



## Fast, Easy Shaft Measurements

### **High Speed Optical Metrology**

**TurnCheck**™ systems offer a fast, easy way to measure shaft, cylinders, and other turned, ground or extruded parts. Designed to be placed on the shop floor with machine tools, TurnCheck systems provide improved process control through immediate feedback. A part can be placed and measured in seconds!

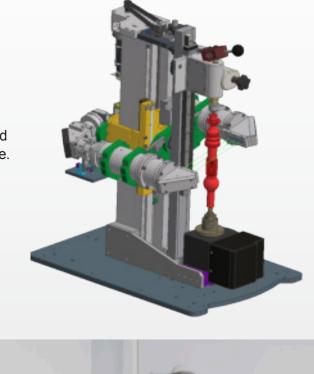
The optics are designed to produce distortion-free images that are truly telecentric. The LED illumination is carefully aligned to the optics providing highly collimated light for nearly perfect back lighting of the work piece

producing a crisp and clear image of the entire part.

All members of the TurnCheck family are precision optical measuring systems built with reliable and rugged materials for thermally stable accurate measurements on the shop floor. Series-10 floor model systems come with a built-in light curtain to safeguard the operator during automatic part measurement.

The moveable tailstock assembly is designed to be easily operated with one hand for precision mechanical alignment of the workpiece. Additional optional workholding kits that fit into the spindle accommodate parts that cannot be held between centers.

Proper thread form measurement often requires that the imaging optics be oriented normal to the thread's helix angle. Series-6 benchtop systems include an optional motorized helix mechanism to automatically orient the imaging system with a ±15° range to enable correct thread measurements.







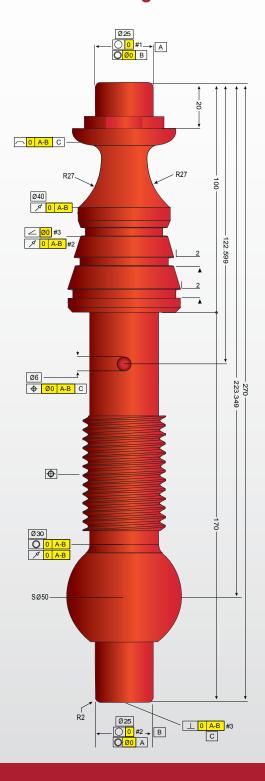




| Models                                | 6  <sup>30</sup> | 10 40       | <b>10</b>   <sup>60</sup> | <b>10 </b> <sup>80</sup> |
|---------------------------------------|------------------|-------------|---------------------------|--------------------------|
| Vertical Measuring Range (mm)         | 300              | 400         | 600                       | 800                      |
| Maximum Diameter Measuring Range (mm) | 60               | 100         | 100                       | 100                      |
| Maximum Part Size (mm)                | 170∅ x 300L      | 175∅ x 400L | 175∅ x 600L               | 175∅ x 800L              |

# **TurnCheck Metrology Software**

#### A New Paradigm in Shaft Measurement

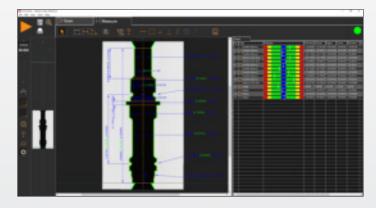


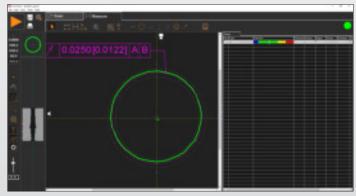
**TurnCheck** software is fast and easy to program with a focus on what you want to measure rather than how to measure it. Automatic feature extraction immediately finds and measures all part features in a single scan. A single image displaying the entire part allows you to easily see all basic shaft measurements at once. Rotational scans can be done for form and runout measurements providing plots to truly visualize the results.

Pre-programmed parts are automatically rotationally aligned allowing for fast and intelligent one-touch measurement every time.

For effortless thread analysis, a large variety of common types are part of an integrated thread library to quickly obtain results such as pitch and major/minor diameter.

Data points can be compared directly to a DXF model including 2D GD&T analysis. Additional data points can be output to optional SmartProfile® software for 3D analysis and advanced GD&T.







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