

Date: 29.04.2025

# **PRODUCT BROCHURE**

# **SAUTER TN GOLD 80**



Ultrasonic measuring instrument for checking the authenticity of gold bars and coins

# **CONTACT**

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#### **PRODUCT SHOWCASE**





#### **DESCRIPTION**

- You can use the TN GOLD 80 to determine whether gold or silver bars and coins are genuine or whether they
  contain a core of a different material
- The instrument measures the thickness of gold bars and gold coins using ultrasound
- Process: Ultrasound waves are directed onto the test object using a sensor. The waves penetrate the test
  object, are then reflected from a surface opposite the object and then picked up again by the sensor. The
  measurement determined by this process will be compared with the material thickness as measured by a
  traditional calliper gauge. On the basis of the measurement given, false cores (Figure: grey) for example, those
  made of tungsten, lead, etc. can be easily identified, as the ultrasound reacts differently, compared with pure
  gold
- Selectable measuring units: mm inch
- SAUTER SSG software (included) can be used to calculate the sound velocity for various precious metal alloys. This makes it possible to determine whether coins or ingots contain false cores or whether they consist of one and the same material. Compatible with the following operating systems: Windows® 7/8/10
- Known additions in tested gold items e.g. copper or silver are compensated by the software
- In addition, the software determines the value of the gold item
- It is a test process which measures right through the whole bar or the whole coin without interference and thereby guarantees the highest level of certainty
- Internal memory for up to 20 files (with up to 100) values per file)
- · Base plate for adjustment included
- Scope of delivery: Operating instructions, batteries, external measuring head (Ø 6 mm) and ultrasound contact gel
- Delivered in a robust carrying case



#### **SPECIFICATIONS**

# **Article codes, product groups & Status information**

Model article-code	TN GOLD 80
Model-Serie	TN
Assortment	Sauter
Product Type	Thickness measurement
Product group	Material thickness gauges
Product usage type	Main article
EAN code (Model)	4045761210660
Customs tariff number	90278990
CE Label	yes

# **Technical data - Primary**

Max. Pulse-Echo	80 mm
Min. Pulse-Echo	0.75 mm

# **Technical data - Construction**

Dimension housing (W×D×H)	150×74×32 mm
Material housing	plastic
cable length	0.9 m

# **Technical data - Display**

Display type	LCD
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# **Technical data - Power supply**

Power supply	Battery
Battery type	Alkali(-Manganese)

Quantity Batteries 2×1.5 V AA

### **Technical data - Measuring system**

Readability	0.01 mm
Tolerance (% from Max.)	0.5%
Units	inch;mm
Material Speed of sound - min.	1000 m/s
Material Speed of sound - max.	9999 m/s
Material Speed of sound - max.	9999 m/s
Measuring Head diameter	6 mm

#### **Technical data - Functions**

Auto-Off	1 - 60 min
Optical ready signal	yes
Interfaces	USB-Device

# **Technical data - Environmental conditions**

Maximum operating temperature	40 °C
Minimum operating temperature	-10 °C
Maximum storage temperature	40 °C
Minimum storage temperature	-10 °C

# **Technical data - Packing & Shipping**

(W×D×H)	Dimensions packaging (W×D×H)	375×220×95 mm
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Gross weight	1.4 kg
Net weight	0.25 kg
Shipping method	Parcel service
UN number	Drycell (UN number Alkaline: none, NiMH: 3496 - Packing instruction #1)
Packaging component - by weight - cardboard	262 g
Packaging component - by weight - styrofoam	542.5 g
Delivery time	1 d

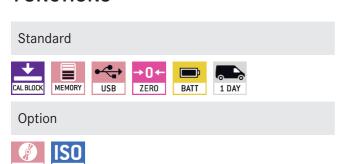
# **Technical data - Counting data**

Value memory - number of groups	20
Value memory - number of cells (per group)	100

# **Optional Services**

Factory calibration 961-113	3	
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#### **FUNCTIONS**



# **ACCESSORIES**

Model	Description
ATB-US02	External measuring head ATB-US02
ATB-US06	External measuring head ATB-US06



Model	Description
ATU-US01	Ultrasonic probe ATU-US01
ATU-US02	External measuring head ATU-US02
ATU-US09	Cable SAUTER ATU-US09
ATU-US10	External measuring head ATU-US10

#### **SERVICES**

Model	Description
961-113	Factory calibration KERN 961-113
970-103	Warranty extension KERN (+2 years) 970-103

# **SOFTWARES**

Model	Description	
ATU-04	Data Transfer Software SAUTER ATU-04	

#### **RELATED ARTICLES DATA**

Model name	Max. Pulse-Echo	Min. Pulse-Echo	Max. Echo-Echo	Min. Echo-Echo
TN 30-0.01EE	600 mm	0.65 mm	30 mm	3 mm
TN 80-0.1US	80 mm	0.75 mm	-	-
TN 230-0.1US	230 mm	1.2 mm	-	-
TN 300-0.1US	300 mm	3 mm	-	-
TN 80-0.01US	80 mm	0.75 mm	-	-
TN 230-0.01US	230 mm	1.2 mm	-	-
TN 300-0.01US	300 mm	3 mm	-	-
TN 60-0.01EE	600 mm	0.7 mm	60 mm	3 mm
TN GOLD 80	80 mm	0.75 mm	-	-