

# GIOTTO MATIC

SHAFT MEASURING CENTER

METROLOGY



# PRESENTATION

**GIOTTO MATIC** is a modular measuring machine for shaft-type parts designed to be placed in the production floor for an automatic control on large batch.

**GIOTTO MATIC** replaces several manual instruments used in the production and is suggested to be placed besides the turning and grinding machines.

The interface is designed to be simple and the **teach mode** makes this bench very quick for large batch. Visualization and storage of measuring results is performed with standard / customized reports. **GIOTTO MATIC** could be customized according to the customer requirements.

Designed for production floor

Simple interface

Hardware and software customization

Measurements in manual, teach-mode and automatic

Customized reports

Perfect for large batch control

Adjustable measuring force to avoid operator influence

## Dimensional and geometrical parameters



**DIAMETER**



**SHOULDER**



**WIDTH OF RECESS**



**LENGTH MEASUREMENT**



**ECCENTRICITY**

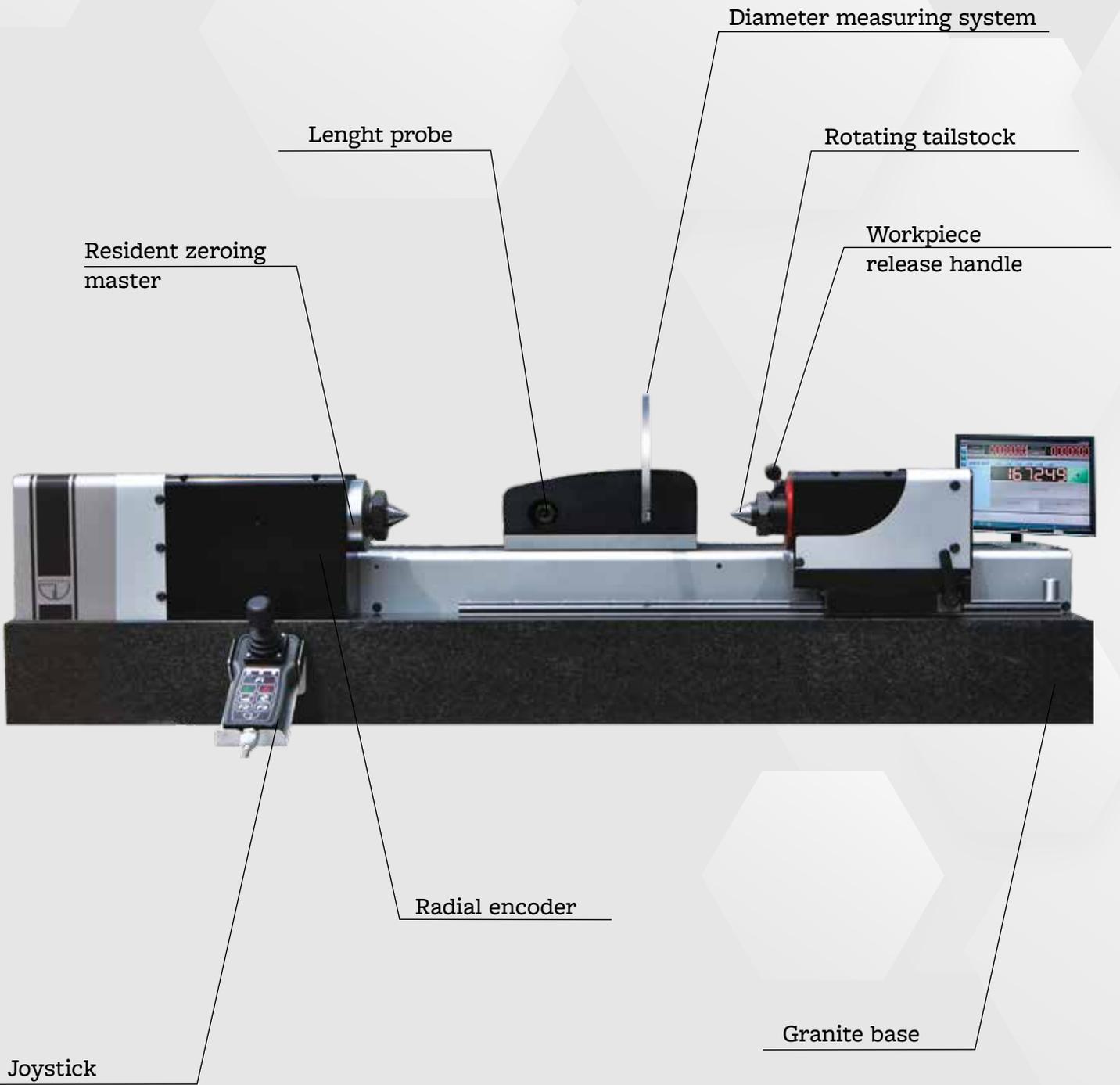


