

## SG300 SUBSTANCE GAUGE

Setting standards  
for leather thickness  
worldwide





## The SG300 Substance Gauge is a precision instrument that measures the thickness of leather.

It is ergonomically designed to give perfect balance and is able to measure a greater depth of softer material than conventional units due to its unique triangular shaped frame.

**PRINCIPLE:** Lever mechanism - smooth needle roller action giving closer control of the test pressure, increased precision and a positive feel.

Dial indicator - shank mounted (with axial adjustment). In line of sight of operator, providing optimum reading position (dial can be read without tilting the instrument and without danger of error due to parallax).

Sliding Anvil - close supported providing better protection against damage.

Handling - designed to be held in either hand, leaving the other free to insert the material. Can also be bench mounted (with optional clamp), or can stand upright when not in use.

Robust - increased consistency of performance, long term use.



**STANDARD CONFORMITY:** Anvil arrangement and spring force design based on the criteria of ISO 2589 (measuring pressure is by means of a calibrated mechanism, giving a close approximation to the dead weight test).

**CALIBRATION:** The SG300 is supplied calibrated based on the values of ISO 2589:2016 (spring force) and gauge distance check range. MSA also offers a re-calibration service.

### MODELS:

**SG300A - Analogue Substance Gauge**  
(dial graduated in 0.1mm divisions)

**SG300D - Digital Substance Gauge**  
(display set to 0.01mm divisions)

### SPECIFICATIONS:

**Spring Force (Equivalent) - 500 gf/cm<sup>2</sup> (393g ± 10g)**

**Calibrated Measuring Range - 0.0 to 20.0mm ± 0.05**

**Anvil - to ISO 2589**

**Presser Foot - Flat, Circular, Ø10.0mm**  
(moves normal to face of anvil)

**Throat Profile - 300mm D, 95mm H (MAX)**

**Net Weight - 1.3Kg**

**Gross (Packed Weight) - 1.9Kg**

**Dimensions - 48 x 18 x 7.5cm**

**Packed Dimensions - 52 x 26 x 11cm**  
(wireless kit extra)

## Digital Substance Gauge

The **SG300D Digital Substance Gauge** is an easy to use unit which enables more accurate measurements and offers additional connectivity.

The digital gauge on the SG300D 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 SG300D 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).

