mm

The right of technical modifications is reserved.
Group 15 - TBE 494 MC-Basic – VIII/2026

Order Information

Ord-No.		Product Description
03010231		Washability and Scrub Resistance Tester, Model 494 MC-Basic-DIN Microcontroller-operated instrument for washability and scrub resistance as well as for cleanability. Basic instrument with base plate on adjustable feet for levelling, touch panel, stroke path 300 mm, stroke rate 40 double strokes/min, 3 parallel test cycles possible. Supplied with one DIN-Equipment (DIN brush, brush holder, rubbing lining), 100 pcs. PVC foils (430 x 280 mm), power pack, glass plate, stainless steel trough with outflow connection and rubber plug, spirit level; <u>without</u> Manufacturer's Test Certificate. Power supply (100 - 240) V, (47 - 63) Hz
03010331		Washability and Scrub Resistance Tester, Model 494 MC-Basic-ISO Microcontroller-operated instrument for washability and scrub resistance as well as for cleanability. Basic instrument with base plate on adjustable feet for levelling, touch panel, stroke path 300 mm, stroke rate 40 double strokes/min, 3 parallel test cycles possible. Supplied with one Abrasive Pad Holder Plate, abrasive pads (7 pcs.), ISO adapter, 100 pcs. PVC foils (430 x 280 mm), power pack, glass plate, stainless steel trough with outflow connection and rubber plug, spirit level; <u>without</u> Manufacturer's Test Certificate. Power supply (100 - 240) V, (47 - 63) Hz
16297032		Manufacturer's Test Certificate M acc. to DIN 55 350, Part 18, incl. cost for examination and calibration/re-calibration, for Washability and Scrub Resistance Tester, Model 494 MC and Model 494 MC-Basic
16297132		Manufacturer's Test Certificate M acc. to DIN 55 350, Part 18, incl. cost for examination and calibration/re-calibration, for Washability and Scrub Resistance Tester, Model 494 MC and Model 494 MC-Basic DIN, <u>with</u> brush (without determination of the scrubbing factor)

Accessories (Spare Parts)		
Ord.-No.		Product Description
00680132		<u>DIN Equipment for tests in accordance with DIN 53 778-2</u> 1 pig bristle brush DIN, 1 brush holder DIN, 1 rubber lining
07870132		<u>Abrasive Pad Holder Plate (without pad)</u> for tests in accordance with DIN EN ISO 11998
08900132		<u>Abrasive pad</u> , type 3M Scotch Brite No. 7448 pre-cut (per 7 pcs./set)
00870132		<u>Micro-Dosing Pump with drip arrangement</u> for tests in accordance with DIN 53778-2 (for each abrasive track a separate micro dosing pump is necessary)
00700132		<u>PVC Foil</u> Black, fine matt finish, 430 x 165 mm, per 100 pcs.
00700232		<u>PVC Foil</u> Black, fine matt finish, 430 x 280 mm, per 100 pcs.
00710132		<u>Pig Bristle Brush DIN</u>
00720132		<u>Brush Holder DIN</u>
04350132		<u>Rubber Lining</u> Suitable for all brush holder
610000141		<u>Thick Glass Plate</u> flat, matt on one side, 430 x 165 x 6 mm