

RECIPROCATING ABRASER MODEL 5900



Wear and Scratch Testing

Unique design ensures simple instrument set-up

Test specimens are mounted to a sliding platform that moves in a horizontal, reciprocating motion under a stationary tool holder. A counterweight enables the operator to balance the test arm prior to applying the test load, thus ensuring the exact load will be applied. An adjustable gantry allows the test system to be positioned according to the height of the specimen. Test parameters such as stroke length, speed, and load are adjustable.

Optional attachments provide versatility to satisfy numerous test requirements

Incorporated at the end of the test arm is a tool holder to which optional attachments and weights are secured. Ideal for flat surfaces, the Taber Reciprocating Abraser can be configured to evaluate the susceptibility of a material surface to abrasion, scratch, scrape, rub, plus many other physical properties. With optional accessories based on GM test methods, this apparatus will also test the abrasion resistance of textile specimens using various friction media.



Maximize testing time with extra test arm assembly kits

Using additional test arm kits (sold separately), the Taber Reciprocating Abraser can test up to three specimens simultaneously to increase technician output or compare different product formulations at the same time.

Test Procedure

The Taber® Reciprocating Abraser (Model 5900) includes a counterbalanced arm which pivots on an adjustable height gantry system. The counterweight allows the user to balance the test arm, ensuring precise test load set-up regardless of the attachment. Incorporated at the end of the arm is a tool holder to which optional attachments and weights may be secured. A sliding specimen platform moves in a horizontal, reciprocating motion under the tool holder. Test parameters such as stroke length, speed and load are adjustable so optimal settings for each material can be established.

Stroke Length: 6 – 155mm (0.25” – 6”)

Speed: 3 – 75 cycles per minute

Test Load: 1N – 24N max (supplied weights include 1, 2, 2.5, 5, 10 & 24N)

Standard Features

- Adjustable stroke length (6 mm to 155 mm)
- Variable stroke speed (3 – 75 cycles per minute)
- Test load (1N – 24N with optional weight discs)
- Variable height adjustment (130mm maximum)
- Wearaser® Collet for vitrified or resilient Wearasers
- Counterweight balanced
- Programmable up to 999,999 cycles
- 115V / 230V switchable

Reciprocating Abraser Includes

- Testing Arm Assembly (1 set)
- Weight Set, 6 Piece (1N, 2N, 2.5N, 5N, 10N, 24N)
- Stainless Steel Wearaser Collet
- CS-10 Wearasers (pkg. 10)
- H-18 Wearasers (pkg. 5)
- Wearaser Depth Gauge Tool
- S-14 Refacing Strips (pkg. 50)
- Specimen Clamp (set of 2)
- Hex L-Key (set of 6)
- Hand Brush

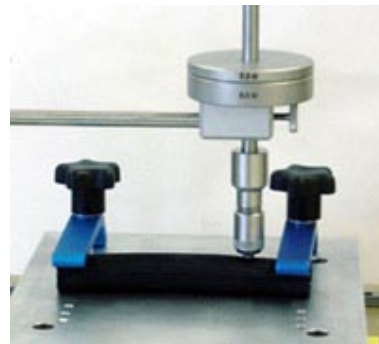
RECIPROCATING ABRASER TESTER

Test procedures have been established by a number of organizations for which the TABER® Reciprocating Abraser may satisfy (note – optional accessories may be required). The following is a partial listing.

ASTM F 2496	Standard Practice for Determining the Scratch Hardness and Scrape Adhesion of Prints and Coatings
GME 60248	Scraping of Coatings on Elastomers and Textile Interiors
GME 60368	Determination of Abrasion Resistance of Artificial Leather
GMW 14125	Linear Abrasion Testing
ISO 1518	Paints and Varnishes – Scratch Test

Optional interchangeable attachments (sold separately) provide additional testing versatility, allowing the Reciprocating Abraser to be configured to perform other tests including wear, scratch, mar, scrape, rub, plus others. Plus, the system is expandable and can accommodate two additional test arm kits, permitting up to three tests to be performed simultaneously.

A critical aspect for using the Reciprocating Abraser is determining how to hold the specimen in place during the test runs. Hardware or other external means may have to be employed to secure the clamp or fixture device prior to testing. The standard specimen table provided with the Reciprocating Abraser is 216mm x 278mm (8.5" x 11") with drilled tapped holes to accommodate specimen clamps or optional specimen fixing plates. To evaluate most flat specimens, specimen clamps or the optional Wide Slot Fixing Plate may be suitable. For flexible materials such as textile products, the optional Specimen Fixing Plate Kit might be used. Products with a slight contour can also be secured in place using the specimen clamps provided or a custom fixture.



Optional Accessories (sold separately)

Additional Testing Arm Kit
Wide selection of abrasants:
Calibrase® CS-8, CS-10F, CS-10, CS-17
Calibrade® H-10, H-18, H-22, H-38
Scratch Tips (various configurations) Counterweight
Multi-Mar Scratch Attachment (45° or 90°)
Universal Attachment
ScotchBrite® Abrasive Pad Kit
Pencil Hardness Scratch Kit
Jumbo Wearaser Collet
Scratch Claw Kit
GM Abrading Accessories

Ordering Information

Reciprocating Abraser model 5900
Catalog number 10-50-00-0001

Instrument Size

Dimensions D x W x H: 406 x 279 x 254 mm
(16 x 11 x 10 in) Weight: 20 kg (45 lb.)

Connections

Electrical: 110/220V 50/60Hz operational

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