TRIMOS

V7

Advanced Height Gauge for the Workshop

Swiss Measuring Instruments

1.

PRESENTATION

The V7 height gauges combine technological innovation and tradition. With their touch-display and lateral insert holders, which have proven their worth for decades, the V7 rank as universal instruments for the workshop.

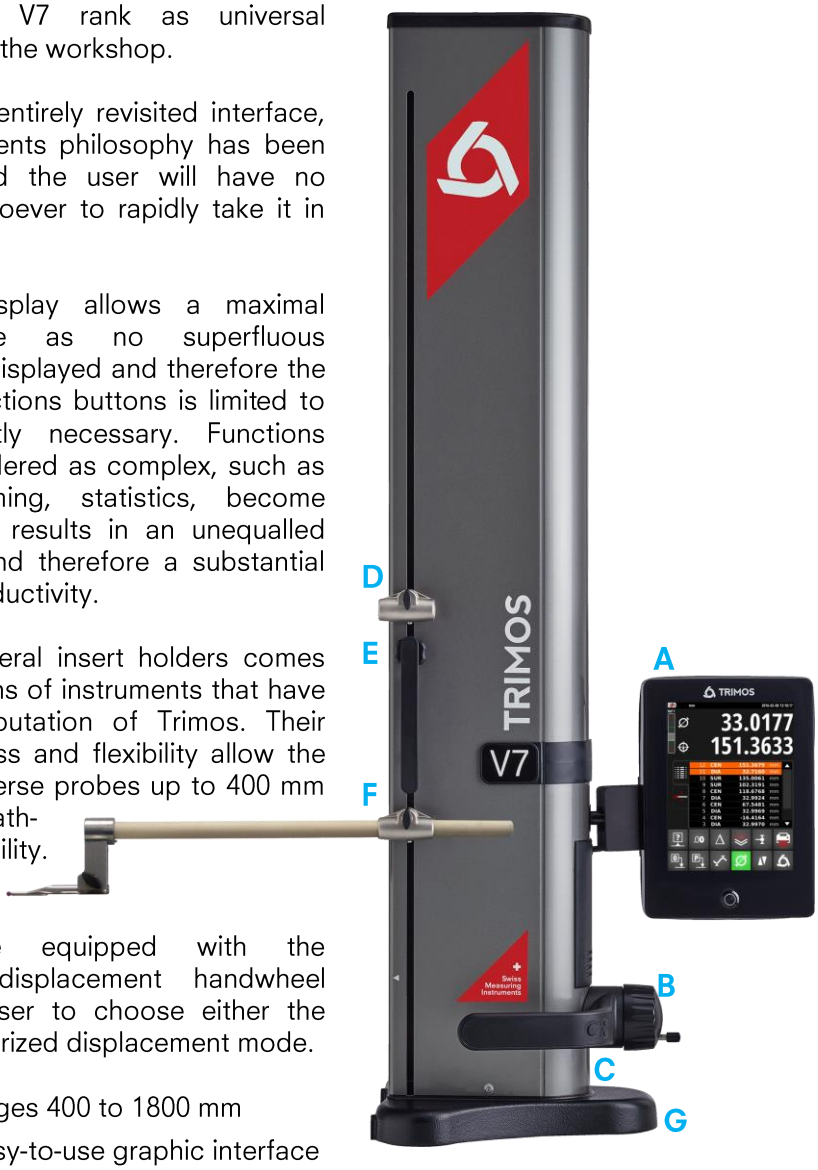
In spite of an entirely revisited interface, Trimos instruments philosophy has been maintained and the user will have no difficulty whatsoever to rapidly take it in hand.

The touch display allows a maximal simplified use as no superfluous information is displayed and therefore the number of functions buttons is limited to what is strictly necessary. Functions normally considered as complex, such as 2D, programming, statistics, become child's play. It results in an unequalled ease of use and therefore a substantial increase in productivity.

The pair of lateral insert holders comes from generations of instruments that have forged the reputation of Trimos. Their great robustness and flexibility allow the use of very diverse probes up to 400 mm long with a breath-taking repeatability.

