

Elcometer 1700 & 1750

Taber® 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.

The Taber® Rotary Abraser is an industry standard used in the wear and durability testing and is available with either a single test head or dual testing heads, which allows the user to test two different or identical materials simultaneously.

Choose from a wide variety of abrading wheels and abraser accessories to simulate real-life wear conditions.

Features:

- Platform speeds 60 and 72rpm
- Balanced, calibrated arms and wheel mounts
- Vacuum system with precision height adjustment
- Sealed aluminium housing with membrane control panel and digital display

STANDARDS:

ANSI INCITS 322, AS/NZS 1580.403.2, AS/NZS 4266.2, ASTM C1353, ASTM C217, ASTM C241, ASTM C501, ASTM D1044, ASTM D3389, ASTM D3884, ASTM D4060, ASTM D6037, ASTM D-7255, ASTM F1478, ASTM F1978, ASTM F362, ASTM F 510, BS 5599, DIN 52347, DIN 53109, DIN 53754, DIN 53799, DIN 68861-2, ECCA T16, EN 13329, EN 13523-16, EN 14323, EN 14327, EN 14354, EN 14431, EN 14688, EN 14864, EN 1504-2, EN 438-2, EN 660-2, EN 13696, FORD BN108-02, GM9515P, ISO 10074, ISO 14656, ISO 24338, ISO 3537, ISO 4586-2, ISO 5470-1, ISO 7784-1, ISO 7784-2, ISO 9352, JIS A 1453, JIS H 8503, JIS K 5600-5-8, JIS K 5600-5-9, JIS K 6404-22, JIS K 6902, JIS K 7205, NEMA LD 3, NF Q03-055, SAE J 1530, SAE J 1847, SAE J 365, SAE J 948, SIS 923509, SS 923509, TAPPI T 476, UNE 135203-1, UNE 48250, UNE 56842, UNE 56843, UNE 56868, UNE 57095

Technical Specification

Part Number	Description	Certificate
UK/EUR 230V US 115V		
ST981700-2 ST981700-1	Elcometer Taber® 1700 Single Head Abraser	●
ST981750-2 ST981750-1	Elcometer Taber® 1750 Dual Head Abraser	●
Dimensions & Weights	Elcometer Taber® 1700: 315 x 391.2 x 213.4mm (12.4 x 15.4 x 8.4”), 14.9kg (33lb)	
	Elcometer Taber® 1750: 535.9 x 393.7 x 213.4mm (21.1 x 15.5 x 8.4”), 24.9kg (55lb)	
	Vacuum unit: 279 x 279 x 610mm (11 x 11 x 24”), 10.4kg (23lb)	
Packing List	Elcometer Taber® 1700 Single Head Abraser: Single head abraser unit with switchable power input (115/230v, 60/50hz), vacuum unit (power supply to be specified at time of order), 2 x 500g auxiliary weights, 2 x 1000g auxiliary weights, SH-125 specimen holder (supplied fitted to the abraser), SH-101 hold down ring (supplied fitted to the abraser), S-12 hand brush, Torx T25 screwdriver, operating instructions	
	Elcometer Taber® 1750 Dual Head Abraser: Dual head abraser unit with switchable power input (115/230v, 60/50hz); vacuum unit (power supply to be specified at time of order), vacuum y-adaptor & hose kit, 4 x 500g auxillary weights, 4 x 1000g auxillary weights, 2 x SH-125 specimen holder (supplied fitted to the abraser), 2 x SH-101 hold down ring (supplied fitted to the abraser), S-12 hand brush, Torx T25 screwdriver, operating instructions	

● Calibration Certificate supplied as standard.

Elcometer 1700 & 1750

Taber® Abrading Wheels



Taber® Abrading Wheels are available in five levels of abrasiveness to suit a wide range of material testing applications.

Wool, felt or plain rubber wheels test delicate materials or abrasiveness of materials such as dental powders.

Wheels featuring abrasive particles in a resilient matrix of rubber or a hard matrix of vitrified clay are suitable for stiffer materials.

- *Calibrase®*: resilient abrasive wheel - rubber and aluminium oxide
- *Calibrade®*: a non-resilient abrasive wheel - vitrified clay and silicon carbide
- *Plain Rubber*: contains no abrasive particles unless used with sandpaper strips
- *Tungsten Carbide*: severe cutting and tearing action with helical teeth for use on resilient materials such as rubber, leather and floor coverings

Technical Specification

Elcometer 1700 and 1750 Taber® Rotary Abrasers (2 wheel set)

