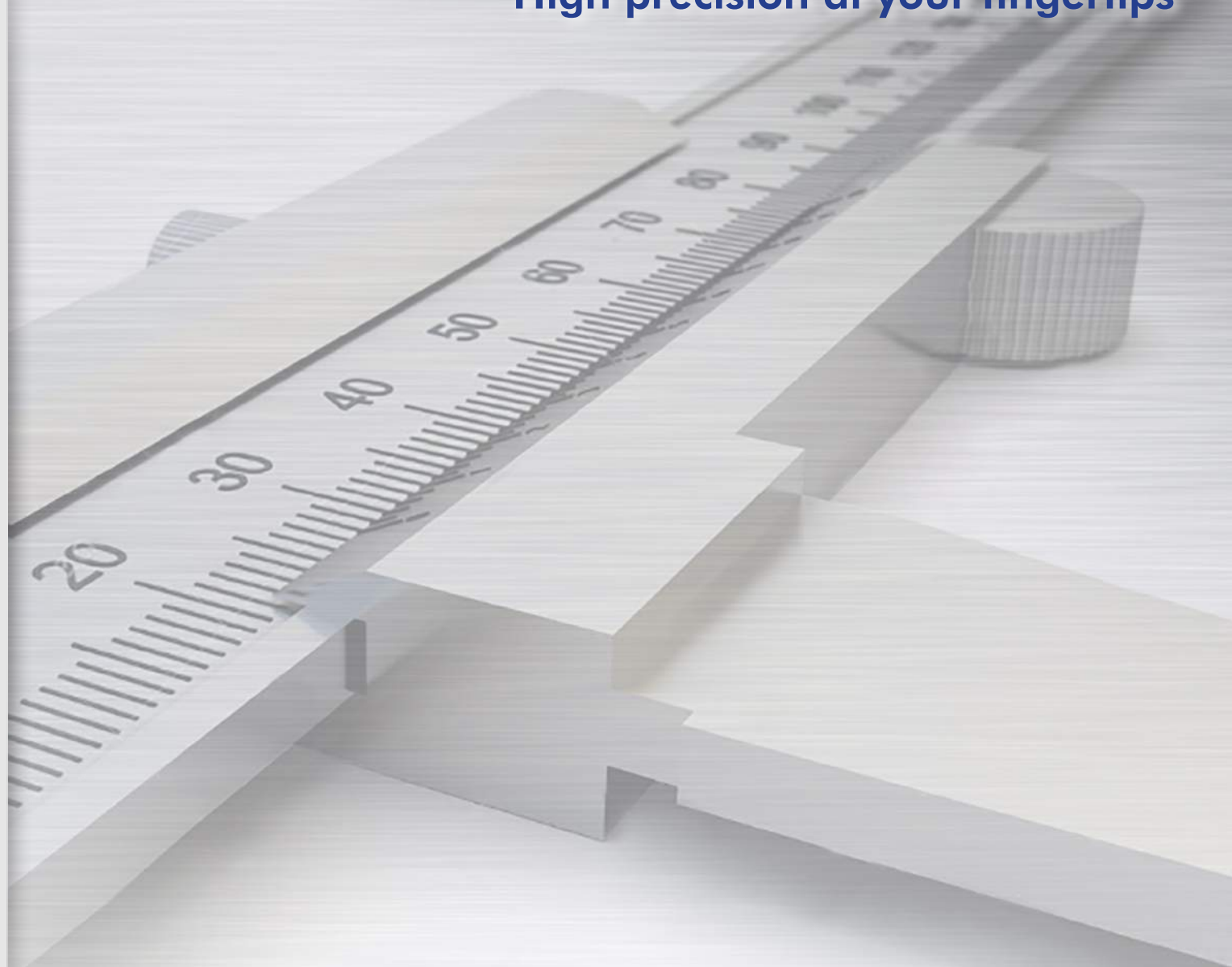




# Metrology Tools

High precision at your fingertips

- Thermometer
- Thermal marking pen
- Welding gauge
- Wire speed meter
- Clamp meter
- Dynanometer
- Torch gas flow meter



Work piece control  
Generator control

## Specifications

Temperature range	- 50 to +380°C
Accuracy	±1.5 °C or ±1.5 % of the reading
Display resolution	0.1°C
Repeatability	1% of reading
Reaction time	500 ms
Spectrale reaction time	8 to 14 um
Emissivity	0.95
Relationship between the distance and the detection point	12:1
Operating temperature	0°C to 40°C
Operating humidity	10 % at 90 % HR without condensation, at 30°C
Storage temperature	-20°C to 60°C (without battery)
Power supply	9V Alkaline battery x1
Dimensions	175 x 100 x 50 mm

