

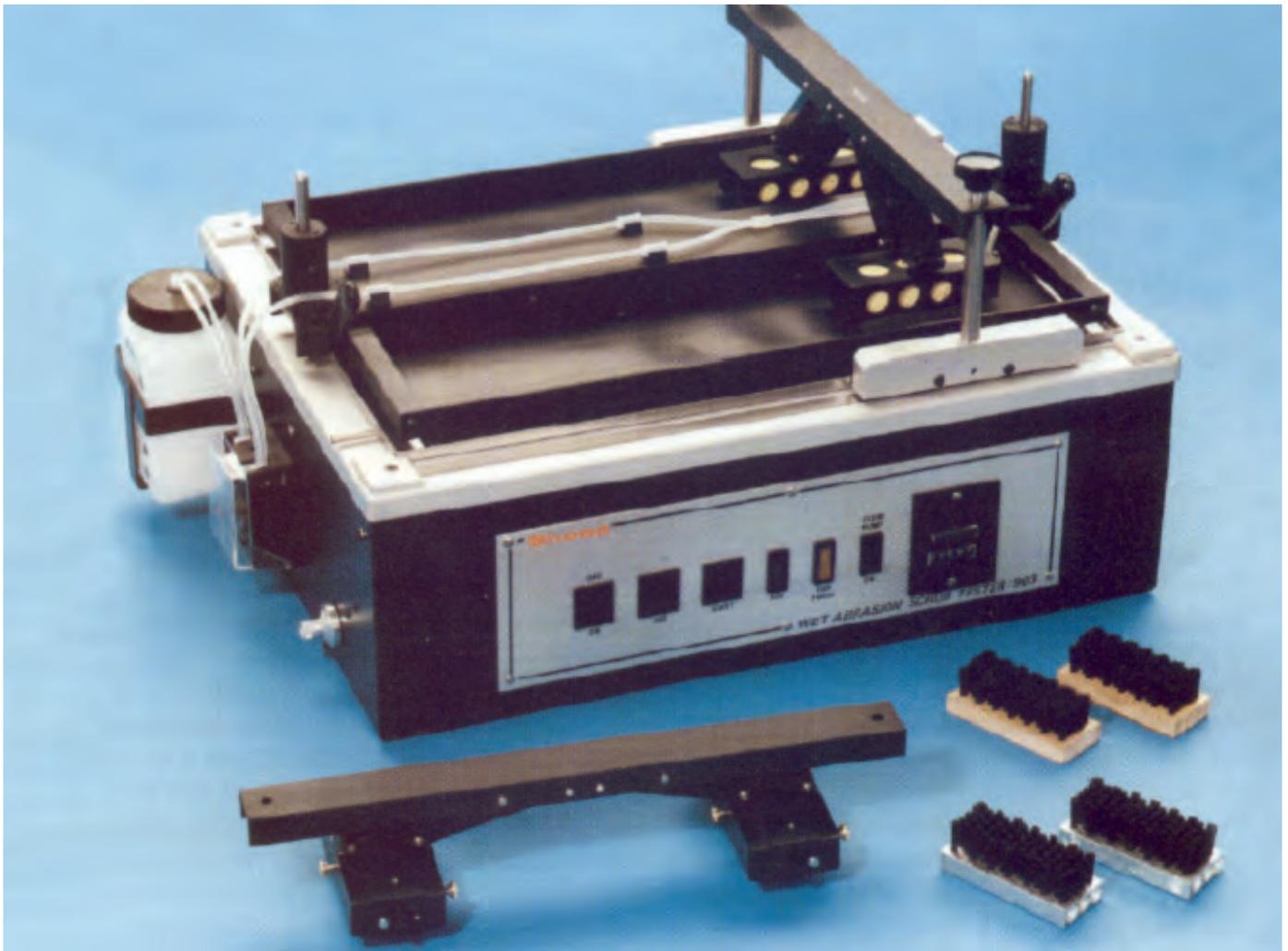
**Physical Testing**

# Wet Abrasion Scrub Tester

These machines often referred to as scrub, abrasion and washability testers are designed to provide an accelerated method for determining wear resistance of surface coatings, and also to test the performance of cleaning compounds.

The machines provide precisely controlled conditions, repeatability of results and close comparability of performance.

A basic machine is offered, a range of accessories are available to enable the user. To convert the unit to comply with several international specifications in a variety of industries.



*Photo shows 903/3 (ASTM D 3450) with alternative / replacement carriage assembly and brushes for 903/1 (DIN 53778) bristle brushes and 903/2 (ASTM D2486) nylon brushes*

## Physical Testing Wet Abrasion Scrub Tester

### Key Features

*The basic machine has the following features:*

Two brush, sponge or abrasive pad holders suspended from the carriage on cantilever arms.

Set scrub rate of  $37 \pm 1$  cycle per minute.

A quick release action clamping frame capable of holding samples from 10mm x 135mm (0.4" x 5.3") to 320mm x 470mm (12.6" x 18.5") and up to 30mm (1.2") thickness.

Five digit preset counter is fitted so that the machine can be set to run unattended without risk of exceeding the required number of strokes - maximum 99,999.

Protective strip fitting within traverse guides prevents injury or accidental intrusion into machine mechanism.

The washing agent is precisely dosed by an adjustable peristaltic pump (excluding 903/8 – no pump fitted).

This type of pump is particularly suited to this application, the pump cannot contaminate the washing fluid and the fluid cannot contaminate the pump.

Stroke length may be set at lengths between 100 and 300mm (3.9" and 11.8") in 50mm (2.0") increments. State requirements at time of ordering.