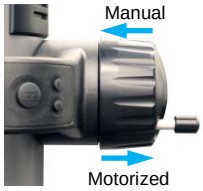
The V7 are equipped with the revolutionary displacement handwheel allowing the user to choose either the manual or motorized displacement mode.

- Measuring ranges 400 to 1800 mm
- Simple and easy-to-use graphic interface
- Electronically adjustable measuring force
- Manual or motorized displacement
- 2D, programming, statistics
- Large range of accessories
- All possible adjustments without tools
- Interfaces RS23, USB
- Wireless data transfer (optional)



A : Adjustable touch-display with intuitive functions

B : Handwheel for measuring carriage movement. Manual or motorized mode



C : Horizontal displacement handle with functions buttons and air cushion

D : Additional probe holder

E : Probe weight balance system

F : Interchangeable insert and probe holder

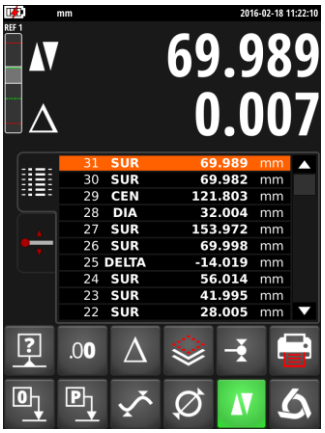
G : Cast iron base for optimal stability

2.

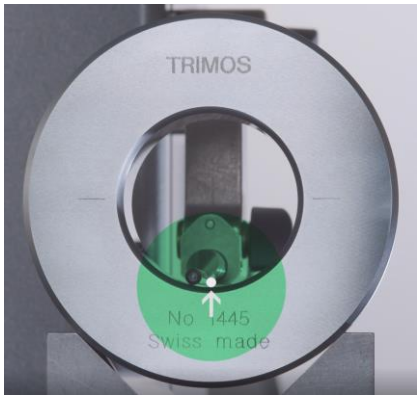
DISPLAY / SOFTWARE

The tablet-type display and graphic interface corresponds to the most modern industrial standards. The great flexibility offered by the touch-display allows a quick and easy grasp.

- VERY SIMPLE GRAPHIC INTERFACE
- GRAPHIC HELP FOR MEASUREMENTS
- 2D MODE MEASUREMENT
- MEASURING SEQUENCES
- STATISTICAL ANALYSIS OF RESULTS
- INTEGRATED ONLINE HELP
- TEMPERATURE COMPENSATION



SMART REVERSE: Diameter measurement faster, more accurate and simpler



SmartReverse technology is the result of an intense collaboration between Trimos users and our R & D team in order to optimize diameter measurements.
SmartReverse makes the measurement of diameters very efficient by clearly indicating the reversal points with audible and visual signals. The user is guided precisely during the measurement of diameters, which generates a significant gain in speed and reliability of the measurement.

3.

TECHNICAL DATA

V7		400	700	1100	1800
Measuring range	mm (in)	407 (16)	711 (28)	1110 (44)	1810 (71)
Measuring range with extension	mm (in)	719 (28)	1023 (40)	1422 (56)	2122 (83)
Max. permissible errors, B_{MPE}	µm	2 + L(mm)/400			2.5 + L(mm)/300
Repeatability, R_{MPE} (2s)	µm	1 (Ø: 2)			
Frontal perpendicularity, S_{MPE}	µm	5	8	11	25
Maximal Resolution	mm (in)	0.0001 (0.00001)			
Measuring force	N	0.75 ÷ 1.5			
Autonomy	h	12			
Interfaces		USB / RS232			
Air cushion		Yes			
Weight	kg	22	25	34	41

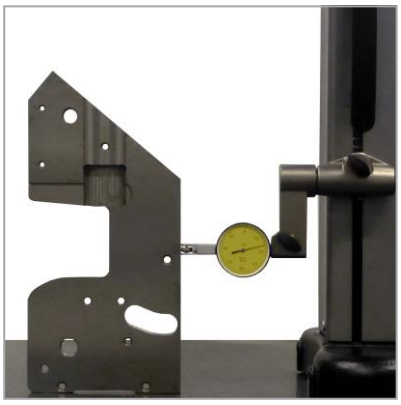
The above values have been determined according to ISO 13225 with the standard measuring insert (TA-MI-101).