## INFRARED THERMOMETER

► Ref : 052994

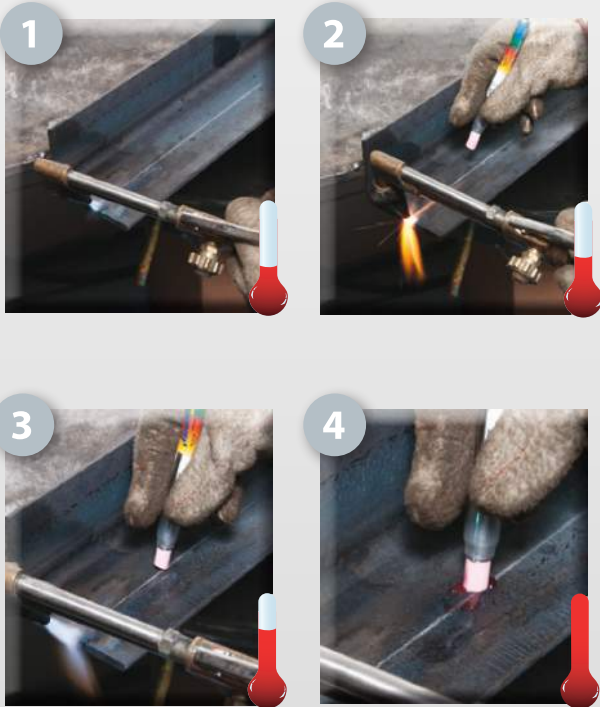


- ➕ Laser pointed aiming system.
- ➕ Backlit display for use in the dark.
- ➕ Ergonomic and comfortable grip.
- ➕ Robust.
- ➕ Wide temperature range between -50 °C and +380 °C.
- ➕ Long battery life : around 5000 measurements.

## DESCRIPTION

This infrared thermometer is designed to measure temperature without contact. This is a high precision compact thermometer and easy to use. Gives a quick reading (*reaction time < 1s*). Ideal to measure the temperature of metal : preheating, post-heating, heat treatment, etc.

Easy to use



## THERMAL MARKING PENCIL

Ref : 052765

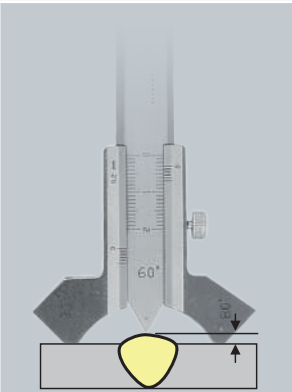


- + Certified temperatures.
- + Low cost, quick readings.
- + Accurate to +/- 3 % in Celsius ; *no adjustment is required.*
- + Long life stick : *33 % greater than some competitors*

### DESCRIPTION

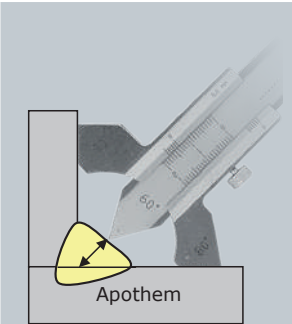
The thermal marking pencil is a cheap and quick way to precisely measure the temperature of metal and equipment. With low corrosion formulas, they can be safely used on stainless steel, alloys and other superalloys, and do not lead to corrosion or degradation, or stitching.

## Weld measuring



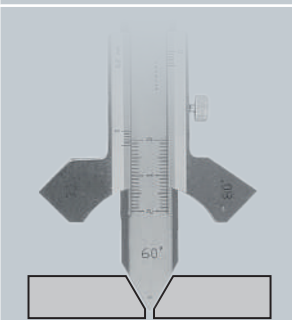
- Determination of the excess thickness of a weld.

*Dimensions read on the vernier 1:10<sup>th</sup>.*



- Determination of the apothem or dimension of the centre for a weld angle.

*Dimensions read on the vernier 1:10<sup>th</sup>.*



- Evaluation of the angle of a chamfer by comparing the 4 angles on the gauge: 60/70/80/90 °

## WELDING GAUGE



- + Steel / Stainless steel, scale and Vernier scale matt chrome.
- + Screw to lock the scale.
- + Laser graduation of Vernier and scale
- + 0.1 mm resolution, 20 mm capacity.

### DESCRIPTION

The Vernier scale gauge enables to quickly determine the exact dimensions (*in mm*) of a weld angle, the excess thickness of a weld and the chamfering angle.

