

MESTRA + TOUCH



MESTRA+TOUCH

INTRODUCTION

The "Mestra" height measuring instruments are classified among the most accurate ones worldwide. This new instrument line is the result of 40 years of experience, which makes it possible to offer a product having advanced technologies combined with ergonomic design.

The result of the well designed instrument concept incorporating an entire new measuring system is an optimum accuracy level. The extreme ease of use allows unrestricted application in production areas as well as in measuring laboratory environment.

Two specific models are available, "Mestra" and "Mestra-Touch". The difference between these two models is the layout of the display unit as well as the available measuring functions. The "Mestra" has a display unit incorporating all basic functions such as checking of heights, depths, diameters and centerline distances, squareness deviation, angles and tolerance limits indication. In addition the "Mestra-Touch" offers a colour touch screen and functions such as the 2-coordinate system, programming of measuring sequences, statistical analysis of memorized values and display of environmental temperature.

EXTREME ACCURACY LEVEL

GRAPHIC HELP FOR MEASURING

PRINTING OF REPORTS ON USB PRINTER

BACKUP ON EXTERNAL SUPPORT (USB KEY)

MEASURING RANGE FROM 300 MM TO 1000 MM















AVAILABLE IN MANUAL OR MOTORIZED VERSION

WORKING ON ACCUMULATOR






LARGE RANGE OF ACCESSORIES

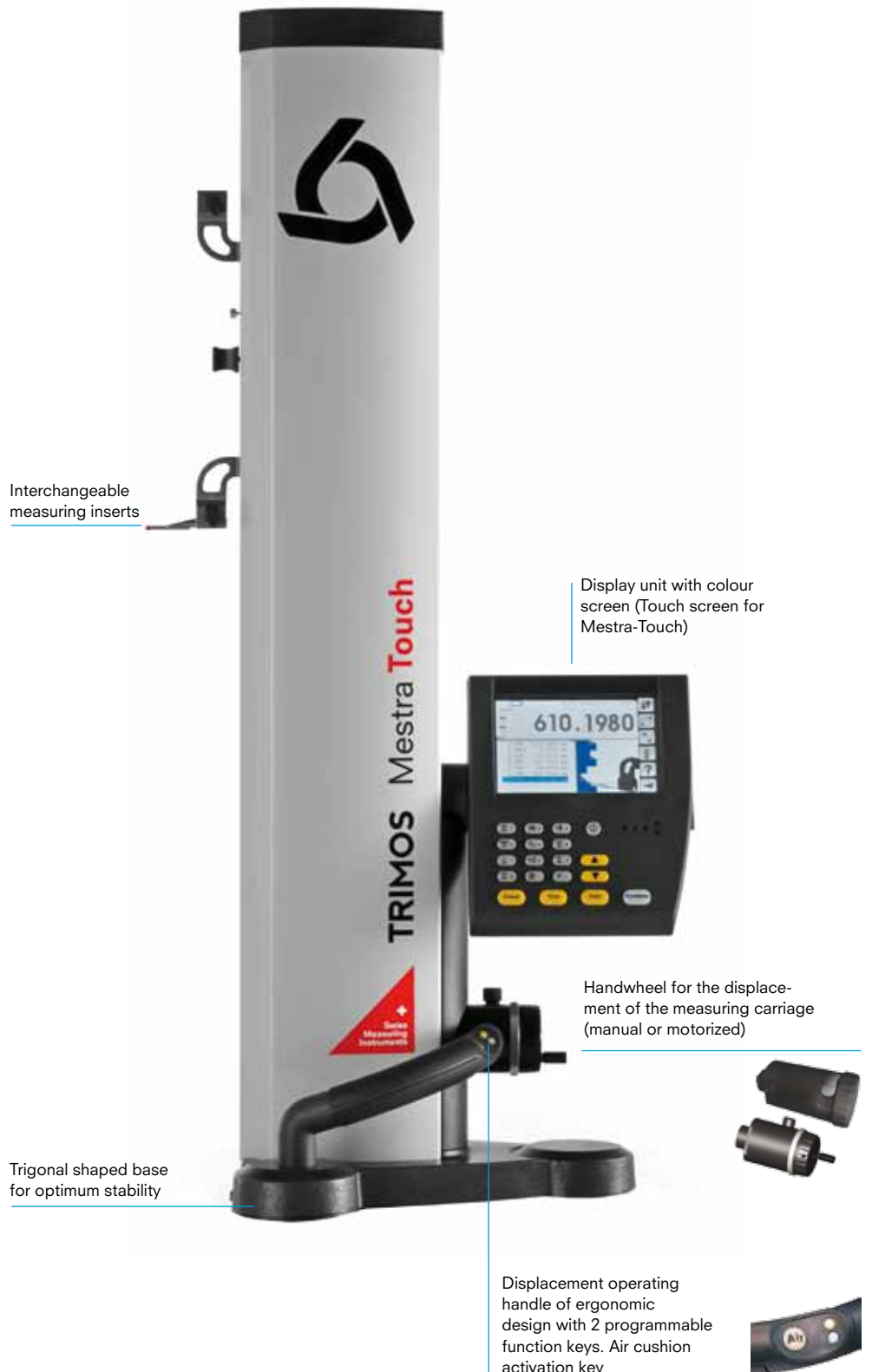
DESCRIPTION

MESTRA + MESTRA-TOUCH

-  Surfaces
-  Internal/external diameters
-  Centerline distances
-  Graphic help "EasyScan"
-  Min/Max/Delta
-  9 references
-  Squareness measurements
-  Angle measurements
-  Calculation mode
-  Tolerances
-  USB ports
-  RS232 ports
-  Wireless communication
-  Automatic displacement

MESTRA-TOUCH

-  2D measuring mode
-  Measurement sequences
-  Statistical analysis
-  Temperature compensation
-  Online help



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DISPLAY / SOFTWARE

The colour display facilitates the reading of all measuring parameters. The functions are easily and directly accessible.

INTERACTIVE HELP

DATE AND TIME DISPLAY

ACOUSTIC AND GRAPHIC PROBING INDICATOR

MEASURING OF VALUES WITH TOLERANCE INDICATION

GRAPHIC DISPLAY OF SQUARENESS

TOUCH SCREEN (MESTRA-TOUCH)

MEASURING IN 2D MODE (MESTRA-TOUCH)

MEASURING SEQUENCES (MESTRA-TOUCH)

STATISTICAL ANALYSIS (MESTRA-TOUCH)

TEMPERATURE COMPENSATION FEATURE (MESTRA-TOUCH)

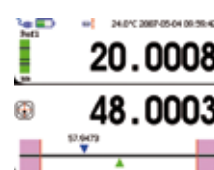
INTEGRATED ON LINE HELP (MESTRA-TOUCH)



Touch-screen with intuitive interface (Mestra-Touch)



