

Taber® Shear/Scratch Tester Models 550 & 551: Description



The Taber® Shear/Scratch Tester Models 550 & 551 are precision instruments which employ interchangeable tools to measure the susceptibility of material surfaces to marring, shearing, gouging, scratching, scraping, engraving, and other similar physical damage not classified as ordinary wear.

The Taber® Shear/Scratch Testers are ideal for evaluating adhesive qualities of surface coatings, detecting the lack of homogeneity in comparative materials, rating similar or competitive materials, or analyzing the effects of age under controlled environmental conditions.



The Taber® Shear/Scratch Tester Models 550 & 551 are designed to test a wide range of products and materials. Precision, calibrated weights provide a flexible testing range for rigid organic materials, adhesive coatings, paints, powder coatings, anodized materials, soft metals, synthetics, linoleum, laminates, plastics, glass, and many others.

A brief discussion on the Taber® Shear/Scratch Tester applications and interpretation of the determinations is available:

 [Taber® Shear/Scratch Tester: Interpreting Test Results](#)

Complete Data Sheets for the Taber® Shear/Scratch Tester:

 [Taber® Shear/Scratch Tester Model 550 / 551 Data Sheet](#)



 [Taber® Shear/Scratch Tester Model 550 / 551 Brochure \(CCSi\)](#)

The Taber® Shear/Scratch Tester:







- Model 550 [P/N 980552] operates at a speed of 0.6 RPM and includes cutting tools S-20 and 139-55. It is configured for 115 VAC and 60 Hz,
- Model 551 [P/N 980551] operates at a speed of 5 RPM, and includes cutting tools S-20 and 139-56. It is configured for 230 VAC and 50 Hz.

Taber® Shear/Scratch Tester Models 550 & 551: Standard Features & Options

Standard Features:

- Constant speed motor;
- Balanced, calibrated scale beam;
- Variable load from 0 – 1000 grams;
- Tests up to 4 in. square or round specimens;
- Adjustable gage block, tests up to 0.50 inch (12.5 mm) thick specimens;
- Soft touch ON/OFF switch;
- 500 Gram Calibrated Weight (2 each);
-  [131763 Measuring Magnifier 10 x](#)
- Spirit Bubble Level;
- Hex Wrench;
- Interchangeable Tools:
 -  [S-20 Tungsten Carbide Contour Shear Tool,](#)
 -  [139-55 Conical Diamond Tool \(3 mil Radius, for Model 550\),](#)
 -  [139-56 Conical Diamond Tool \(3.5 mil Radius, for Model 551\),](#)
 -  [139-58 Diamond Scratch Tool.](#)

Optional Accessories (sold separately):

-  [S-20-1 Tungsten Carbide Fingernail Shear Tool;](#)
-  [139-61 Measuring Magnifier 7 x;](#)
-  [132618 Diamond Tool Standardization Plates, 2 each, for ISO 4586-2;](#)
-  [ETF-14 Stepdown Transformer, 230 / 115 VAC, 1000 Watt, 50 / 60 Hz.;](#)
-  [Scale Beam Height Extension Kit \(550/551\);](#)
-  [Scale Beam Height Extension Kit \(502/502-ISO\).](#)

Taber® Shear/Scratch Tester Models 550 & 551: Applicable Test Methods

SDO	Number	Title / Description
ASTM	C217	Weather Resistance of Slate
CEN	EN 438 (Part 2)	Decorative High Pressure Laminates – Sheets based on Thermosetting Resins Part 2: Determination of Properties • 14. Resistance to Scratching
CEN	EN 13310	Kitchen Sinks - Functional requirements and test methods
DIN	53 799	Decorative Laminated Sheets on Basis of Aminoplastic Resins: Test Method
DIN	68 861-4	Furniture Surfaces; Behavior at Scratches
Federal	L-F-00450A	Floor, Vinyl, Plastic (Canceled)
Federal	L-T-00345	Tile Floor, Vinyl, Asbestos (Interim)
Federal	L-T-751	Tile Floor, Vinyl, Asbestos
Federal	SS-T-307	Tile, Asphalt, Grease Resistance (Canceled)
Federal	SS-T-312	Tile, Floor: Asphalt, Rubber, Vinyl – Vinyl-Asbestos (Canceled)
ISO	4586-2	High-Pressure Decorative Laminates Part 2: Determination of Properties - Resistance to Scratching
Terrazzo	90322-9E-1	Conductive, Synthetic Latex Terrazzo Flooring

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