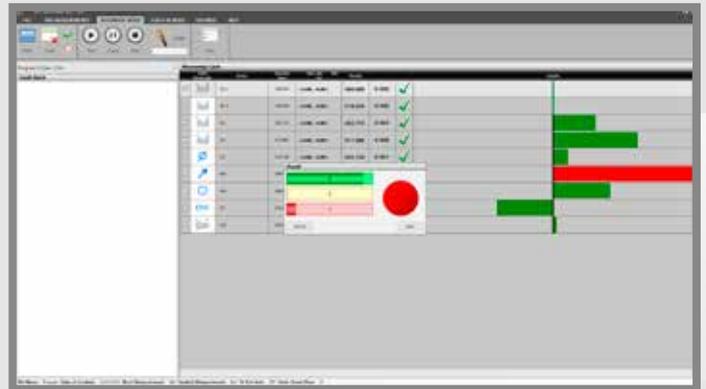
**OVALITY**



**TAPER**

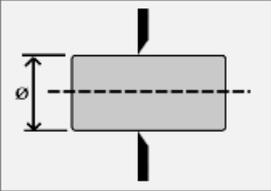
**OTHER PARAMETERS**





**Diameter Setting**

Set Master value and click START button.



Master: 105.061

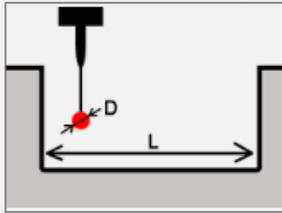
Nuovo Valore

STOP START

Cancel OK

**Probe setting**

Position the sphere between the recess, enter or modify the value of master length and probe diameter. Press start to execute the automatic probe re-setting.

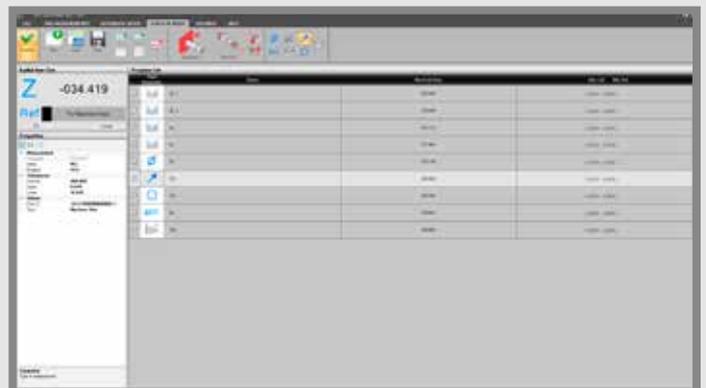
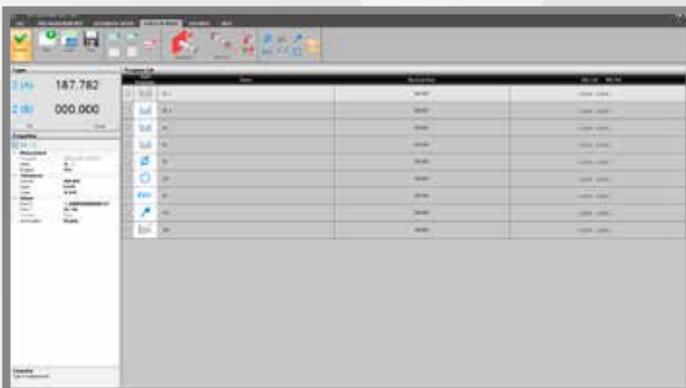


Master Length Probe

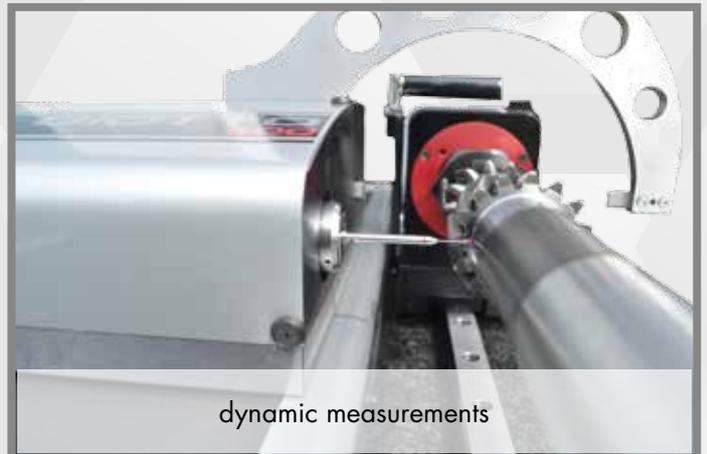
STOP START

Cancel OK





joystick for manual and teach mode cycle



dynamic measurements



motorized tailstock - resident diamenter master



anvils in hard metal



customizable teilstock and probe diameter



heidenhain probe

# CONFIGURATIONS

## GIOTTO MATIC

The modular configuration of the machine allows a customized solution.

