

# Elcometer 1700 Falling Sand Tester



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The Falling Sand Tester is a rugged and sturdy instrument, used to measure the resistance to abrasion of paints and lacquers.

Standardised sand is contained in a hopper which is connected to a guide tube. Test pieces are fixed at a 45° angle, 25mm (0.98") from the base of the tube, where the wear can be observed.

The sand is allowed to fall, at a controlled rate, on to the test piece which must have a known coating thickness.

The resistance to abrasion is measured when the substrate is revealed and measured by the amount of sand required to wear through the coating.

## Washability, Brushability & Abrasion Testers

Improved mechanical resistance to wear is a key requirement of a wide range of products. From coatings to clothing, leather to upholstery, keypads to plastic toys, a product's ability to resist wear is an important characteristic.

There are testing methods relating to the 'abrasion by friction' concept. Others are based on the projection of abrasive particles on to the test specimen. These techniques provide valuable information about materials and processes.

**Washability:** The ability of a coating to withstand being washed using either wet or dry scrubbing action. The effect can be determined in terms of coating weight loss, loss of gloss or loss of thickness after the scrubbing process.

**Brushability/Spongeability:** The degree to which a wall covering resists washing with either a brush or a sponge, usually a sponge using a fixed testing regime, e.g the number of cycles, weight and size of sponge, etc.

**Abrasion:** The ability of a coating to resist damage caused by a defined material rubbing its surface. Abrasive wear is the erosion of material from a solid surface by the action of another solid.

Can be used in accordance with

ASTM D 968

DIN 53233

FTMS 141 6191

JIS A1452

JIS H 8682-3

*Standards in grey have been superseded but are still recognised in some industries.*

TECHNICAL SPECIFICATION		
Dimensions	1790 x 330 x 400mm (70 x 12.9 x 15.7")	
Weight	20kg (44lb)	
Part Number	K0001700M001	Elcometer 1700 Falling Sand Tester
Packing List	Elcometer 1700 Falling Sand Tester and operating instructions	

ACCESSORIES	
Description	Part Number
Ottawa ASTM Standardised Sand - 23kg (50.7lb)	KT001700N001
CEN DIN EN 196-1 Standardised Sand - 50kg (110lb)	KT001700N002
Artificial Corundum - NF Standard Bag - 5kg (11lb)	KT001700N003
Glass Tube for Falling Sand Tester	KT001700P001

## Related Products



Elcometer 1720

### Elcometer 1720 Washability & Abrasion Testers

These robust, reliable and extremely versatile machines have been designed for testing the abrasion, washability, brushability and resistance of a wide range of materials including paint, lacquers, inks, coatings, leather, wood, plastics, printed material, fabrics etc.



Taber 5135

### Elcometer Taber<sup>®</sup> 5135 & 5155 Rotary Abrasers

Used primarily in the testing of ceramics, plastics, textiles, metals, leather, rubber and painted, lacquered and electroplated surfaces, accelerated wear test procedures have also been written into many test specifications including ASTM, ISO, TAPPI and DIN - as well as automotive manufacturing procedures around the world.



Taber 5750

### Elcometer Taber<sup>®</sup> 5750 Linear Abraser

Whatever your product, be it curved, round, big or small, the Linear Abraser from Taber<sup>®</sup> can test it all. Using a free floating head to follow the contours of the sample, the Taber<sup>®</sup> 5750 is the ideal abrasion tester for flat or curved surfaces. It may also be used as a scratch tool, using the scratch kit accessory.

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