



**TurnCheck Series-10** systems are precision optical shaft measuring instruments designed for shop floor environments. Rugged and reliable, TurnCheck Series-10 has a completely telecentric, large field of view optical system that accommodates parts with shaft diameters up to 100 mm. The granite base support for rotary provides a rigid base and isolates vibration.

- **Measure Within Seconds** – Shaft lengths up to 1200 mm.
- **Collimated LED illumination** – Reduces distortion to provide superior image quality and improved measurement of critical dimensions of all feature types.
- **Shop-Floor Debris Protection** – Optics drop down below the stage when machine is not in use. Convenient air blow-off mounted to the front of the machine for cleaning parts prior to measurement.

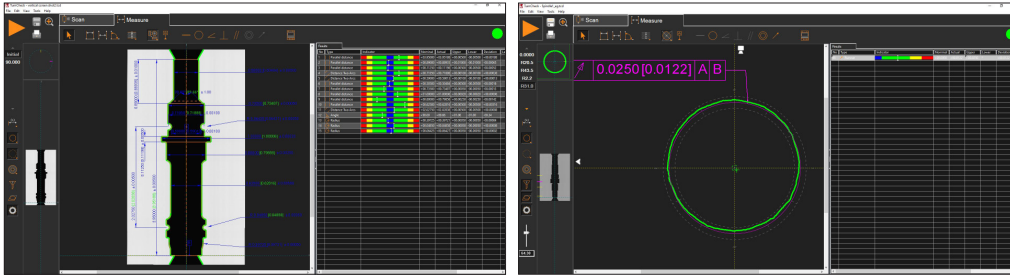
## High-Performance Shaft Measuring Machine



TurnCheck 10|60 model with optional workstation shown.



# TurnCheck™ Series-10

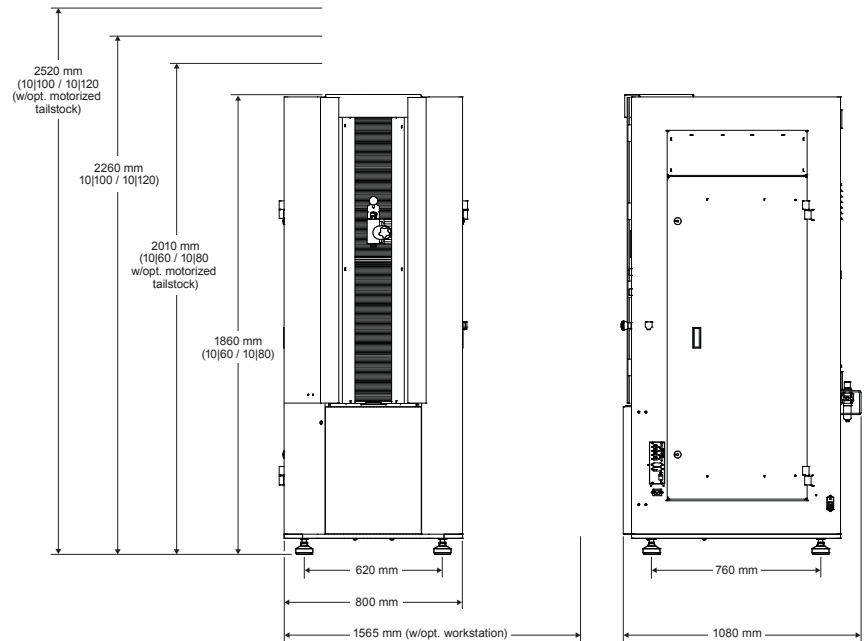


## Measurement & Analysis Capabilities:

- Automatic data point generation and simple feature extraction
- Advanced image analysis technology
- Program using DXF CAD models
- True high definition of part image display
- Built-in temperature compensation
- 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
- Additional optional workholding kits available for parts that do not have centers
- Optional motorized upper tailstock to assist operators with part loading



System Weight: 530 kg  
Shipping Weight: 630 kg

Series-10	10 60	10 80	10 100	10 120
<b>Measurement Capacity &amp; Machine Size<sup>1</sup></b>				
Vertical Measuring Range	600 mm	800 mm	1000 mm	1200 mm
Maximum Diameter Measuring Range	100 mm	100 mm	100 mm	100 mm
Maximum Part Size	175∅ mm x 600L mm	175∅ mm x 800L mm	175∅ mm x 1000L mm	175∅ mm x 1200L mm
<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	1.0 µm			
Length Measurement	3.5 + L/150 µm			
Length Repeatability	3.0 µm			
<b>Rated Environment &amp; Facilities</b>				
Power Requirements	100-120 VAC or 200-240 VAC, 50/60 Hz, 1-Phase, 650 W			
Compressed Air Requirements	Air supply pressure: 0.45 MPa; Minimum Flow capacity: 175 l/min; Air quality ISO 8573-1:2010 Class 4.3.4 or better			
Safe Operating Environment	15-30 °C, non-condensing			
Rated Environment	Temperature 18-22 °C, stable to ± 1 °C, max rate of change 1 °C / hour, max vertical gradient of 1 °C meter; 30-80% humidity; vibration <0.001g below 15 Hz			

Accuracy is evaluated with a QVI® compensation and verification procedure where "D" is measured diameter in millimeters and "L" is measured length in mm. Specifications apply within the rated environment. Accuracy applies to a work piece with its center of mass located on the spindle axis. Depending on load distribution, accuracy at maximum payload may be less than standard.

<sup>1</sup>Between standard centers.



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