4.

APPLICATIONS

Height, thickness, and sequential measurement

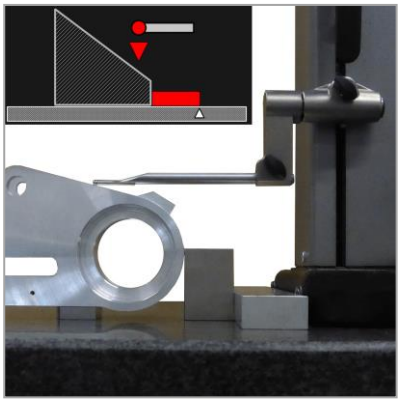
SMART REVERSE: Diameter measurement faster, more accurate and simpler



Perpendicularity measurement with lever indicator or electronic probe

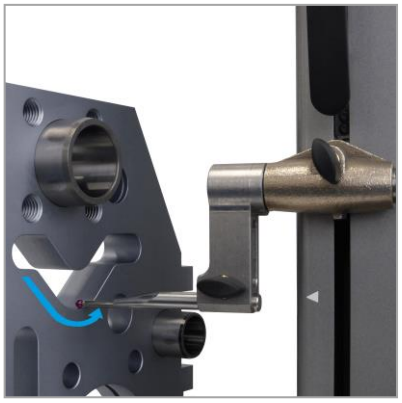
Probes up to 400 mm with excellent repeatability

Large range of accessories for each measuring application

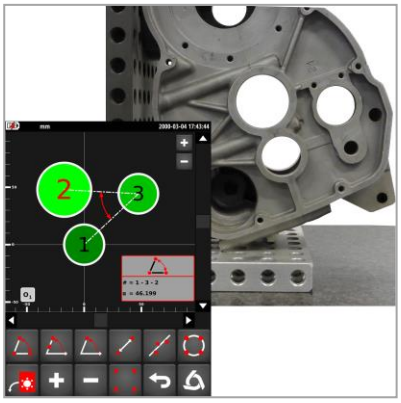


Graphically assisted angles and cones measurement

Data transfer via USB, RS232, wireless or memory stick



Perfectly steady measuring force guaranteed by the motorization



2D measurement with easy graphical interface

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750 02 0054 03 – Version 1.2/2017-11 – Changes without prior notice

TRIMOS

V9

Swiss
Measuring
Instruments

V9

PRODUCT PRESENTATION

The V9 has been developed for the most demanding users. Laboratories and workshops for whom measuring reliability is determining will fully appreciate its exceptional precision level and its "Swiss Made" finish.

Metrological performances have been the core of the development of this height gauge. No compromise on precision and repeatability have been tolerated. This is why some construction details, particularly probe holders differ from other models.

The display, based on an entirely tactile interface, offers an ease of use never reached yet on a vertical measuring instrument. The menus and functions displayed obey to a very strict philosophy and design. This allows a great efficiency, even in complex tasks such as programming, 2D mode, angles measurements or statistical analysis of results.

The V9 are equipped with a revolutionary displacement handwheel allowing the user to choose either the manual or motorized displacement mode.