## Specifications

MECHANICAL	
Measuring range	+0.1 to +19 999 tr/mn
Resolution	0.1 tr/min (0.5 to 999 tr/min) 1 tr/min (1000 to 19 999 tr/min)
OPTIC	
Measuring range	+2.5 to +99 999 tr/mn
Resolution	0.1 tr/min (2.5 to 999 tr/min) 1 tr/min (1000 to 99 999 tr/min)
TECHNICAL DATA	
Power consumption	~ 45 mA
Operating temperature	0 to +50 °C
Battery	4 * 1.5V AA
Battery life	40 h
Dimensions	160 × 72 × 37 mm
Weight	204 g
Wire Ø supported	0.6 to 3.2 mm
Rotor Ø	~ 20 mm

## MIG/MAG WIRE SPEED TACHYMETER

► Ref : 053953



- ⊕ Easy to use with one hand.
- ⊕ Speed and length measurement.
- ⊕ Storage of min. and max. value and of the last measured value.
- ⊕ Digital display.
- ⊕ Battery level control « Low Batt ».
- ⊕ Robust.

### DESCRIPTION

This wire speed tachymeter enables to quickly measure the wire speed (*in m/min*) of a MIG/MAG welding machine, by softly pushing the wheel (*rubber coated for good grip*) against the wire. It also enables to measure with or without contact the rotation speed in RPM (rotation per minute). The contactless measure is performed by a laser reading a reflective tape (*tape included*) fixed on a spinning roller.



## Specifications

		400 A	600 A
Current AC	Range	40 - 400 A	40 - 600 A
	Accuracy	± 2.5% + 5d	
Current DC	Range	40 - 400 A	40 - 600 A
	Accuracy	± 2.0% + 3d	
Voltage AC	Range	4 - 600 V	4 - 600 V
	Accuracy	± 1.0% + 5d	
Voltage DC	Range	400 Mv - 600 V	
	Accuracy	± 0.8% + 1d	
Resistance	Range	400 Ω - 40 MΩ	
	Accuracy	± 1.0% + 2d	
Frequency		10Hz to 10MHz	
Storage temperature		-40 ~ +60 °C	
Ø max. of the clamp		28 mm	
Screen size		35.6 × 18 mm	
Battery		9 V	
Battery life		150 h	
Dimensions		208 x 76 x 30 mm	
Weight		260 g	

# GENERATOR CONTROL

▶ Ref : 053991 (400A)  
▶ Ref : 053984 (600A)

## 400A & 600A CLAMP METER



- ➕ Slim and ergonomic.
- ➕ Measuring AC / DC current up to 600 A.
- ➕ Measuring resistance up to 40 MΩ with continuity buzzer.
- ➕ Wide opening jaw.
- ➕ Data hold.
- ➕ Low battery display.
- ➕ Carry bag.




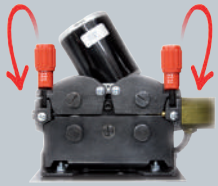
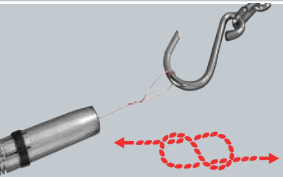

## DESCRIPTION

This professional clamp meter is capable of measuring AC and DC current and offers high quality functions. It can measure voltage up to 600V and test the resistance, the frequency and duty cycle. The compact dimensions of this clamp enable use in difficult to access areas.

## Specifications

Accuracy	± 0.5%
Measure frequency	5 Hz
Operating temperature	5°C to 35°C
Power supply	9V Alkaline battery x1
Battery life	20 h
Dimensions with hook	90 x 30 x 270 mm
Weight	250 g

## Instructions

1		Fit a new contact tube.
2		Release the wire pressure level to its minimum.
3		Tie the wire to the hook.
4		Measure the effort (kg).

## ELECTRONIC DYNAMOMETER

Ref : 053960



- +** Measure from 20 g to 15 kg (accuracy of 20g).
- +** Integrated tape measure, around 1 m.
- +** Stainless steel hook.
- +** Hold function, holds the display for 5 seconds.
- +** Choice of units of measurement (kg, lb, N).
- +** Tare function.

## DESCRIPTION

This electronic scale enables to evaluate the frictional force in the liner of a MIG/MAG torch. The effort required to move the wire forward in the torch must not exceed 3.5 kg.



- Insert the torch tip in the torch gas flow meter.






- Measure the gas flow (l/min) at the end of the torch by looking at the black ball.

## TORCH GAS FLOW METER

▶ Ref : 053939



- + Easy to use.
- + Graduated from 0 to 25 l/min.
- + Cleanable by the top.

Welding flow information	
	5 to 8 l/min
	10x the wire Ø (eg : Ø 1 mm = 10 l/min)
	UA specific gas flow meter is included with Plasma Cutters. No graduation but minimal and maximal value to respect.



### DESCRIPTION

Ball float rigid flow meter enabling measurement of gas flow at the end of the torch and to detect leaks.