- lengths measurement range mm 500/1000,
- diameter range 120/150 mm
- granite base
- height of teilstock 150 mm complete of static centers
- ergonomic handle for workpiece loading
- joystick

Length measuring system, TT probe with spheric diameter 1-4 mm; software for length acquisition; shoulders, other parameters.

Rotative encoder; rotating right livecenter; motorized left center.  
Software for measurement of: concentricity, taper, ovality, axial run-out, run-out to part axis, eccentricity, shoulder, other parameters.

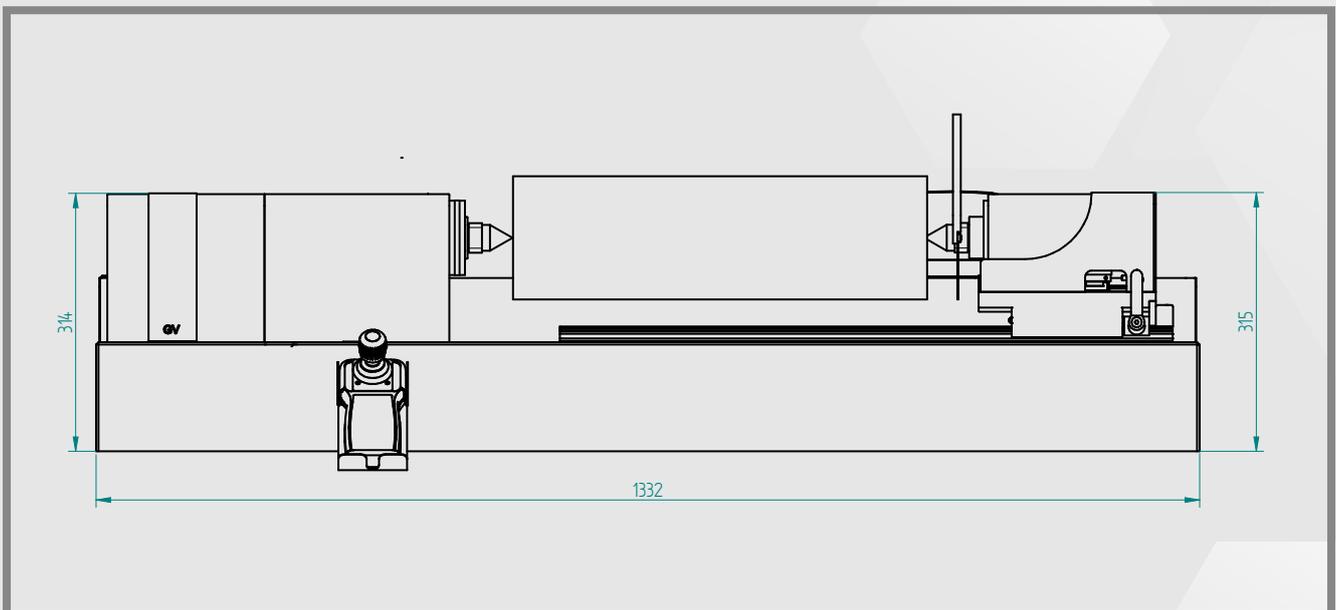
Optical module for radial parameters.

## OPTIONALS

- Industrial PC
- Support table
- Bar code
- Polycarbonate protection
- External keyboard

# TECHNICAL SPECIFICATIONS

GIOTTO MATIC	GMT500	GMT1000
Measuring range, length Z (mm)	0-500	0-1000
Measuring range, diameter X (mm)	1-120	1-150
Max permissible error, length Z ( $\mu\text{m}$ )	$3 + L(\text{mm})/100$	$3 + L(\text{mm})/100$
Max permissible error, diameter X ( $\mu\text{m}$ )	$2 + D(\text{mm})/100$	$2 + D(\text{mm})/100$
Repeatability, length Z ( $\mu\text{m}$ )	$\leq 2$	$\leq 2$
Repeatability, diameter X ( $\mu\text{m}$ )	$\leq 1$	$\leq 1$
Resolution, length Z (mm)	0.001 / 0.0001	0.001 / 0.0001
Resolution, diameter X (mm)	0.001 / 0.0001	0.001 / 0.0001
Measuring force Z, X (N)	3 , adjustable	3 , adjustable
Max weight of shaft (Kg)	60	75
Weight of instrument (Kg)	410	610



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