

Elcometer 5135 & 5155 Taber Rotary Abrasers

Can be used in accordance with:

ANSI, AS/NZS, ASTM, BS, DIN, ECCA, EN, ENV, FORD, GM, ISO, JIS, NEMA, NF, SAE, SS, TAPPI, UNE



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.

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.

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

Technical Specifications

Part Number	Description		Certificate
	Elcometer Taber® 5135 Single Head Abraser	Elcometer Taber® 5155 Dual Head Abraser	•
UK/EUR 230V	ST985135-2	ST985155-2	
Dimensions	279 x 406 x 279 mm	482 x 355 x 279 mm	
Weight	19.5kg	31.75kg	
Vacuum unit	279 x 279 x 610 mm	10.0kg	

• Calibration Certificate supplied as standard.

Standards

Can be used in accordance with:

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, EN14327, EN14354, EN14431, EN 14688, EN 14864, EN 1504-2, EN 438-2, EN 660-2, ENV 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, 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TAPPI T 476, UNE 135203-1, UNE 48250, UNE 56842, UNE 56843, UNE 56868, UNE 57095 * Standards not in bold have been superseded but are still recognised in some industries

Packing List

Elcometer Taber® Abraser
Auxiliary weights - 1 x 500g load and 1 x 1000g load
Specimen holder 109.2mm O/D (E-100-125)
Holding down ring (E-100-101)
100 x refacing discs (S-11)
Calibrase® Wheel set (CS-10)
Calibrade® Wheel set (H-18)
Vacuum unit with suction hose
Round brush
Power leads 230V
Operating instructions



Accessories

Part Number

Description

Taber Abrading Wheels and Wearasers

See last page to choose from a wide variety of abrading wheels and abramer accessories to simulate real-life wear conditions.



Multi-Media Attachment

This attachment is used to recreate contact surface wear caused by liquids, fluids and powders. Measures the abrasivity of materials including paints, pigments, adhesives, sealants, pastes, additives etc. If you require either the Elcometer Taber® 5135 or Taber® 5155 ready assembled with the Multi-Media Attachment, please contact Elcometer.



ST985500

Sample Cutter

The Model 5000 Sample Cutter will cut a precise 106mm circular sample with a 6.35mm 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 to 6.35mm, are also available.



ST985000

Grit Feeder Attachment

Provides a unique method to evaluate 3-body abrasion resistance on a variety of materials. Aluminium oxide grit particles are evenly distributed on to the specimen wear path and pass under a pair of leather wheels. This loose grit acts as an abradant aiding the action that contributes to the physical breakdown of materials.

The Abraser Vacuum is attached to the grit feeder and continuously removes both abraded material and used grit.

The Grit distributor and vacuum removal nozzle heights are adjusted using a thumbscrew.

Two versions are available, Model 155 and Model 255. The Model 155 uses an alignment guide screw to set the position of the instrument. The model 255 has an alignment block incorporated into the base to ensure the correct location of the grit feeder in relation to the Abraser.



Both models are supplied complete with:
 S-39 Leather wheel set
 S-38 Standardisation Plates
 S-41 #240 Aluminium oxide
 Alignment guide and mounting hardware

ST980503-1	Model 155
ST980503-2	Model 255

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 work space 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.

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 - work space and viewing window

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)

Supplied complete with:

- S-45 Wheel tracking cards (x15)
- Vacuum nozzle suction and orifice gauge
- Vacuum nozzle O-ring
- Dual unit vacuum plug
- Taber® Abraser clean-up hose

ST132030	Calibration Verification Kit
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Taber Abrading Wheels and Wearasers

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 5750 Taber® Linear Abraser

Part Number	Description	Abrasive Action	Composition
ST130684	CS-10F Resilient Wearaser® (pack of 10)	Very Mild	Rubber & Abrasive Grain
ST130685	CS-10 Resilient Wearaser® (pack of 10)	Mild	Rubber & Abrasive Grain
ST130686	CS-17 Resilient Wearaser® (pack of 10)	Harsh	Rubber & Abrasive Grain
ST130681	H-18 Non-resilient Wearaser® (pack of 5)	Medium, Coarse	Vitrified Clay
ST130682	H-22 Non-resilient Wearaser® (pack of 5)	Very Coarse	Vitrified Clay