Ultrasonic thickness gauge SAUTER TN-US







Portable measuring device for ultrasonic material thickness testing

Features

• External sensor

- Data interface USB, standard (only for models with readout [d] = 0,01 mm)
- Delivered in a hard carrying case
- Scan mode (10 measurements per sec.) or single point measuring mode possible
- Internal memory for up to 20 files (with up to 100 values per file)
- Selectable measuring units: mm, inch

Technical data

- \bullet Precision: 0,5 % of [Max] \pm 0,04 mm
- Dimensions WxDxH 74x32x150 mm
- Battery operation, batteries standard 2 x 1.5 V AA, AUTO-OFF function to preserve the batteries
- Net weight approx. 245 g

Accessories

- **Software**, interface cable included, SAUTER ATU-04
- External sensor, 2,5 MHz, Ø 14 mm, for thick samples, in particular cast iron with rough upper surfaces: Measuring range 3 – 300 mm (steel), SAUTER ATU-US01

- External sensor, 7 MHz, Ø 6 mm, for thin test materials: Measuring range 0,75 80 mm (steel), SAUTER ATU-US02
- External sensor, 5 MHz, Ø 12 mm, for hot test materials: Measuring range (steel)
 3 - 200 mm at temperatures of up to 300 °C, SAUTER ATB-US02
- External sensor, 5 MHz, Ø 10 mm, SAUTER ATU-US09
- External sensor, 5 MHz, Ø 10 mm, transducer at an angle of 90°, SAUTER ATU-US10
- Ultrasound contact gel, standard, can be reordered, approx. 60 ml, SAUTER ATB-US03
- 5 steel calibration blocks without wooden box, SAUTER ATU-06
- 5 steel calibration blocks with wooden box, SAUTER ATU-09

STANDARD		OPTION						
+		⊷	→0←			2 _{YEARS}		ISO
CAL BLOCK	MEMORY	USB	ZERO	BATT	1 DAY	WARRANTY	SOFTWARE	+4 DAYS

Model	Measuring range	Readout	Sensor	Sound velocity	Option ISO Calibration Certificate
	[Max]	[d]			ISO
SAUTER	mm	mm		m/sec	KERN
TN 80-0.1US.	0,75 - 80	0,1	7 MHz Ø 6 mm	1000-9999	961-113
TN 230-0.1US.	1,2 - 230	0,1	5 MHz Ø 10 mm	1000-9999	961-113
TN 300-0.1US.	3 - 300	0,1	2,5 MHz Ø 14 mm	1000-9999	961-113
TN 80-0.01US.	0,75-80	0,01	7 MHz Ø 6 mm	1000-9999	961-113
TN 230-0.01US.	1,2-200 230	0,01 0,1	5 MHz Ø 10 mm	1000-9999	961-113
TN 300-0.01US.	3 - 200 300	0,01 0,1	2,5 MHz Ø 14 mm	1000-9999	961-113

SAUTER Pictograms:



Adjusting program (CAL): For quick setting of the balance's accuracy. External adjusting weight required.



Calibration block:

standard for adjusting or correcting the measuring device.



Peak hold function: capturing a peak value within a measuring process.



of measurements.

Scan mode:



Push and Pull: the measuring device can capture tension and compression forces.

continuous capture and display



Length measurement:

captures the geometric dimensions of a test object or the movement during a test process.



Focus function:

increases the measuring accuracy of a device within a defined measuring range.



Internal memory: to save measurements in the device memory.

of printer and PC.



Data interface RS-232 bidirectional, for connection



Data interface USB: To connect the balance to a printer, PC or other peripheral devices.



Data interface Infrared: To transfer data from the balance to a

printer, PC or other peripheral devices.



(optocoupler, digital I/O): SWITCH to connect relays, signal lamps, valves, etc.

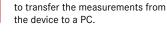


Analogue interface: to connect a suitable peripheral device for analogue processing of the measurements.



using the saved values, the device STATISTIC calculates statistical data, such as average value, standard deviation etc.

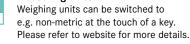






GLP/ISO record keeping: of measurements with date, time and

Measuring units:





Measuring with tolerance range: Upper and lower limiting can be programmed individually, e.g. for sorting and dosing.





Battery operation:

Ready for battery operation. The battery type is specified for each device.



Rechargeable battery pack:

rechargeable set.



Mains adapter:

230V/50Hz in standard version for EU. On request GB, AUS or USA version available.



230 V

Power supply:

Integrated, 230V/50Hz in EU. More standards e.g. GB, AUS or USA on request.



The mechanical movement is carried out by a motorised drive.



the total length of travel can be covered by a single lever movement.



ISO Calibration:

The time required for ISO calibration is shown in days in the pictogram.



Package shipment:

The time required for internal shipping preparations is shown in days in the pictogram.

Pallet shipment:

The time required for internal shipping preparations is shown in days in the pictogram.



The warranty period is shown in the pictogram.

Your SAUTER specialist dealer:







a printer can be connected to the device to print out the measurements.

Printer:

GLP PROTOCOL

S UNIT





ZERO:

Resets the display to "0".







VARRANTY



serial number. Only with SAUTER printers.

MOTOR

Motorised drive:

Fast-Move: