



# TQC Sheen Automatic Scratch Tester

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The TQC Sheen Automatic Scratch Tester enables customers to test coating hardness on coated metal test panels with improved repeatability. Test for scuffing and measure scratch resistance quickly and easily with this handy automated scratch hardness tester.

### A reliable scratch tester for your coatings

Brought to you by TQC Sheen, our paint testing specialist brand, the TQC Sheen Automatic Scratch Tester is dedicated to coatings hardness evaluation based on the scratch resistance method. Quickly and easily measure how resistant your coating is to scratches or scuffing with our reliable scratch hardness tester, engineered for consistent, standards-aligned operation and long-term repeatability.

### How our handy scratch tester works

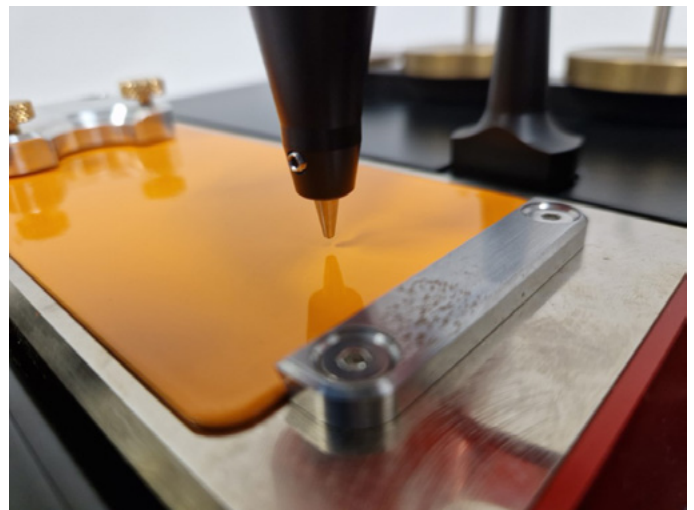
A test panel is clamped down and slowly moved at 35 mm/s whilst a stylus with a tungsten carbide tip rubs and potentially scratches the coated surface. Depending on test procedures, specified loads can be applied to obtain different degrees of failure, from trace to destruction. A simple meter indicates the stylus contacting the metal sample substrate. To support repeatable and accurate testing, the instrument uses a rigid stylus arm with a counterweight, minimizing whip and ensuring stable, controlled contact across the sample surface.

### Weight options for our scratch tester

The scratch tester comes with the weight set required by the current ISO 1518-1. The weight set specified by the preceding standard is optionally available for those who'd like to carry out scratch testing according to those standards. This system is fully ISO 1518-1 compliant, including the complete 20 N weight set required by the standard.

### Technical Specification:

<b>Operating voltage</b>	100–240 VAC / 50–60 Hz (via grounded wall outlet)
<b>Power consumption</b>	20 W (via 24 VDC power adapter)
<b>Operating temperature</b>	+5 °C to +40 °C
<b>Humidity range</b>	5–85% non-condensing
<b>Maximum operating altitude</b>	2000 m
<b>Noise level</b>	< 70 dB during continuous operation
<b>Instrument control</b>	5-button illuminated keypad and 70 × 40 mm LCD display
<b>Weight</b>	13.2 kg (29 lbs)
<b>Dimensions</b>	(DxWxH): 340 × 350 × 450 mm (13.4 × 13.8 × 17.7 in)



## About our Automatic Scratch Tester

The TQC Sheen Automatic Scratch Tester is a robust machine with all the moving parts well encased, ensuring it's a great addition to any set up. It uses an engine for operating the moving slide and holds the sample at a constant speed of 35 mm/ s. The rigid stylus arm with counterweight prevents whip or chatter at the stylus ball-point.

A 1 mm tungsten carbide ball-ended stylus is held in a chuck at exactly 90° to the test panel. It can be easily removed for inspection and replacement. The tungsten carbide tip provides a long-lasting tool that won't need frequent replacement.

The instrument features a robust, enclosed mechanical structure to protect moving parts and ensure reliable daily operation in busy lab environments. Audible and on-screen failure indication, along with an optional auto-return function to the first point of coating failure, streamlines evaluation, documentation, and repeat testing workflows.

These improvements support enhanced lab efficiency and greater long-term reliability.

## Automatic Scratch Test Scope of Supply:

- **Automatic Scratch Tester**
- **ISO1518-1 20 N set of weights: 2 x 0,5 N, 1 x 1,0 N, 2 x 2 N, 1 x 4 N and 1 x 10 N and one weight holder pin**
- **1 mm Stylus with Hemispherical 0.5 mm radius (tungsten carbide for excellent durability and precision)**
- **Power cord**

### Disclaimer

The information contained in this document is liable to modification from time to time in the light of experience and our policy of continuous product development. Check the Industrial Physics website for the latest version.

## Features & Benefits:

- Automated scratch testing at a fixed 35 mm/s and custom speed Selectable test speed (1–60 mm/s) and scratch travel (10–80 mm) for flexible test configuration and method development
- Stylus calibration and verification modes to maintain confidence in measurement accuracy over time
- Easy to use 5-button illuminated control panel and LCD display, making operation straightforward for technicians, R&D and QC teams
- Achieve highly repeatable and accurate scratch resistance results, thanks to controlled test speed, calibrated stylus control, and microprocessor-driven movements
- Clear identification of coating failure through audible/visual indicators and automated return, speeding up inspection and documentation workflows

## Ordering Information:

Article Number	Article Description
<b>SP0100</b>	TQC Sheen Automatic Scratch Tester

## Accessories:

Article Number	Article Description
<b>Various Sizes</b>	TQC Sheen Test Panels
<b>SP0150</b>	TQC Sheen Spare 0.5mm Radius Stylus A
<b>SH4811</b>	TQC Sheen Weight Set (ISO 1518) for Mechanized Scratch Test Tester
<b>SH4783</b>	TQC Sheen Weight Set for Mechanized Scratch Test Tester

## Contact Details

**web.** [www.industrialphysics.com](http://www.industrialphysics.com)

**email.** [info@industrialphysics.com](mailto:info@industrialphysics.com)