Taber® Rotary Abraser
5135/5155
Wear and Abrasion Testing

Taber abrading wheels produce characteristic rub wear action. Mounted to a rotating turntable, specimens are subjected to the rub-wear action of two abrasive wheels. Driven by the test sample, the wheels produce abrasion marks that form a pattern of crossed arcs over a circular ring approximately 30 square centimeters. This reveals abrasion resistance at all angles relative to the weave or grain of the material.

Referenced in numerous international test standards and specifications. Simple to operate, this instrument has been accepted worldwide as a standard for wear and abrasion research, quality and process control, materials evaluation, and product development. Taber Rotary Abrasers are capable of providing reliable data in a matter of minutes, compared to the years that may be required with in-use testing. Test a wide range of products.

The Taber Abraser can be used to test virtually any flat specimen. Its field of application has included tests of: painted, lacquered, powder coated, and electroplated surfaces; textile fabrics ranging from sheer silks to heavy upholstery and carpeting; and solid materials such as metals, stone and ceramics. Other materials include paper, glass, plastics, leather, rubber, linoleum, laminates, plus many others.

Model 5155 Shown
# Taber® Rotary Abraser

## 5135/5155

Wear and Abrasion Testing

## Available in Two Versions:
- Model 5135 Single Platform Abraser
- Model 5155 Dual Platform Abraser
  - 115/230V, 60/50Hz

## Standard Features:
- Platform speeds 60 and 72 rpm
- Quick Release Wheel Hub
- Balanced, calibrated arms and wheel mounts
- Vacuum system with precision height adjustment
- Sealed aluminum housing
- Membrane control panel with digital display
- Precision stainless steel weights
- Accessory electrical receptacle

## Optional Accessories (sold separately):
- Calibration / Verification Kit
- Sample Cutter
- Wheel Refacer
- Quiet Cabinet
- Grit Feeder
- Scuffing Head Attachment
- Multi-Media Attachment
- Interchangeable Specimen Tables
- Arm Height Extension Kit
- Selection of Abrading Wheel Sets
- Test Accessories

## Taber Rotary Abraser Includes:
- Auxiliary Weights: 500g load & 1000g load
- Specimen Holder (E100-125)
- Hold Down Ring (E-100-101)
- Refacing Discs (S-11)
- Specimen Mounting Card Sample Package (S-36)
- Calibrate® Abrading Wheel Set (CS-10)
- Calibrate® Abrading Wheel Set (H-18)
- Vacuum Unit with Suction Hose & Round Brush

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*Send us your materials for a product demonstration*

## Model 5135 Shown

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LASS12/05
Are you getting the most out of your TABER® Abraser?

**Sample Cutter**
Prepare specimens for the Taber Rotary Abraser with the Model 5000 Sample Cutter. A heavy-duty blade cuts a 4.2-inch diameter specimen and the punch creates a precise ¼ inch center hole. Use for a variety of materials, including paper, cardboard, rubber, leather, vinyl, linoleum, carpet, textiles, thin metals, flexible plastics, plus many others.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
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<tbody>
<tr>
<td>980500</td>
<td>Sample Cutter, Model 5000</td>
</tr>
<tr>
<td>128530</td>
<td>Replacement Blades</td>
</tr>
</tbody>
</table>

**Wheel Refacer**
The Model 250 Diamond Wheel Refacer is a precision instrument that was specifically developed for dressing the contact surfaces of CALIBRADE® wheels (H-10, H-18, H-22 and H-38). It is also suitable for CALIBRASE® abrasive wheels that have become out-of-round (CS-10F, CS-10 and CS-17).

**Quiet Cabinet**
The Quiet Cabinet has been specially designed to reduce sound levels by approximately 20% and provide a convenient, dust-free workspace for your Taber Abraser. The upper cabinet features a hinged Plexiglas viewing window to monitor testing. The lower cabinet holds the abraser vacuum unit and includes a built-in exhaust system to provide the proper air circulation.

<table>
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<tr>
<th>Part No.</th>
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<tbody>
<tr>
<td>128372</td>
<td>Quiet Cabinet (115V/60Hz)</td>
</tr>
<tr>
<td>129497</td>
<td>Quiet Cabinet (230V/50Hz)</td>
</tr>
</tbody>
</table>

**Grit Feeder**
The Grit Feeder is used to evaluate three body abrasion caused by the destructive action of fine hard particles. Originally designed to evaluate the resistance of floor surface coatings to abrasion, this instrument distributes a consistent flow of aluminum oxide grit onto a specimen surface before it passes under a pair of leather-clad wheels. The grit particles serve as the abradant and aids in the rolling action that contributes to the materials breakdown.