MEASURING RANGE 400 TO 1100 MM
EXCEPTIONAL PRECISION LEVEL
ELECTRONICALLY ADJUSTABLE MEASURING FORCE
MANUAL OR MOTORIZED DISPLACEMENT
2D, PROGRAMMING, STATISTICS
LARGE RANGE OF ACCESSORIES
ALL POSSIBLE ADJUSTMENTS WITHOUT TOOLS
INTERFACES RS232 AND USB

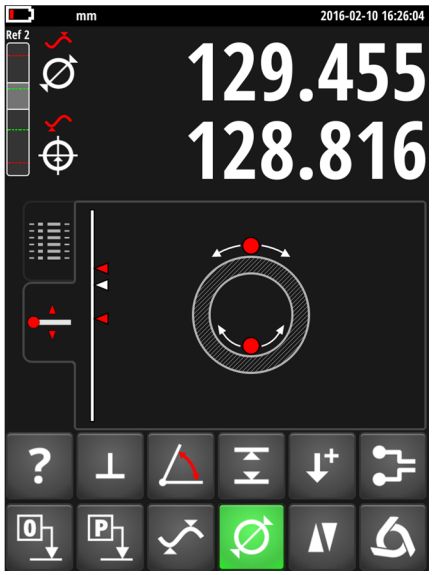
DESCRIPTION

- Heights
- Diameters
- Centerlines
- Min / Max / Delta
- 9 References
- Perpendicularity
- Angles
- Calculation
- Tolerances
- 2D Mode
- Programs
- Statistics
- Temp. compensation
- Online Help
- USB Ports
- RS232 Port
- Automatic displacement

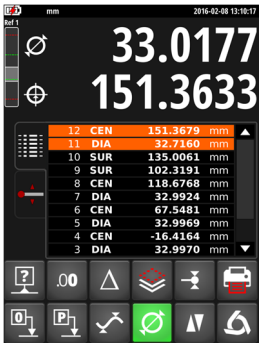
V9

DISPLAY / SOFTWARE

The choice and position of symbols, as well as the colours used correspond to very high ergonomic standards. The result is a consistent interface offering exceptional readability and ease of use.

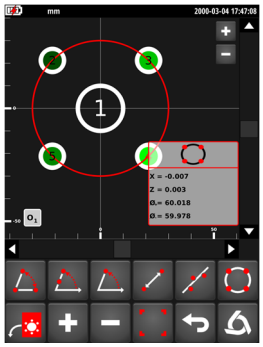


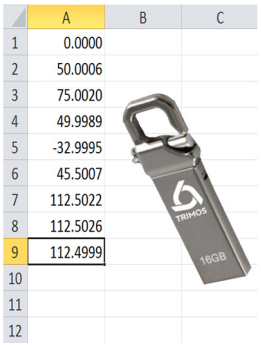
- VERY SIMPLE GRAPHIC INTERFACE
- EXCEPTIONAL READABILITY
- 2D MODE MEASUREMENT
- MEASUREMENT SEQUENCES
- STATISTICAL ANALYSIS OF RESULTS
- INTEGRATED ONLINE HELP
- TEMPERATURE COMPENSATION



