

TQC SURFACE PROFILE AND COATING THICKNESS GAUGE

SP1560

MANUAL

1 PRODUCT DESCRIPTION

The TQC Surface Profile & Coating Thickness gauge is a combination gauge. that can be equipped with two different tips, one for surface roughness and another for coating thickness.

1.1 Technical Specifications

| | |
|---------------|--------------------------|
| Range | : 0~3,4 mm / 0~0.13 inch |
| Resolution | : 1µm / 0.04 mil |
| Accuracy | : ± 5µm / 0.2 mil |
| Thread | : M2.5 x 0,45 |
| Stem Diameter | : 8 mm / 0.3 inch |
| Battery | : Type LR44 1.5 V |

1.2 Details

| | |
|-------|---|
| Tips: | : Sharp needle tip for Surface Roughness gauge (<i>standard on the gauge</i>) |
| | : Round tip for Coating Thickness Gauge |

**2 STANDARDS**

ISO 2808-4B, ASTM D 4417-B, JIS K 5600-1-7, BS 3900-C5

Look up the appropriate standard for a correct execution of the test

3 WHAT'S IN THE BOX?

The instrument comes with two tips and a glass calibration plate, all in a leather pouch.

4 SPARES / ACCESSORIES

| | |
|--------|---------------------------------------|
| SP1619 | Replacement tip for coating thickness |
| SP1616 | Replacement tip for roughness |
| SP1618 | Spare leather pouch for SP1560 |

5 PERFORM A MEASUREMENT**5.1 Measuring Roughness**

1. Press the On/Off button to switch the gauge on.
2. Check if the right tip is chosen. (the sharp needle tip is suitable for measuring roughness)
3. Choose parameter by pressing the IN/MM button.
4. Place the needle of the gauge on the flat glass specimen (zero plate) and press the gauge with the holder down until the base of the holder stands firmly on the zero plate.
5. Press the ZERO button to make the instrument read zero.

6. Place the needle gently on the blasted surface and press the base of the gauge-holder firmly against the steel. Do not drag the instrument.
7. Read the peak-valley value.
8. Make 10 measurements on each desired location and determine the mean as being the profile of the surface.

5.2 Measuring Thickness

1. Press the On/Off button to switch the gauge on.
2. Check if the right tip is chosen. (the round tip is suitable for measuring thickness)
3. Choose parameter by pressing the IN/MM button.
4. Place the needle of the gauge on the flat glass specimen (zero plate) and press the gauge with the holder down until the base of the holder stands firmly on the zero plate.
5. Press the ZERO button to make the instrument read zero.
6. Gently remove a piece of paint with a diameter of 8mm. from the surface. Try to remove the paint without damaging the underground material.
7. Place the needle on the removed paint. Make sure the aluminium footing stands on the painted area.
8. The Coating thickness appears on the display.

6 CHANGING TIPS



Step 1

Two tips are supplied. The sharp needle tip is suitable for measuring roughness, the round one for thickness.



Step 2

Take the tip between two fingers and turn anti-clockwise until it is loose. If the tip stays stuck, go to step 2a.



Step 2a

Only when loosening the tip anti-clockwise by hand fails, a pair of tongs may be used GENTLY. Make sure the tip remains undamaged.



Step 3

Turn the new tip clockwise until it's stuck.



Step 4

The tips have been changed. Don't forget to store the tip that's not in use.

7 BATTERY REPLACEMENT

If the display blinks it's necessary to replace the battery. The battery compartment lid is the grey cap on top of the gauge. Remove it by lifting it with a small screw driver.
Replace the LR44 battery with its positive side facing upwards.

8 CALIBRATIONS

We recommend annual calibration. You can send the instrument to the TQC Service department, together with a completed RMA form. This form is available on www.tqc.eu under the Service-menu ; Repairs / Calibrations

9 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.
- Do not use compressed air to clean the instrument.
- Always keep the instrument in its case when not in use.

10 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.