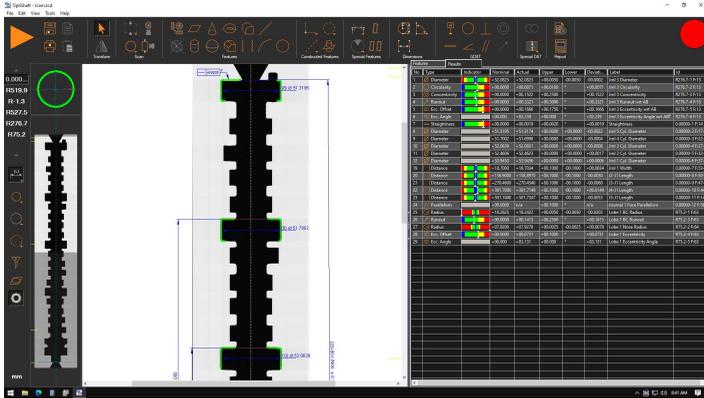


## OptiShaft™ S135

Optical Shaft Measuring Machine  
135mm Field of View



Intuitive user interface for gage programming, data collection, and reporting

The Adcole OptiShaft S135 is a large capacity precision precision optical shaft measuring instrument designed for shop floor environments but is equally suited for the measurement laboratory. Rugged and reliable, OptiShaft systems use a completely telecentric, large field of view optical system that measures parts with diameters up to 135 mm, and lengths up to 1.2-meters.

### Measure Within Seconds

Fast measurements on part lengths up to 1.2-meters and diameters up to 135 mm.

### Collimated LED illumination

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

## Features and 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 measurements
- 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



Adcole OptiShaft S135/10 with workstation

### 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.

Convenient air blow-off mounted to the front of the machine for cleaning parts prior to measurement.

# OptiShaft S135

Measurement Capacity & Machine Size <sup>i</sup>	S135/10	S135/12
Vertical Measuring Range	200 mm	200 mm
Maximum Diameter Measuring Range	100 mm	100 mm
Maximum Part Size	Ø 170 mm x L 200 mm	Ø 170 mm x L 200 mm
Machine Size	1000 mm x 850 mm x 2000 mm	
Machine Size with Workstation	1000 mm x 850 mm x 2000 mm	
Rated Spindle Load	10 kg	

## System Performance

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°

## Accuracy <sup>ii</sup>

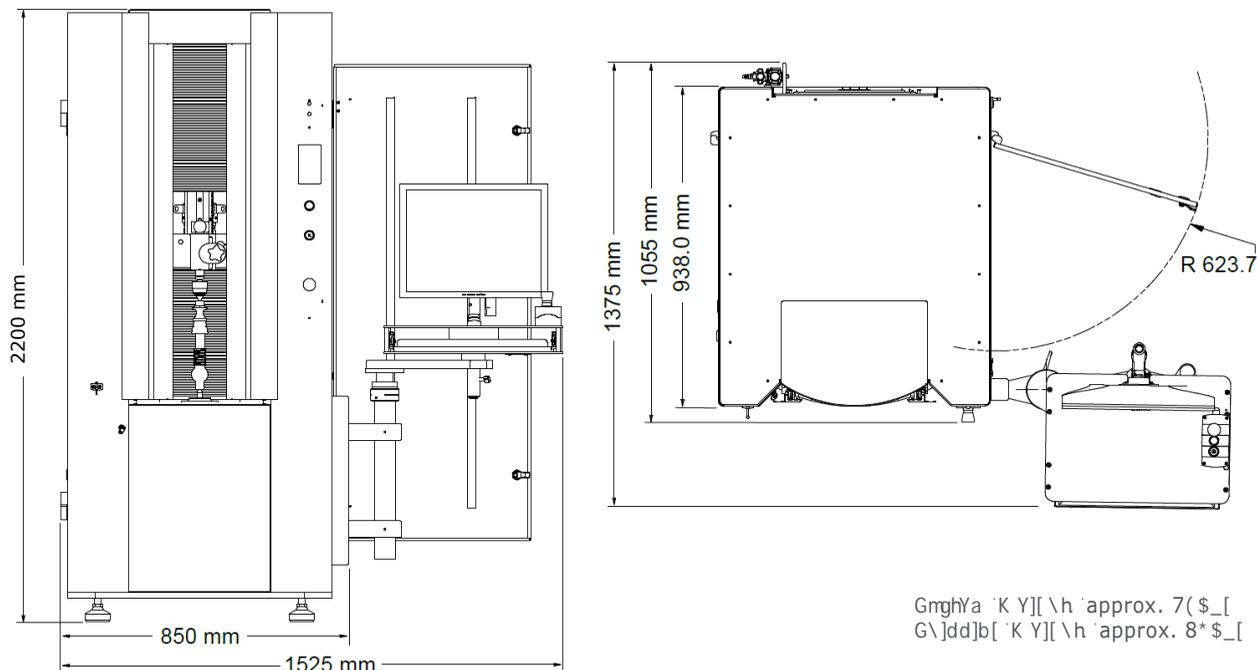
Diameter Measurement	1.8 + D/100 µm
Diameter Repeatability	1.0 µm
Length Measurement	3.5 + L/150 µm
Length Repeatability	2.0 µm

## 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
Compressed Air Requirements	5 bar (72.5 psi) dry, filtered, oil-free

<sup>i</sup> Between standard centers

<sup>ii</sup> 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.



Approx. 7" (178 mm) high  
Approx. 8" (203 mm) wide

email: [info@adcole.com](mailto:info@adcole.com)

[www.adcole.com](http://www.adcole.com)

**USA Global Headquarters**  
669 Forest Street  
Marlborough, MA 01752  
USA  
+1 (508) 485-9100

**Germany**  
Am Stadion 6  
45659 Recklinghausen  
Germany  
+49 (2361) 91960

**China**  
526 East 3rd Fute Road, 301 Bldg 8  
Shanghai F.T.Z.  
P.R. China, 200131  
+86 (21) 5866-3088

**Japan**  
Techno Wave 100 Bld 1F  
1-1-25 Shin Urashima-cho  
Kanagawa-ku, Yokohama-shi  
Kanagawa Japan  
+81 (45) 534-3380