

A white, handheld leather softness tester with a digital display and a lens. The device is shown from a three-quarter perspective against a light blue background. A dark, semi-transparent banner is overlaid on the left side of the image, containing text and a logo.

## ST300 SOFTNESS TESTER

Setting standards for  
leather softness worldwide





The ST300 Softness Tester is a precision instrument that provides a dependable means of monitoring leather softness.

The ST300 is non-destructive, so doesn't require samples to be removed from the leather prior to testing. This enables a quality system to be set-up between supplier and customer whenever leather softness is a priority.

**PRINCIPLE:** A cylindrical rod/mass is lowered at a controlled rate onto a securely clamped area of leather. The distension is recorded as the softness.

**INDUSTRY STANDARD:** The ST300 Softness Tester was originally designed by MSA Engineering Systems Limited in conjunction with BLC Leather Technology Centre. A need was identified for an easy to use non-destructive test instrument which would produce reliable, repeatable measurements on a range of leather with varying thickness and softness. The ST300 was adopted at the Industry Standard in 1995 - ISO 17235 (IULTCS/IUP36).

Further development has been conducted by MSA and in 2017 an updated version of the ST300 was released which featured higher precision castings and an optimised main rear pivot.

**CALIBRATION:** Each new ST300 supplied is calibrated by MSA to the full requirements of ISO 17235:2015. MSA also offers a comprehensive re-calibration service.

*NOTE: Official calibrations/re-calibrations can only be carried out by MSA and its authorised partners.*

#### MODELS:

##### ST300A - Analogue Softness Tester

(dial graduated in 0.1mm divisions)

##### ST300D - Digital Softness Tester

(display set to 0.01mm divisions)

#### SPECIFICATIONS:

**Apertures - 35, 25 and 20mm**

(15 and 10mm optional for special applications)

**Cylindrical Mass - 530g ± 10g**

**Load Pin Travel - 11.5mm ±0.1mm in 1.5s ±0.5s**

**Static Force - 5,20 ± 0.1N**

**Total Test Force - 6,13N to 5,5N**

**Net Weight - 4.5Kg**

**Gross (Packed Weight) - 5.5Kg**

**Dimensions - 49 x 15 x 11cm**

**Packed Dimensions - 59 x 25 x 18cm**

(wireless kit extra)

## Digital Softness Measurement

The ST300D Digital Softness Tester is an easy to use unit which enables more accurate measurements and offers additional connectivity.

The digital gauge on the ST300D features a USB interface for connection to a computer. The accessories below are available for data download:

**MSA DATASOFT STG300:** Dedicated software and USB cable, enabling data download and subsequent storage and manipulation. The software receives the data which in turn is then exported to a chosen application (e.g. MS Excel). Data is transmitted by pressing the yellow button on the gauge. If using Excel, the cursor automatically moves to the next entry field after each reading is exported.

**WIRELESS KIT:** Wireless Radio Module, Receiver and Software Kit. The module fits into the digital gauge on the ST300D and the receiver fits into a PC with the supplied software installed. Wireless transmission of readings is then possible. The receiver allows communication from 1 up to 500 gauges, with a maximum transmission distance of 200m (depending on the environment).

When using multiple gauges the PC transmits address numbers to each gauge's radio module where they are stored. The transmission of a measurement value is triggered by pressing the data key on the gauge radio module or gauge itself. Special data coding between the PC and gauge radio module guarantees absolute data security.

Successful data transmission is automatically confirmed by a green flashing light and short audible tone on the gauge radio module. If transmission is unsuccessful a red flashing light and two longer audible tones inform the error.

**WIRELESS HIGHER FUNCTIONALITY SOFTWARE:** Export software that allows readings from multiple gauges to be sorted automatically into columns within an Excel spreadsheet (enquire for further details).

