

ADCOLE 1310-S

IN-LINE CAMSHAFT INSPECTION MACHINE

The 1310-S gage is designed for fully automated, high speed in-line camshaft manufacturing operations. The 1310-S is a value-oriented solution for single part type applications, utilizing a fixed headstock and a pneumatic tailstock with 30mm of travel (optional 60 mm travel available). Offering sub-micron accuracy, the 1310-S can easily monitor (in real-time) the machining process of up to 200 parts per hour. Rapid camshaft measurement cycle times of <20 seconds — depending on part requirements — ensures optimal manufacturing quality and throughput levels. The gage provides 3,600 data points per revolution from each follower and has a part capacity of up to 609 mm (24").

Features

- Part length capacity up to 609 mm (24"), with optional part lengths available
- Offers a deep set of camshaft measurement parameters, containing lobes, journals, and timing references
- Provides menu-driven software for easy gage operation
- Optional motorized follower carrier enables linear scans and/or multi-cut inspection
- Engineered for shop floor conditions

Benefits

- Provides a value-driven solution for high-speed inspection of a single part type
- Automatic, push-of-a-button system enables high volume inspection capacity of up to 200 parts per hour
- Collects 3,600 data points per revolution per follower
- Affords camshaft measuring times of <20 seconds, depending on part requirements (not including load and unload time)
- Provides easy maintenance via modular gage design
- Permits easy part changeovers using a simple follower relocation system



THE MODEL
1310-S IS IDEAL
FOR MEASURING
FEATURES ON:

- Camshafts
- Balance Shafts
- Eccentric Shafts
- Fuel Pump Shafts
- Other Rotating Components



Model 1310-S Gage Specifications

1310		1310-S
Accuracy Specifications		
Radial Accuracy ⁱ	±0.5 µm	
Radial Resolution ⁱ	0.016 µm	
Axial Accuracy by LVDT ⁱ	±2 µm / 100mm	
Angular Resolution	<0.036 arc second (<0.00001°)	
Spindle Total Runout	<0.1 µm	
General Dimensions		
Follower Heads	Up to 28	Up to 24
Follower Stroke	51mm (2")	
Swing Diameter	102mm (4")	
Part Length (Max)	609mm (24")	
Part Weight (Max)	25 kg (55 lb)	
Rotation Speed	1 to 30 rpm (Maximum 40 rpm)	
Base Gage Dimensions		
Gage Height	2,004mm (80")	2,229mm (90.5")
Gage Width	887mm (34.9")	
Gage Depth	1,195mm (47")	
Gage Weight	2,160 kg (4,760 lb)	2,380 kg (5,250 lb)

Parameters Supported

- Angularity
- Cam Lobe Lift Error
- Center Deviation
- Chatter
- Concentricity
- Cylindricity
- Diameter
- Flatness
- Length
- Parallelism
- Perpendicularity
- Profile
- Roundness
- Runout
- Straightness
- Taper
- True Position

Gage Options

The 1310-S gage is an entry level CCMM, designed to measure a single part type and is engineered with fewer features than the 1310. Customers have the option of equipping the 1310-S with a motorized follower carriage, enabling linear scan capability and the ability to measure multiple cuts of a complex part. In addition, the 1310-S gage is available with an optional 60 mm tailstock option, and customers can select from manual or in-line robotic load options. Ask your local sales representative for details.

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

ⁱⁱ Ask your salesperson about optional part length sizes for the 1310 gage

