Vision on quality
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HARDNESS TEST
SP0010, SP0015

MANUAL

1 PRODUCT DESCRIPTION

The TQC Hardness Test is a pocket instrument for testing the hardness and wear/scratch resistance of materials such as coatings, lacquers, plastics or related products. A tungsten carbide tip is drawn over the surface with a defined constant pressure. The pressure on the tip can be changed using the slide or by changing the spring. A visual mark on the surface after use of the TQC Hardness Test indicates a fail of the surface hardness or wear/scratch resistance. Can be used on flat and curved surfaces.

1.1 Specifications

	Tips	Range	Dimensions	Weight
SP0010	∅ 1mm	0-3 N, 0-10 N, 0-30 N	L 190mm	67g
SP0015	∅ 1mm, 0,75mm, 0,50mm	0-3 N, 0-10 N, 0-30 N	L 190mm x H 160mm	375g

2 STANDARDS

Can be used in accordance with ISO 1518; AS 3894.4; EN 438-2, SIS 184188, DIN 55656 and Corporated Standards Bosch, Volvo, Opel, van Laar

3 WHAT'S IN THE BOX?

SP0010
- TQC Hardness test pen
- Tip Ø 1mm
- Spring 0 – 3 N (300g - 0.671lbF) (Blank)
- Spring 0 – 10 N (1000g - 2.248lbF) (Blue)
- Spring 0 – 30 N (3000g – 6.74lbF) (Red)

SP0015
- TQC Hardness test pen
- Handle / Wheel assembly
- Tip Ø 1mm
- TIP Ø 0,75mm
- Tip Ø 0,50mm
- Spring 0 – 3 N (300g - 0.671lbF) (Blank)
- Spring 0 – 10 N (1000g - 2.248lbF) (Blue)
- Spring 0 – 30 N (3000g – 6.74lbF) (Red)
- Allen key

Spare items
SP0012 Tip for hardness test Diameter 0.5 mm / R=0.25 (acc. To Opel, Volvo, van Laar)
SP0013 Tip for hardness test Diameter 0.75 mm / R=0.375 (acc. to Bosch, Volvo)
SP0014 Tip for hardness test Diameter 1.0 mm / R=0.25 (acc. to ISO)

4 PREPARATIONS

SP0010
1. Make sure the right tip is mounted and the correct spring is placed
2. The scale mentions the color that belongs to that spring

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SP0015

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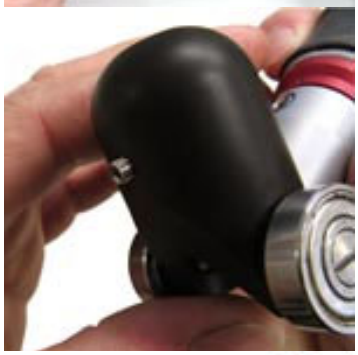

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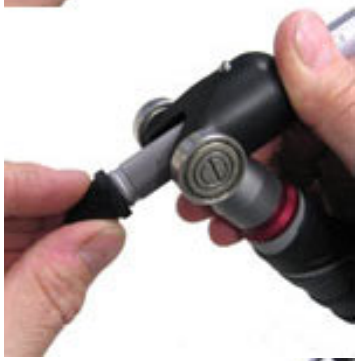

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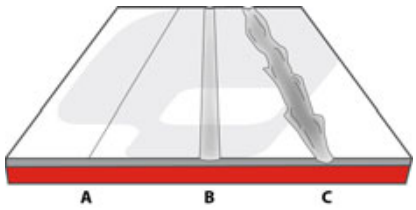
5 PERFORM A MEASUREMENT

1. Release the red knob on the slider and set the slider to the required position and fasten it by turning the red knob clockwise. (Note the beveled edge of the slider indicates the correct position).
2. Place the tester perpendicular on the surface to be tested and press the holder, using light force, in order to create load on the tip. The black guide tip should not touch the sample.
3. Move the tester over the surface over a length of about 10 mm with a constant speed.
4. Observe the surface to check for visible marks as indicated by standard. For example see image



6 MAINTENANCE

- Though robust in design, this instrument is precision-machined. Never drop it or knock it over
- Always clean the instrument after use.
- Clean the instrument using a soft dry cloth. Never clean the instrument by any mechanical means such as a wire brush or abrasive paper. This may cause, just like the use of aggressive cleaning agents, permanent damage.
- Always keep the instrument in its case when not in use.

7 DISCLAIMER

The right of technical modifications is reserved.

The information given in this manual is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this manual without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. Whilst we endeavour to ensure that all advice we give about the product (whether in this manual or otherwise) is correct we have no control over either the quality or condition of the product or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of the use of the product. The information contained in this manual is liable to modification from time to time in the light of experience and our policy of continuous product development.