

ADCOLE 1200-LX

LASER INTERFEROMETER-BASED SHAFT GAGE

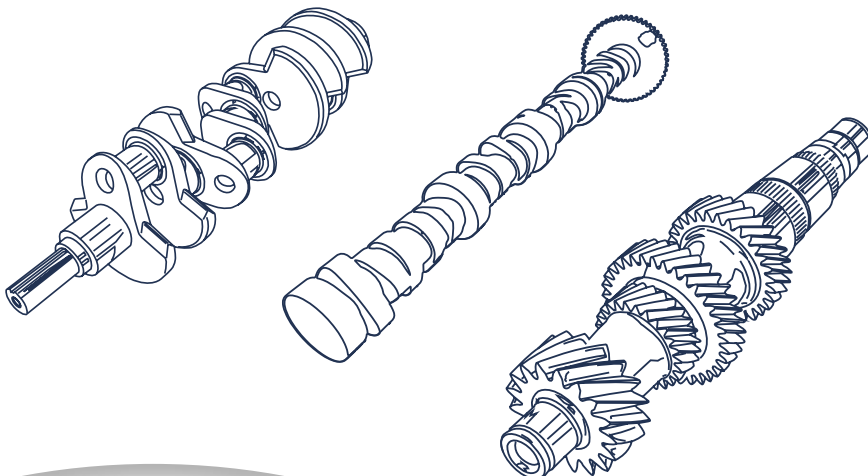
The Adcole Model 1200-LX is a high-speed, high-precision gage designed to measure camshafts, crankshafts, pistons, and other cylindrical components in demanding production environments. The heart of the 1200-LX is a laser interferometer, which enables the gage to measure to sub-micron accuracy and repeatability.

Features

- Smaller gage footprint saves valuable production floor space
- Swivel-hinge mounted control panel provides ergonomic, convenient positioning
- Brushless and linear slide motors supply more torque and speed, reduce friction, and improves measurement accuracy
- Optional enclosed measuring chamber with interlocking, easy-swing door ensures a clean gage measurement environment. Includes a Go/No-Go LED indicator that shows pass/fail of the part

Benefits

- Laser interferometer-based design offers sub-micron radial accuracy ($\pm 0.25 \mu\text{m}$) and repeatability
- 1200-LX gage measures an extensive list of parameters to provide the most complete, accurate camshaft and crankshaft inspection data available
- 3D Color Map and Program Builder software data analysis provides reporting, including: part summary, part programming, inspection packages, dimensions, calculated values for elements



THE MODEL 1200-LX IS IDEAL FOR MEASURING CHALLENGING FEATURES ON:

- Camshafts
- Crankshafts
- Cylindrical Parts
- Eccentric Shafts
- Transmission & Axle Shafts
- Heavy Diesel Camshafts & Crankshafts



Model 1200-LX Gage Specifications

	1200-LX (1M)	1200-LX (1.5M)
Accuracy Specifications		
Radial Accuracy ⁱ	±0.25 μm	
Radial Resolution	0.005 μm	
Axial Accuracy	±1.0 μm / 100mm	
Angular Resolution	< 0.036 arc second (< 0.00001°)	
Spindle Total Runout	< 0.1 μm	
General Specifications		
Swing Diameter	300mm (11.81")	
Part Weight Max.	340 kg (750 lb)	
Part Length Max.	1,000mm (39.4")	1,500mm (59.1")
Rotational Speed	1 to 20 rpm (Maximum 30 rpm)	
Carriage Speed	2,286mm (90") per minute	
Base Gage Dimensions		
Gage Height	2,535mm (99.8")	3,043mm (119.8")
Gage Width	1,396mm (55")	
Gage Depth	1,720mm (67.7")	
Gage Weight	2,495 kg (5500 lb)	4,700 kg (10,362 lb)

Parameters Supported

- | | | | |
|---------------------------------------|----------------|-------------------------------|-----------------|
| • Angularity | • Eccentricity | • Lobe Angle | • Runout |
| • Center Deviation (hourglass/barrel) | • Flatness | • Lobe Velocity | • Straightness |
| • Coaxiality | • FFT Chatter | • Parallelism | • Stroke |
| • Concentricity | • Index Angle | • Perpendicularity | • Taper |
| • Cylindricity | • Length | • Profile | • Throw |
| • Diameter (LSC, 2-Point Max/Min) | • Lobing | • Radius | • True Position |
| | • Lobe Lift | • Roundness (LSC,MIC,MCC,MZC) | |

Gage Support

Adcole machine support is provided by a factory trained field service team that is backed by more than 60 years of industry experience and ISO 9000 certification. Machine and application support, machine retrofit and upgrade services, plus part inspection and gage recertification services are offered to our global customer base. Adcole's support regions include Japan, Korea, China, Brazil, Mexico, India, Europe and North America. Regular and after hours email and phone support is available 8am-11pm EST.

ⁱ Temperature 20±1 C°, Relative Humidity 40%-60%, Pressure 86KPa-106KPa.

