



# TurnCheck™ Series-10

TurnCheck™ Series-10 systems are precision optical shaft measuring instruments designed for shop floor environments. Rugged and reliable, TurnCheck accommodates parts up to 800 mm in length.

- Completely telecentric, large field of view optical system
- Measure diameters as large as 100 mm and lengths up to 800 mm
- TurnCheck easily measures all critical dimensions of turned parts, from simple lengths and diameters to distances, angles, radii, form, position, cylindricity, and runout

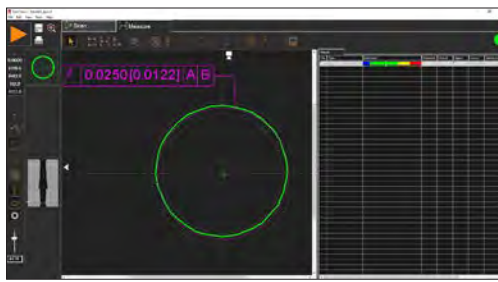
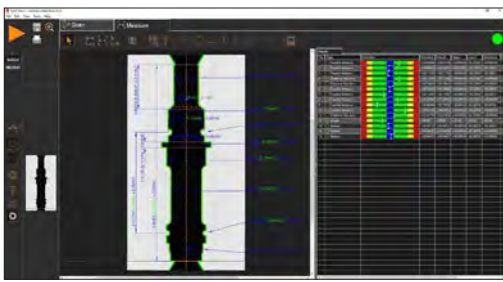
## High Performance Shaft Measuring Machine

Series-10	10  <sup>40</sup>	10  <sup>60</sup>	10  <sup>80</sup>
Maximum Diameter Measurement (mm)	100		
Maximum Length Measurement (mm)	400	600	800



TurnCheck 10|<sup>60</sup> model with optional workstation shown

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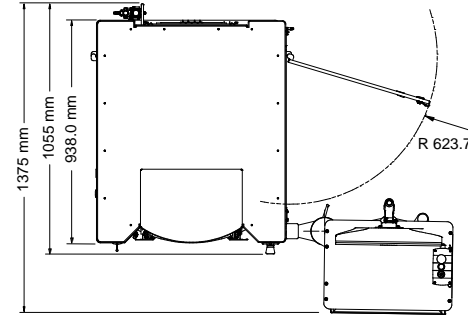
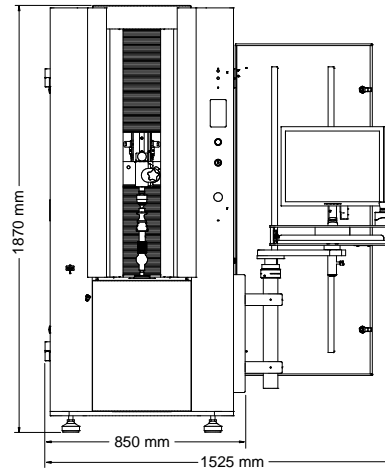


## Measurement & Analysis Capabilities:

- Automatic data point and feature extraction
- Advanced image analysis technology
- Easy walk up measurements
- Dimension comparison directly to 2D CAD
- True high definition of part image display
- Optional SmartProfile® software for 3D analysis and advanced GD&T

## Rugged, Easy To Use Design:

- Easy loading – one-handed tailstock operation
- Built-in light curtain to safeguard the operator during automatic measurement
- Air gun included to blow off dirt and debris from part
- Additional optional workholding kits available for parts that do not have centers



System Weight: 530 kg  
Shipping Weight: 580 kg

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<b>Measurement Capacity &amp; Machine Size*</b>			
Vertical measuring range	400 mm	600 mm	800 mm
Maximum diameter measuring range	100 mm	100 mm	100 mm
Maximum part size	175Ø mm x 400L mm	175Ø mm x 600L mm	175Ø mm x 800L mm
Machine size	850 mm x 1055 mm x 1870 mm	850 mm x 1055 mm x 1870 mm	850 mm x 1055 mm x 1870 mm
Machine size with optional workstation	1525 mm x 1055 mm x 1870 mm	1525 mm x 1055 mm x 1870 mm	1525 mm x 1055 mm x 1870 mm
* Between standard centers.			
<b>System Performance</b>			
Vertical scanning speed	100 mm/sec		
Rotational scanning speed	60 RPM		
Vertical scale resolution	0.1 µm		
Video edge resolution	0.5 µm		
Rotational scale resolution	0.001 degrees		
Rated spindle load	80 kg		
<b>Accuracy**</b>			
Diameter measurement	1.8 + D/100 µm		
Diameter repeatability (4s)***	1.0 µm		
Length measurement	3.5 + L/150 µm		
Length repeatability (4s)***	2.0 µm		
<b>Rated Environment &amp; Facilities</b>			
Rated environment	Temperature 18-22 °C; 30-80% humidity; vibration <0.001g below 15 Hz		
Operating temperature range	15 - 30 °C		
Utility requirements	Power: 100 - 120 VAC or 200 - 240 VAC, 50/60 Hz, 1-Phase, 650 W Compressed Air: 175 l/min - 4-bar		

\*\*Where D, L = measuring length in mm. Applies to thermally stable system in rated environment. Maximum rate of temperature change: 1 °C/hour. Maximum vertical temperature gradient: 1 °C/meter. Applies to a work piece with its center of mass located on the spindle axis.

\*\*\*Repeatability (4s) is based on 25 repeated measurements on ground metal objects.



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