PORTABLE SHORE HARDNESS TESTER

HARD SCOPE

This unit is designed for direct-reading type. Shore hardness meter for portable use.

- This unit is a compact and lightweight, and is very convenient to carry. It is also easy to operate.
- This unit can convert shore hardness value into hardness of Rockwell, Brinell, and Vickers immediately by conversion table.

PS-2 is universal type. It can measure special shape products like a gear tooth bottom and measure the plane and curved surface.

- This unit cannot measure below 4Kg, hollow products, and veneer.

<table>
<thead>
<tr>
<th>Object</th>
<th>PS-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>plane</td>
<td>○</td>
</tr>
<tr>
<td>convex</td>
<td>○</td>
</tr>
<tr>
<td>concave</td>
<td>○</td>
</tr>
<tr>
<td>gear tooth bottom</td>
<td>○</td>
</tr>
</tbody>
</table>

Easy control

Test method is as follows:

Standing this unit erect on a test specimen or product vertically, push the push rod at the upper part with thumb. Then, read off the jumping up height due to the falling down of a diamond hammer inside glass tube by means of a scale behind the glass tube.

If finger is released, the diamond hammer will return to its original position automatically due to the action of the air pump, resulting in being possible to handle easily only with one hand.

※This unit cannot test work harder more than HS100 and very hard work, like diamond, SIC or tungsten carbide.
**SPECIFICATION**

<table>
<thead>
<tr>
<th></th>
<th>PS-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions of Body</td>
<td>L 25.6mm x 25mm</td>
</tr>
<tr>
<td>Weight</td>
<td>285g</td>
</tr>
<tr>
<td>Measuring Hardness</td>
<td>Shore Hardness (HS 30~95 marks)</td>
</tr>
<tr>
<td>Indication</td>
<td>Direct reading (Maximum point of the first jump)</td>
</tr>
<tr>
<td>Working temperature</td>
<td>10~40℃ (fair temp. is 23℃)</td>
</tr>
<tr>
<td>Manufacture's standard</td>
<td>(± 1.5 to HS30, HS60, HS95)</td>
</tr>
<tr>
<td>Dimensions of the case</td>
<td>H 40mm x W 80mm x L 290mm</td>
</tr>
<tr>
<td>Weight of the case</td>
<td>585g</td>
</tr>
</tbody>
</table>

**ACCESSORIES**

- Plane Cap
- Cleaning rod & Tool

**OPTION**

- Standard Blocks for Hardness (HS)

Incidentally, test pieces for inspection of accuracy (Standard Blocks) are also available in order to meet your requirement.

**PRECAUTIONS FOR TESTING**

1. The test surface should be plane and smoothly finished. This is all the more important, the higher the hardness becomes.
2. Do not allow the hammer to strike more than once on the same spot or too near it. Readings will be incorrect as a result of work hardening effect.
3. Do not let fall the hammer without placing a test piece. This will cause a deformation of the diamond hammer, loosening of diamond embedding, inaccuracy of hardness indication, etc. When it is necessary to lower the hammer, place your finger to the tip of the lower cover, then lower it.
4. If any rust, dust or oil is accumulated on the hammer, its up-down motion will receive resistance and the indication will be inaccurate, tending to show lower values. In such case, remove the lower cover (19) and take out the hammer to clean it with a clean cloth, and clean the glass tube with the cleaning rod supplied, inserting it into the tube. Clean the tube by moving the rod up and down while rotating it.
5. Use hardness conversion table for a quick and easy reference. (This should be used as an approximate reference.)

**IMAI's Instruction for Control**

Testing method and prerequisite for the Standard Hardness Block

1. Reference drawing of testing conditions and points to be noted:
   - Wipe out oil, dust and the like between "Material FC25" (250 × 250) and "Material SUJ2" (φ 160 × 73).
   - Wipe out oil, dust and the like between "Material SUJ2" and "Standard hardness block".

2. Data collection:
   - Measure the impression produced on the 5 points of standard hardness block, i.e. (a), (d) outside, (b) central point, and (c), (e) intermediate point, to take an average.

**REFERENCE DRAWING**

- A. Wipe out oil, dust and the like between "Material FC25" (250 × 250) and "Material SUJ2" (φ 160 × 73).
- B. Wipe out oil, dust and the like between "Material SUJ2" and "Standard hardness block".

**OPTION**

- Standard Blocks for Hardness (HS 30~95 marks)

Incidentally, test pieces for inspection of accuracy (Standard Blocks) are also available in order to meet your requirement.

**MODEL**

- Measuring Block

Model, appearance and specifications subject to change without notice.