6mm (0.24") Glass panel mounted on a stainless steel top tray provides a non corroding flat base.

A fan is mounted within the body to keep the motor cool and prevent heat build up on the surface test area.

*Individual carriage assemblies can be supplied to convert machines from existing specification to another. E.G. convert 903/1 to 903/8*

### Applications

A wide range of surfaces may be subjected to intensive accelerated wearing in order to assess long term potential changes in surface condition.

The Wet Abrasion Scrub Tester will provide repeatable and reproducible results. Typical applications include abrasion resistance of:

- Paints, varnishes, inks, plastics.
- Floor coverings, carpets, upholstery materials.
- Kitchen worktops, refrigerators, washing machines etc.
- Ceramics - glazed or unglazed.
- Furniture - wooden, metal or plastic.
- Anodised or plated surfaces.
- Leathers - natural or artificial.
- Wallpapers and coverings.

*The machine is an essential piece of equipment for the evaluation of:*

- Gloss retention or deterioration.
- Soil removal capabilities of cleaning materials.
- Print removal by constant rubbing.
- Surface protection by waxes or other products.
- Roof felt (GEN / TC 254/SCI N45)

### Note

Owing to continuous development, we reserve the right to introduce improvements and modify specifications without prior notice.



## Physical Testing Washability Tester

The washability tester was designed in response to the detergent industry requirements for washability testing using cleaning agents applied directly to sponge (or other types of) scrubbing heads.

Four scrubbing heads enable a combination of tests to be carried out one at a time either using a single product or up to three other products for comparison purposes. A lift and tilting carriage assembly allows all four heads to be lifted and rotated through 180 degrees to facilitate a quick and easy application of test medium directly to the sponge. Weights can be added to the scrub heads to give a weight loading between 300gms and 1000gms in 100gm increments for intensive test procedures.

The washability tester is fitted with a five speed motor. This allows adjustment for the scrubbing heads to travel at speeds of 20,25,30,35 and 37 strokes per minute allowing simulation of fast or

slow cleaning actions. To aid cleaning, the carriage assembly can be removed simply by moving the spring clip and lifting off.

A five digit counter with pre-set facility is fitted so that the machine can be set to run unattended without risk of exceeding the number of strokes required by the test procedure.

An additional facility available for the scrub tester is an automatic stroke counter. Mounted on the counter are 4 large LCD screens which display the number of strokes for each track. Four buttons allow the operator to stop the counter on any track once a sample is observed to have completed its test thus allowing the scrub tester to carry on operating until all the samples have been tested or when the pre-set count limit is reached.



903/PG Washability Tester

## Physical Testing

### Ordering Wet Abrasion Scrub Tester

- Ref **903** *Sheen Standard Model Wet Abrasion Scrub Tester*  
Base unit supplied with carriage assembly giving applied loading of 500gms and 2 natural bristle brushes.
- Ref **903/1** *Wet Abrasion Scrub Tester to DIN 53778*  
Base unit supplied with carriage assembly giving applied loading of 250gms and 2 natural bristle brushes.
- Ref **903/2** *Wet Abrasion Scrub Tester to ASTM D2486*  
Base unit supplied with carriage assembly giving applied loading of 454gms, 2 nylon bristle brushes, 2 rubber mats and brass shim 12.7 X 0.25mm (0.50" x 0.01")
- Ref **903/3** *Wet Abrasion Scrub Tester to ASTM D3450*  
Base unit supplied with carriage assembly giving applied loading of 1500gms and 2 sponges.
- Ref **903/4** *Wet Abrasion Scrub Tester to ASTM D4213*  
Base unit supplied with carriage assembly giving applied loading of 470gms, 2 sponges and 2 abrasive pads.
- Ref **903/5** *Wet Abrasion Scrub Tester to ASTM D4828*  
Base unit supplied with carriage assembly giving applied loading of 1000gms and 2 sponges.
- Ref **903/6** *Wet Abrasion Scrub Tester to EN 12956*  
Base unit supplied with dual speed motor -30 and 120 cycles per minute, 3 carriage assemblies and abraders as follows.  
For Spongeability - applied load 100gms, 2 sponges.  
For Washability - applied load 550gms, 2 felt sheets.  
For Scrubbability - applied load 600gms, 2 polyimide bristle brushes.
- Ref **903/7** *Wet Abrasion Scrub Tester to BS7719*  
Base unit supplied with carriage assembly giving applied loading of 130gms and 2 non woven pads backed by sponge.
- Ref **903/8** *Wet Abrasion Scrub Tester to ISO 11998/BS3900 F 17*  
Base unit supplied with carriage assembly giving applied loading of 135gms and 2 non woven abrasive pads.

### Ordering Washability Tester

- Ref **903/PG** *Washability Tester*  
Supplied as previously described as a complete unit.
- Ref **903/PG/O21** Counter unit for REF 903/PG

*Power supply required must be clearly stated on your order, either: 220 -240 volt 50 hz or 110 -120 volt 60 hz*

### Consumables

- Ref **903/138/P2** Black Plastic Test Panels – Packs of 100
- Ref **903/050/D** Scrubbing Pads for 903/7 ( BS 7719 ) available in packs of 50, 100 and 200 Pads

*Spare brushes, sponges, abrasive pads for all versions*

- Ref **903/SM1** ASTM Scrub medium  
- Non abrasive type - 473CC
- Ref **903/SM2**  
- Non abrasive type - 473CC  
- Abrasive type - 473CC
- Ref **903/ST1** ASTM Staining medium  
- Pigmented type - 473CC  
- Abrasive type - 473CC
- Ref **903/ST2**  
- Pigmented type - 473CC  
- Penetrating type - 473CC

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