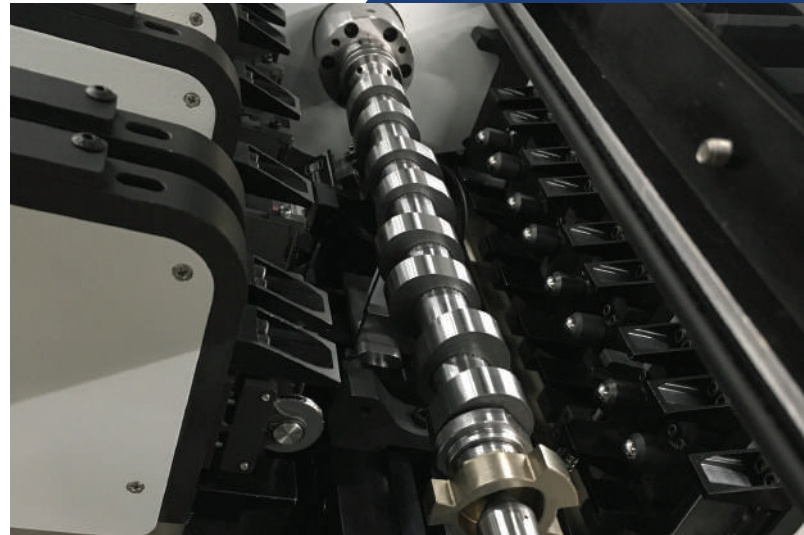


1310-S In-Line Tactile Camshaft Inspection Gage

MODEL 1310-S



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 3600 data points per revolution from each follower and has a part capacity of up to 609 mm (24").

The 1310-S gage is ideal for measuring challenging features on:

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

Features:

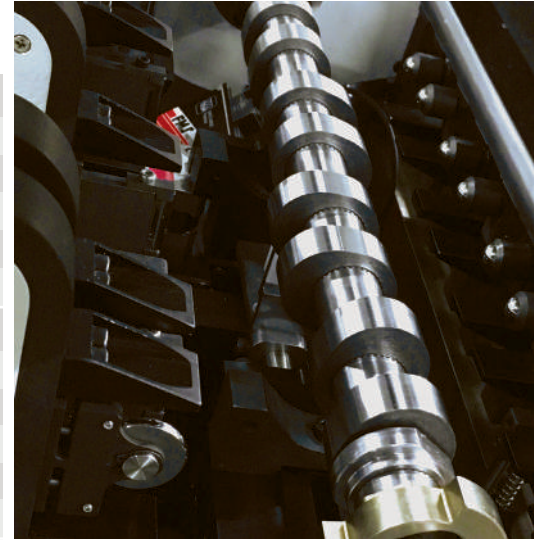
- Part length capacity up to 609 mm (24"), with optional part lengths available
- Offers a deep set of camshaft measurement parameters, containing lobes, journals, and timing references
- Provides menu-driven software for easy gage operation
- Optional motorized follower carrier enables linear scans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

1310-S Gage Specifications

Accuracy Specifications	Radial Resolution	.016 μm^1
	Spindle Total Runout	< 0.15 μm
	Radial Accuracy	$\pm 0.5 \mu\text{m}^1$
	Axial Accuracy by LVDT	$\pm 1 \mu\text{m}$ over 25 mm ¹
	Angular Resolution	0.00001°
	Rotation Speed	40 rpm (max)
General Specifications	Follower Heads	Up to 24
	Part Length (Max)	609 mm (24")
	Swing Diameter	102 mm (4")
	Part Weight (Max)	25 kg (55.5 lbs)
	Tailstock Travel	30 mm ²
	Headstock	Fixed
Gage Dimensions	Gage Height	1074 mm (42.3")
	Gage Depth	1556 mm (61.2")
	Gage Width	984 mm (38.7")
	Gage Weight	1419 kg (3130 lbs)



Parameters 1310-S Gage Measures

- | | | |
|---|--|---|
| <ul style="list-style-type: none"> • Angularity • Center Deviation • Concentricity • Diameter • Length • Perpendicularity | <ul style="list-style-type: none"> • Roundness (Circularity) • Straightness • True Position • Cam Lobe Lift Error • Chatter • Cylindricity | <ul style="list-style-type: none"> • Flatness • Parallelism • Profile • Runout • Taper |
|---|--|---|

1310-S 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.

Adcole Machine Support

Adcole machine support is provided by a factory trained field service team that is backed by 50 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.

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

² Optional 60 mm tailstock option available