<table>
<thead>
<tr>
<th>Part No.</th>
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<tbody>
<tr>
<td>980503-1</td>
<td>Grit Feeder, Model 155</td>
</tr>
<tr>
<td>980503-2</td>
<td>Adjustable Grit Feeder, Model 255</td>
</tr>
<tr>
<td>121257</td>
<td>S-38 Standardization Plates</td>
</tr>
<tr>
<td>125529</td>
<td>S-39 Leather Wheel Set</td>
</tr>
<tr>
<td>121086</td>
<td>S-41 Aluminum Oxide Grit</td>
</tr>
</tbody>
</table>

**Scuffing Head**
The Scuffing Head Attachment is used to evaluate the scuff-resistance of materials such as vinyl, painted surfaces, leather, car floor mats, etc. Mounted to the left hand abraser arm mount, a scuffing head and weight are used in place of the abrading wheels. As the table rotates, the scuffing head is dragged across the specimen surface. Three different profiles are offered.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
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<tbody>
<tr>
<td>980503-13</td>
<td>Scuffing Head Attachment Set (meets Ford FLTM BN 106-04)</td>
</tr>
<tr>
<td>980503-13-1</td>
<td>Scuffing Head Attachment Set (meets General Motors GM10911P)</td>
</tr>
<tr>
<td>120918</td>
<td>Scuffing Head &quot;A&quot;</td>
</tr>
<tr>
<td>120920</td>
<td>Scuffing Head &quot;B&quot;</td>
</tr>
<tr>
<td>127524</td>
<td>Scuffing Head &quot;C&quot;</td>
</tr>
</tbody>
</table>

**Multi-Media Attachment**
The Multi-Media Attachment can recreate contact surface wear caused by liquids, fluids and powders. Measure the abrasivity of materials including paints, pigments, adhesives, sealants, pastes, additives, etc.

<table>
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<tr>
<th>Part No.</th>
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<tbody>
<tr>
<td>985000</td>
<td>Multi-Media Abraser, Model 5000</td>
</tr>
<tr>
<td>130352</td>
<td>Brass Pins</td>
</tr>
<tr>
<td>130353</td>
<td>Wear Discs</td>
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</tbody>
</table>

For more information on Taber Industries products visit our web site www.labomat.com or call us +33 1 48 09 66 11
**Test Accessories**

Taber offers a selection of specimen plates to assist with the evaluation of coatings. Counterweights are available to expand the testing load. And, to test specimens that are greater than 12mm but less than 40mm, we offer the arm height extension kit.

### Specimen Holders

The Taber Abraser can be used for many different applications. Interchangeable specimen holders provide a suitable fixing device dependent on the material.

- **E100-125** – Standard; provided with all instruments, used to test most rigid or flexible specimens (includes E100-101).
- **E100-10** – Transparent; enables textile specimens to be viewed against a light.
- **E140-14** – Ring Clamp; eight screws spaced evenly on a clamp plate to test slightly warped specimens.
- **E140-15** – Textile, Tensioning; incorporates a raised wear track to provide extra tensioning to the material.
- **E140-18** – Textile, Rimmed; provides an initial stretch to woven fabrics, minimizing the tendency to wrinkle if tested wet.
- **E140-19** – Drive-Pin Type; used for rigid, square specimens without the need for a center hole.
- **E140-21** – NEMA Threaded Ring; incorporates a clamp plate and flanged clamp ring to test slightly warped specimens, ring is threaded to the body of the holder.
- **E140-75** – Rimmed; a raised rim retains liquids allowing you to determine the effect of absorbed or surface moisture on abrasion resistance.
- **E-3945** – Multiple; holder permits simultaneous testing of lightweight, flexible specimens.
- **S-21** – Extension Nut; use when sample thickness is ¼” to ½”.

### Specimen Mounting

Mounting cards provide a unique way to mount flexible specimens, and include a test report to capture critical data. **Mounting sheets** allow you to affix specimens directly to a specimen table.

### Abrading Wheels

**Abrading Wheels** are available in a range of abrasiveness. Calibrase® wheels are a resilient composition, which are typically used to test rigid specimens. Calibrade® wheels are a vitrified composition, often used to evaluate flexible specimens. Other wheels are available for specific applications and custom formulations can be developed upon request.

### Calibration Verification Kit

To generate useful data, it is critical that the Taber Abraser is within established calibration tolerances. The **Calibration Verification Kit** provides a fast, reliable system check to verify if a Taber Rotary Platform Abraser is within calibration. When properly used, this cost effective method enables users to determine if an instrument should be returned to the factory for recalibration or repair prior to it’s scheduled calibration.

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