



TESA CLINOBEVEL 1 USB INCLINOMETER

The TESA CLINOBEVEL 1 USB is a portable and compact instrument for measuring horizontal and vertical inclinations up to $\pm 45^\circ$.

Light, manageable and battery operated, it can be used directly on any piece that is being measured. Each of the four measuring faces can be used as an inclination reference.

With our free software TESA CLINOSOFT, data can be easily collected, analysed and stored, which helps avoid potential transcription errors and ensures perfect traceability.

To give more stability to the instrument and to reduce any influence on the measurement, the TESA CLINOBEVEL 1 USB can also be customised on demand with magnetic inserts or threaded holes that allow to fix it on the measuring surface.



UNIQUE FEATURES:

- MEASURING RANGE $\pm 45^\circ$
- CLEAR READING LCD DISPLAY
- 4 MEASURING FACES
- VISUALISATION AND STORAGE OF MEASUREMENTS WITH THE INCLUDED TESA CLINOSOFT SOFTWARE



FEATURES

Units	DEG, mm/m, „/10“, „/12“, mRad, DEG/min, min/sec, mm/REL, „/REL, A‰, GON
Absolute zero setting	Absolute zero represents a base for absolute inclination measurements. It is automatically calculated and set from the two values entered when conducting a reversal measurement (two measurements made at the same spot but in opposite directions)
Relative zero setting	Relative zero allows comparative inclination measurements
HOLD function	HOLD function allows to position the instrument, freeze the results and read them in a second step

The LCD display helps with easy reading and low power consumption

3 buttons for easy navigation



Clear visualization on the screen of each functionality

Connection RS-485 to USB to transfer the data to a computer

ACCESSORIES INCLUDED

- Electronic inclinometer TESA CLINOBEVEL 1 USB
- Battery LR6, type AA 1,5 V
- USB-RS-485 cable to computer 1,8 m
- TESA CLINOSOFT software (provided with the USB key)
- Measuring report
- User manual
- Robust transport case

EXAMPLES OF APPLICATIONS

Hydraulic Engineering - Measuring the inclination of a pipe

Measuring the inclination of a pipe is important to show any relevant difference to the ideal inclination course of the pipe. The TESA CLINOBEVEL 1 USB can be a compact and portable solution to calculate these relevant differences.

Machining Industry – Measuring the inclination of a rotation working plate

The TESA CLINOBEVEL 1 USB can be used to control the inclination of a rotation working plate on a 5-axis milling machine.

The 45° measuring range allows these measurements on big machining plates with a wide inclination angle to be made.



Aerospace Industry – Measuring the inclination of helicopter rotor blades or plane wings

With the TESA CLINOBEVEL 1 USB, checking the inclination of helicopter rotor blades or plane wings to verify that they respect the correct criteria can be simple and quick. The instrument can be positioned and data can be held for later reading or captured with a remote control.



TECHNICAL SPECIFICATIONS

Part number	05330203
Measuring range	± 45°
Calibration range	± 50°
Resolution (Depend on units set)	0,025 mm/m (5")
Limit of error	< 2' + 1 digit
Value available after	< 2 sec
Data connection	RS 485, asynchronous, 7 Bit, 2 Stop Bit, no parity, 9600 bps
Battery	1 x 1.5 V (Alkaline) Size AA, type LR6
Battery life	130 Hours
Dimension / Weight	100 x 75 x 30 mm / 485 g with battery
Housing	Aluminium hard anodised
Operating temperature range	0 to 40 °C
Storage temperature range	-20 to 70 °C

TESA CLINOSOFT SOFTWARE

The TESA CLINOBEVEL 1 USB can be connected to any PC via a USB-RS-485 cable.

The TESA CLINOSOFT software allows the acquisition of measuring data from the TESA CLINOBEVEL 1 USB, to display results in real time and to export them to an Excel file.

The software is included in a USB stick delivered with the instrument.

The TESA CLINOSOFT permits the comparison of data coming from two instruments and visualizes them with diagrams.

- Direct data transfer in a .csv file
- Automatic generation of inspection reports in Excel format
- Connect 2 TESA CLINOBEVEL 1 USB (maximum) simultaneously for comparative measurement



ACCESSORIES

04768002	4 batteries LR6 AA 1,5 V
05360006	External switch control with cable, L=2 m
05360014	Infrared remote control
S53300165	USB cable to computer, L=1,8 m



The infrared remote control allows measurements to be taken without touching the TESA CLINOBEVEL 1 USB, which helps avoid any error due to contact with the instrument or the measuring surface.

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About TESA

For more than 75 years, TESA has distinguished itself in the market through its excellent products, its unique expertise in micromechanics and precision machining as well as its proven experience in dimensional metrology. The TESA brand is the global market leader in the field of height gauges and a pioneer thanks to its wide range of instruments, including callipers, micrometers, dial gauges, lever-type dial test indicators and inductive probes. TESA is a true benchmark for the inspection of incoming goods, as well as for production workshops and quality assurance laboratories.

About Hexagon Manufacturing Intelligence

Hexagon Manufacturing Intelligence helps industrial manufacturers develop the disruptive technologies of today and the life-changing products of tomorrow. As a leading metrology and manufacturing solution specialist, our expertise in sensing, thinking and acting – the collection, analysis and active use of measurement data – gives our customers the confidence to increase production speed and accelerate productivity while enhancing product quality.