Easy identification of each measuring function



Graphical help for diameter measurements



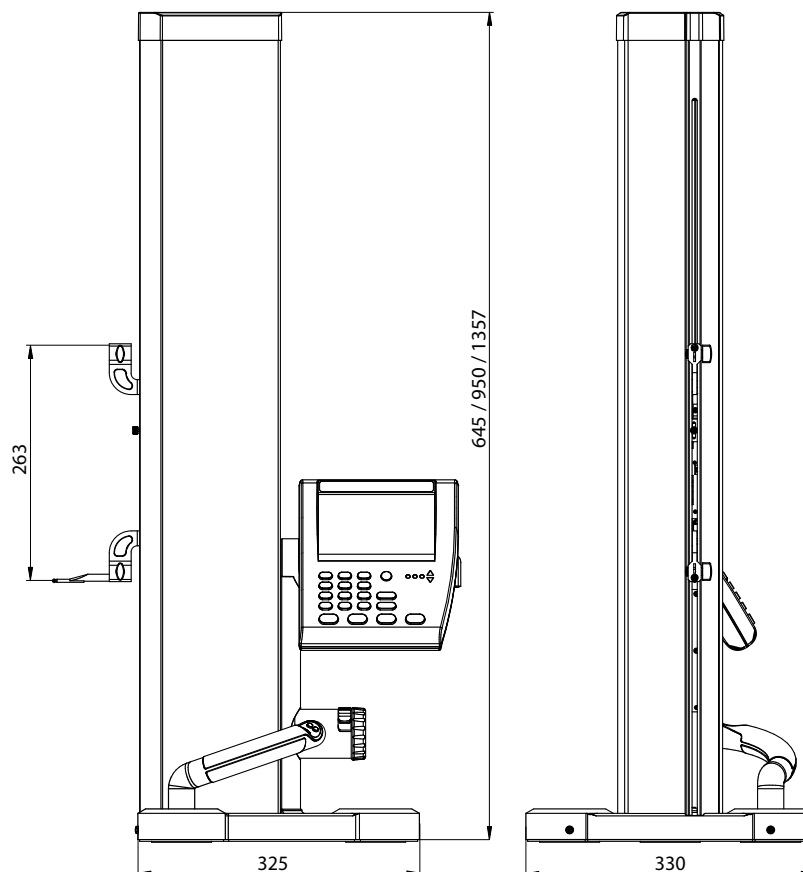
Clear indication of part conformity

TECHNICAL SPECIFICATIONS

| Mestra/Mestra-Touch | | 300 | 600 | 1000 |
|---------------------------------------|---------|---------------------------------------|----------|-----------|
| Measuring range | mm (in) | 305 (12) | 610 (24) | 1016 (40) |
| With second probe holder | mm (in) | 567 (22) | 872 (34) | 1278 (50) |
| Max. permissible errors ¹⁾ | µm | 1.2+ L(mm)/1000 | | |
| Repeatability (2s) ¹⁾ | µm | 0.5 (Ø:1) | | |
| Resolutions | mm (in) | 0.01/0.001/0.0001 (.001/.0001/.00001) | | |
| Manual carriage displacement speed | mm/s | 1000 | | |
| Motorized carriage displacement speed | mm/s | 150 | | |
| Measuring force (adjustable) | N | 0.5 ÷ 1.8 | | |
| Frontal squareness deviation | µm | 4 | 6 | 10 |
| Autonomy | h | > 8 | | |
| Data output | | 2 x RS232 C and 2 x USB (A et B) | | |
| Operational temperature | °C | +10 ÷ +40 | | |
| Temperature of storage | °C | -10 ÷ +40 | | |
| Weight | kg | 22 | 25 | 29 |

¹⁾ Values valid with ball probe TA-MI-119 at temperature of 20 ± 0.5°C and relative humidity of 50 ± 5 %.

SCHEMA



STANDARD INSTRUMENT

The Maestra and Maestra-Touch instruments are supplied as follows:

| | |
|--|-----------------------------------|
| Instrument according to specifications | User's manual (750 50 0002 03) |
| Charging unit (TA-EL-130) | Test certificate |
| Measuring insert with ruby ball \varnothing 5 mm (TA-MI-119) | Hex screw driver 2 mm (TA-TO-002) |
| Setting gauge (TA-MG-101) | Hex screw wrench 5 mm (TA-TO-001) |
| Protection cover (TA-TO-109/110/111) | Touch screen pen (LABC-30.3) |