Part Number	Description	Abrasive Action	Composition
ST125319	CS-5 Resilient Wheel (Pack of 2)	None	Wool Felt
ST135177	CS-8 Resilient Wheel Set (Pack of 2)	Extra Mild	Rubber & Abrasive Grain
ST125321	CS-10F Resilient Wheel (Pack of 2)	Very Mild	Rubber & Abrasive Grain
ST125320	CS-10 Resilient Wheel (Pack of 2)	Mild	Rubber & Abrasive Grain
ST132684	CS-10P Resilient Wheel Set (Pack of 2)	Mild	Rubber & Abrasive Grain
ST130950	CS-10W Resilient Wheel Set (Pack of 2)	Mild	Rubber & Abrasive Grain
ST125322	CS-17 Resilient Wheel (Pack of 2)	Harsh	Rubber & Abrasive Grain
ST125345	S-35 Non-resilient Wheel (Pack of 2)	Severe Cutting	Tungsten Carbide
ST125529	S-39 Non-Resilient Wheel (Pack of 2)	-	Leather
ST132720	S-24 Non-Resilient Wheel (Pack of 2)	-	Aluminium
ST125323	H-10 Non-resilient Wheel (Pack of 2)	Coarse	Vitrified Clay
ST125324	H-18 Non-resilient Wheel (Pack of 2)	Medium, Coarse	Vitrified Clay
ST125325	H-22 Non-resilient Wheel (Pack of 2)	Very Coarse	Vitrified Clay
ST125326	H-38 Non-resilient Wheel (Pack of 2)	Very Fine, Hard	Vitrified Clay
ST125344	CS-0, S-32 Resilient Wheel (Pack of 2)	Very Mild	Non-Abrasive Rubber
ST132661	CS-T3 Resilient Wheel Set (Pack of 2)	Very Mild	Rubber & Abrasive Grain
ST125564	Sand Paper Strips for use with CS-0, S-42	Medium	Sand Paper Strips (pack of 100)
ST121124	Sand Paper Strips for use with CS-0, S-33	Fine	Sand Paper Strips (pack of 100)

All the items listed above are compatible with both the new (Elcometer 1700 and Elcometer 1750) and old models (Elcometer 5135 and Elcometer 5155)

Elcometer 5135 & 5155

Taber® Rotary Abraser Accessories

Accessories

**Sample Cutter**

The Model 5000 Sample Cutter will cut a precise 106mm (4.2") circular sample with a 6.35mm (0.25") centre hole to prepare your specimens for use with the Elcometer Taber® Abrasers.

An easy counter-clockwise cutting motion allows you to cut a variety of materials. Optional pads, which allow cutting thicknesses of 0.03mm (0.001") to 6.35mm (0.25"), are also available.

Part Number	Description
ST985000	Model 5000 Sample Cutter
ST128530	Replacement Blades (Pack of 5)

**Taber® Grit Feeder**

The Grit Feeder is a freestanding instrument used in conjunction with the Taber Abraser (Model 1700 or 1750).

During testing, abrasive grit particles (e.g. aluminum oxide) are uniformly and continuously distributed onto the specimen surface at a specified rate. As the specimen holder rotates, the loose grit particles pass under two S-39 leather clad brass wheels.

Used grit and wear debris are then removed by the Taber Abraser vacuum system. The operation of the Grit Feeder is controlled through the Taber Abraser, ensuring the specimen holder turntable, grit distribution and vacuum suction are actuated simultaneously.

Part Number: ST980355

Elcometer 5135 & 5155

Taber® Rotary Abraser Accessories



Quiet Cabinet

Comprising an upper and lower unit, this solid wood cabinet is suitable for use in a laboratory environment and achieves an approximate 20% reduction in operating sound level.

The top cabinet provides a convenient, dust-free workspace for the Abraser and features a Plexiglas® viewing window to monitor testing and a removable front for easy transfer of the Abraser in and out of the cabinet.

The base cabinet holds the Abraser Vacuum Unit and includes an inbuilt exhaust system for effective air circulation.

Both cabinets offer ample room to store test specimens, supplies and accessories. The Quiet Cabinet can be purchased as a complete unit or the top and base separately. The lower cabinet exhaust system is available for 230V/50Hz or 115V/60Hz.

Technical Specification

Part Number	Description
ST129497	Complete 230V - both upper and base cabinets
ST128372	Complete 115V - both upper and base cabinets
ST129498	Base unit only 230V - includes vacuum unit
ST128371	Base unit only 115V - includes vacuum unit
ST128370	Upper unit only - workspace and viewing window
ST133439-1	Upper unit only - large version for use with Grit Feeder Attachment



Calibration Verification Kit

A cost effective method that enables users to verify that an instrument is in calibration, or requires attention. Each kit is individually calibrated providing a reliable check system.

Kit allows you to verify:

- Longitudinal alignment of abraser arm
- Transverse alignment of abraser arm
- Wheel tracking and wear pattern
- Bearing integrity (tracking pattern compliance)
- Vacuum nozzle orifice size
- Minimum vacuum nozzle suction force
- S-30 Weartrac precision wheels (x1 set)

Technical Specification

Part Number	Description
ST132030	Calibration Verification Kit