Graphic help for each function

Display of perpendicularity


2D ultra-simple and intuitive interface



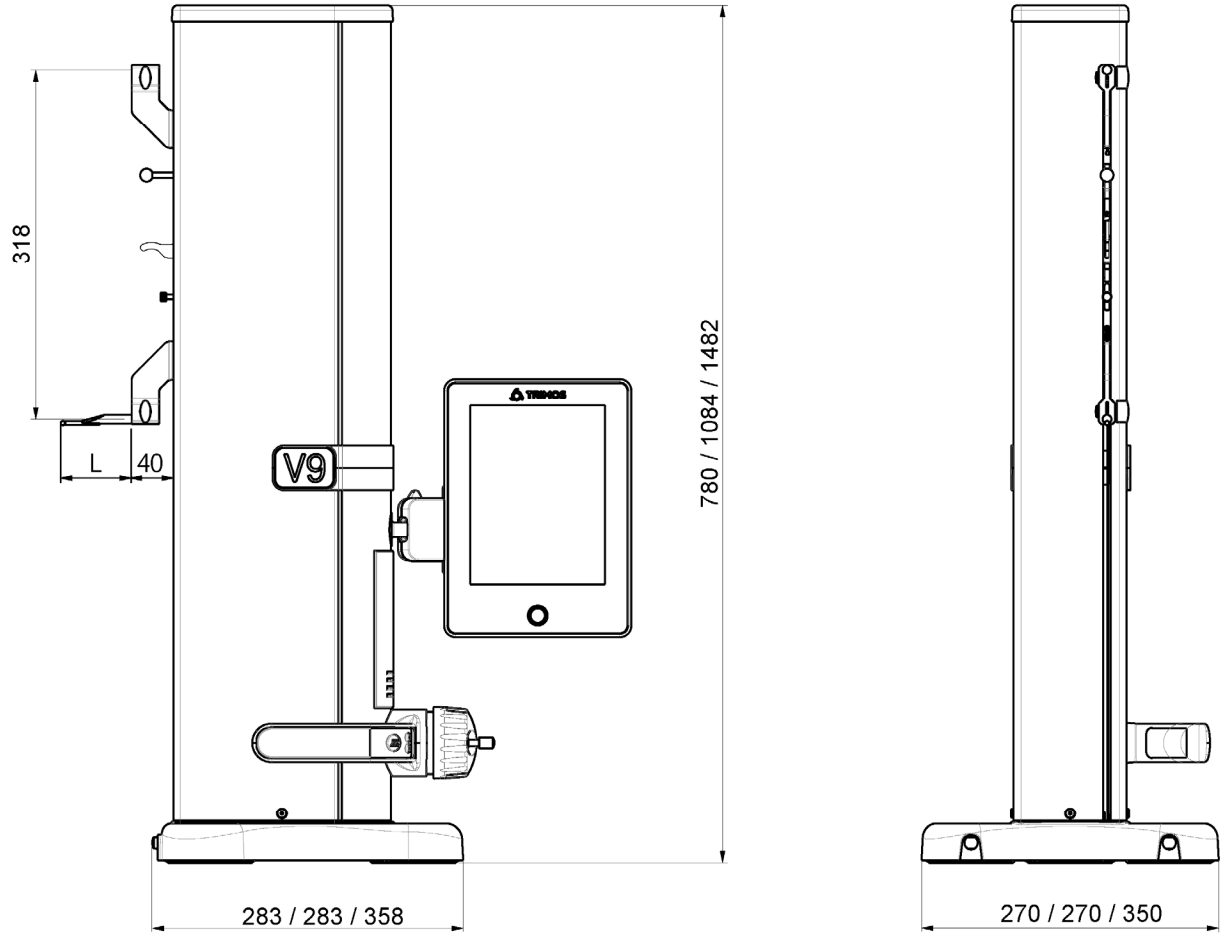
Data transfer via USB, RS232 or on memory stick

TECHNICAL DATA

V9		400	700	1100
Measuring range	mm (in)	406 (16)	710 (28)	1109 (43)
Measuring range with extension	mm (in)	724 (28)	1028 (40)	1427 (56)
Max. permissible errors, B_{MPE}	µm	1.2 + L(mm)/1000		
Repeatability, R_{MPE} (2s)	µm	0.5 (Ø: 1)		
Frontal perpendicularity, S_{MPE}	µm	5	8	11
Maximal Resolution	mm (in)	0.0001 (0.00001)		
Measuring force	N	0.75 ÷ 1.5		
Autonomy	h	12		
Interfaces		USB / RS232		
Air cushion		Yes		
Weight	kg	21	24	33

The above values have been determined according to ISO 13225 with the standard measuring insert (TA-MI-101).

SCHEMA



L: Depends on the measuring insert used

STANDARD INSTRUMENT

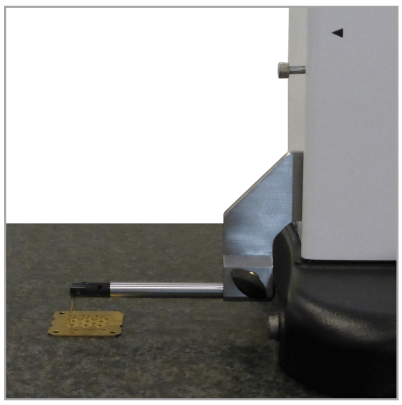
The V9 are supplied as follows	
Instrument according to specifications	Charging unit (TA-EL-132)
Measuring insert with ruby ball Ø 5 mm (TA-MI-119)	Calibration certificate
Setting gauge (TA-MG-104)	User's manual (750 50 0042 03)
Protection cover (TA-TO-114/115/116)	

