

ADCOLE OptiShaft S60

OPTICAL SHAFT MEASURING MACHINE

The Adcole OptiShaft S60 is a precision optical shaft measuring instrument designed for shop floor environments but is equally suited for the laboratory. Rugged and reliable, OptiShaft systems use a completely telecentric, large field of view optical system that measures parts with diameters up to 60mm, and lengths up to 300mm.

Measure Within Seconds

Fast measurements on part lengths up to 300mm and diameters up to 60mm.

Collimated LED Illumination

Reduces distortion to provide superior image quality and improved measurement of critical dimensions of all feature types.

Built-in Thread Library

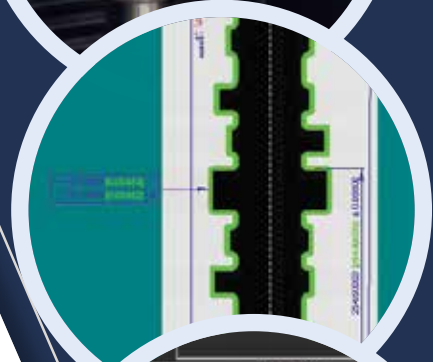
Optional #12.5° motorized helix viewing angle that automatically adjusts based on thread value.

Engineered for Shop-Floor Use

The granite base supports the rotary table providing a rigid base and vibration isolation. Optics drop down below the stage for protection when machine is not in use.

Features & Benefits

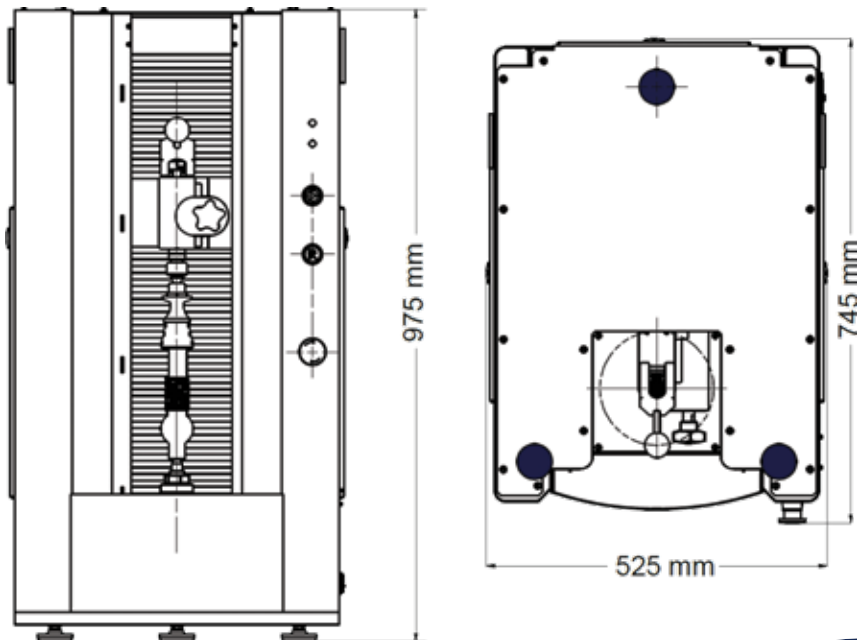
- Innovative telecentric optics enabling a large depth of field with minimal distortion
- Advanced edge-detection technology providing sub-pixel resolution for superior accuracy and repeatability
- Automatic data point generation and simple feature extraction
- Exceptional image analysis software allows for simple feature extraction and measurement
- Program using DXF CAD models
- True high definition of part image display
- Optional Smartprofile® software for 3D analysis and advanced GD&T
- 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
- User-friendly interface that makes it easy to quickly integrate the system into a factory or audit room workflow



Type	Indicator	Value
Diameter		+55.00000
Offset		+00.00000
Diameter		+55.00500
Offset		+00.00000
Diameter		+55.00500
Offset		+00.00000
Diameter		+55.00000
Offset		+00.00000
Diameter		+55.00500
Offset		+00.00000
Circularity		+00.00000
Circularity		+00.00000
Circularity		+00.00000
Circularity		+00.00000
Radius		+00.00000

OptiShaft S60 Specifications

Measurement Capacity & Machine Size ⁱ	S60/03
Vertical Measuring Range	300mm
Maximum Diameter Measuring Range	60mm
Maximum Part Size	Ø 170mm x L 300mm
Machine Size	525mm x 745mm x 975mm
Rated Spindle Load	20 kg
System Performance	
Vertical Spinning Speed	100mm/sec
Rotational Scanning Speed	60 RPM
Vertical Scale Resolution	0.1 µm
Video Edge Resolution	0.5 µm
Rotational Scale Resolution	0.001°
Motorized Helix Angle Adjustment	± 12.5°
Accuracy ⁱⁱ	
Diameter Measurement	1.0 + D/200 µm
Diameter Repeatability	0.5 µm
Length Measurement	3.0 + L/200 µm
Length Repeatability	1.2 µm
Rated Environment & Facilities	
Power Requirements	100-120 VAC or 200-240 VAC, 50/60 Hz, 1-Phase, 650 W
Safe Operating Environment	15-30°C, non-condensing
Rated Environment Temperature	18-22°C, 30-80% humidity, vibration <0.001g below 15 Hz or better



System Weight:
approx. 150 kg

Shipping Weight:
approx. 200 kg

ⁱ Between standard centers

ⁱⁱ Where D, L = measuring length in mm. Applier to thermally stable system in rate environment. Maximum rate of temperature change: 1°C/hour. Maximum vertical temperature gradient: 1°C/meter.