

SETTING STANDARDS FOR LEATHER THICKNESS WORLDWIDE

# SG300 SUBSTANCE GAUGE





UK REGISTERED DESIGN NO. 2 046 049  
US DESIGN PATENT NO. 379 938



MATERIAL CAN BE ROLLED UP IN THE SPACE  
STANDARD THROAT DEPTH IS 300MM

## DIGITAL SUBSTANCE MEASUREMENT

The SG300D Digital Substance Gauge is an easy to use unit offering two major features not found on the analogue version:

- (1) digitally displayed figures to within 0.01mm
- (2) statistical analysis of measurements taken

The SG300D features a USB interface connection to a computer for data manipulation and storage. To facilitate this, MSA can supply an ingenious software product that allows the user to connect the SG300D directly to a PC or laptop, and send the instruments reading to many application programs such as spreadsheets, databases, word, notepad etc. Imported data can then be further manipulated and analysed, if required, on the users own software of choice (e.g. graphs or charts can be updated in real time, calculations can be performed using MS Excel). The MSA DataSoft STG300 is easily configured for use with any Windows application. Because the link between SG300D and your computer is provided in real time, flawless data entry is achieved. The software is user friendly, has a simple Graphical User Interface (GUI) for easy configuration and operates as a background application. It automatically receives data from the instrument and forwards it to the application program of choice.

Alternatively, we can offer **wireless capabilities** for the SG300D, comprising of a compact radio module that fits into the digital gauge and a receiver that fits into your PC. This allows for wireless transmission of measurement values from each gauge directly to your PC.

Communicating with up to 120 gauges, and with a maximum transmission distance of up to 200m, the wireless data transfer module connects via a port on your PC. The PC transmits address numbers to each gauge's radio module where they are stored. The transmission of a measurement value is triggered simply by pressing the data key on the gauge module or gauge itself. An audible tone and visible light confirms a successful data transmission. Special data coding between the PC and the gauge radio module guarantees absolute data security.

The **SG300 Substance Gauge** 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.

The frame presents the dial indicator in the line of sight of the operator, consequently providing the optimum reading position (*dial can be read without tilting the instrument and without danger of error due to parallax*). The unit is also designed to be held in either hand, leaving the other free to insert material to be checked. Additionally, the base of the frame has been designed to allow the gauge to be bench mounted (*with optional clamp*), or to stand upright when not in use.

The SG300 is available as a conventional analogue unit (*graduate in 0.1mm divisions*), or as an electronic digital unit (*displaying figures to 0.01mm/0.0005"*). The digital version features a USB interface, thereby enabling links to be made to a computer for data manipulation and storage. Using electronic test equipment, both versions can be calibrated precisely and re-set to original factory parameters conforming to ISO 2589:2002.

Re-engineering and extensive design modifications mean that the new generation SG300 offers a number of advantages over previous models. A lighter frame means that the unit now weighs around 28% less (*at 1.3Kg compared with 1.8Kg previously*). The rigidity of the gauge has been improved by 40%.

A specified anvil arrangement and spring force means the new design now conforms more closely to the criteria set out in international standard ISO 2589:2002 (Measurement of Thickness). To satisfy many quality issues and standards, the SG300 can now be calibrated through a screw adjustable, constant force spring mechanism, and units will be issued with calibration certificates.

The lever mechanism of the unit features a smooth needle roller action. This will give more consistent results due to closer control of the test pressure and increased precision. Additionally, this roller action results in a more positive feel by the operator.

The dial indicator is now shank mounted (*with axial adjustment*) as opposed to the previous fixed back mounting. This will mean adjustments to the gauge can be carried out much easier and faster.

The sliding anvil is now close supported instead of floating, providing much better protection against damage. Units are more robust, resulting in increased consistency of performance over long term use.