CODE NUMBERS

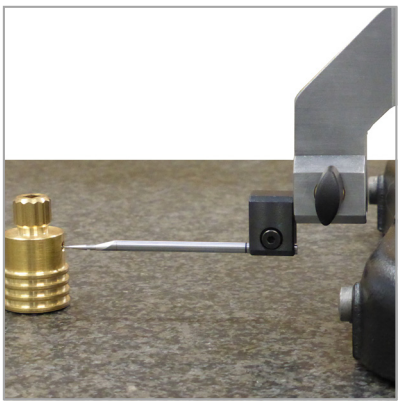
V9		
V9-400	700 110 10 09	Measuring range 400 mm
V9-700	700 110 20 09	Measuring range 700 mm
V9-1100	700 110 30 09	Measuring range 1100 mm

V9

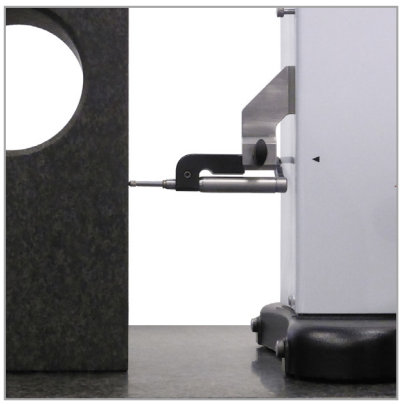
APPLICATIONS



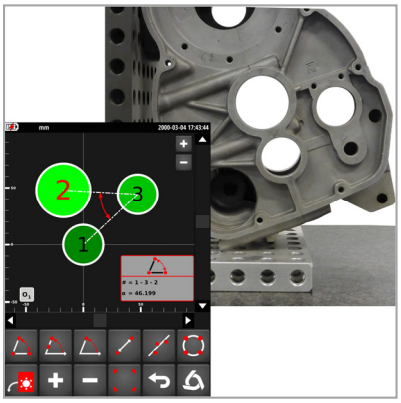
Height measurements on watch movement plate (TA-MI-115, TA-IH-103)



Small diameters measurements with insert Ø 4 mm (V-50.12, V-5)

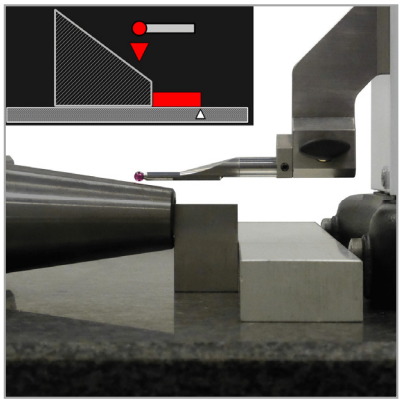


Perpendicularity measurements with electronic probe (TA-IH-126, TA-MS-101)

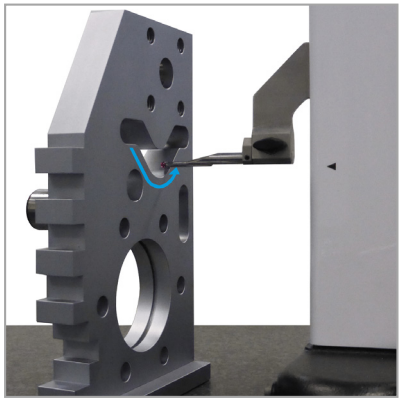


Very simple measurements in 2 coordinates thanks to the graphic interface

Large range of accessories for all types of measurements (TA-SE-102, TA-SE-106, TA-SE-107)



Measurements of angles and cones graphically assisted (TA-MI-101, TA-AD-101)



Minimum position measurement thanks to the contour tracking in motorized mode (TA-MI-101, TA-AD-101)

Instrument can be remote-controlled via a PC

Display adjustable in every direction