CODE NUMBERS

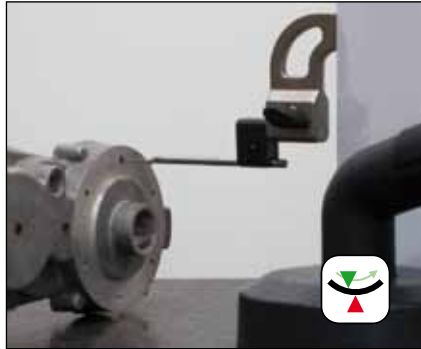
| Mestra | | Mestra-Touch | | |
|------------------------------|------------------------------|-------------------------------|-------------------------------|-------------------------|
| Manual | Motorized | Manual | Motorized | |
| M300MA 700 107 10 03 | M300MO 700 107 10 04 | MT300MA 700 107 10 05 | MT300MO 700 107 10 06 | Measuring range 300 mm |
| M600MA 700 107 20 03 | M600MO 700 107 20 04 | MT600MA 700 107 20 05 | MT600MO 700 107 20 06 | Measuring range 600 mm |
| M1000MA 700 107 30 03 | M1000MO 700 107 30 04 | MT1000MA 700 107 30 05 | MT1000MO 700 107 30 06 | Measuring range 1000 mm |

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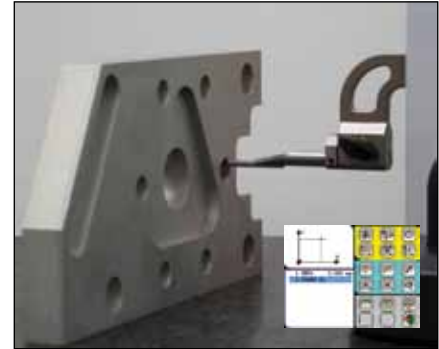
APPLICATIONS



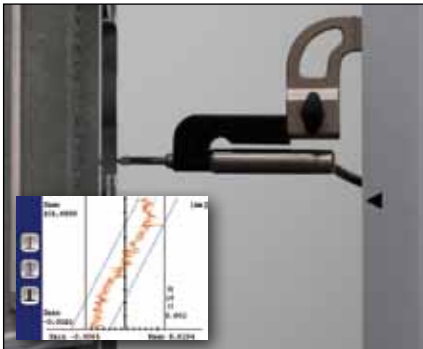
Height measurement of a small board (TA-IH-109/V-50.5/TA-MI-118)



Checking of a small diameter using the adequate measuring insert (V-5/V-50.9)



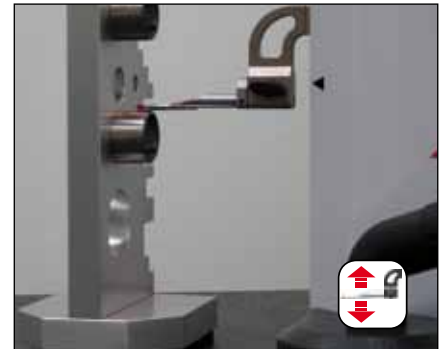
2-coordinate measurement with standard graphic help (TA-MI-101/TA-AD-101)



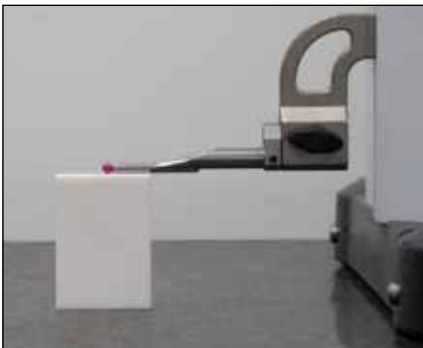
Checking of squareness deviation using an additional electronic probe and colour print-out of the curve (TA-MS-101)



Measurement of a groove using a 90° angled measuring insert holder and an L-shaped insert (TA-IH-105/V.50.5/V-50.3)



Automatic measurement of an external diameter performed with "TRIMOS® NC movement" (TA-MI-101/TA-AD-101)



The complete digital measuring system offers an extremely high accuracy (TA-MI-101/TA-AD-101)



An USB data output allows the storage of all data on an USB Memory Stick as well as the printing of protocols (TA-EL-140)



Wireless communication by Bluetooth or Wi-Fi (optional) (TA-EL-123/4)