

ADCOLE 1302

COMPACT HORIZONTAL GAGE

The Adcole Model 1302 gage is engineered to measure sliding camshaft elements and small camshafts. This compact horizontal gage features a dual-head measurement configuration, enabling manufacturers to reduce cycle time while obtaining sub-micron accuracy and repeatability. The 1302 gage provides 3600 data points per revolution (every 1/10 of a degree), and offers up to 40 rpm headstock rotation speeds.

Features

- Enables fast measurement of complex part features with two opposing measuring heads that operate independently
- Provides cam element identification with a handheld or in-line fixed matrix reader
- Offers rapid, comprehensive part measurement with high rotational speeds and fast-moving carriages
- Ensures speed and accuracy with programmable follower and headstock speeds
- Optional Camtracker measures grooves and side walls with ± 9.5 mm travel using a Heidenhain probe

Benefits

- Provides 3,600 data points per revolution (every 1/10 of a degree) for actionable metrology data
- Rotational speed of up to 40 RPM
- Offers user-friendly software for easy programming and maximum productivity
- Includes cryogenically hardened followers that last up to 3x longer than conventional designs



THE MODEL 1302 IS
IDEAL FOR MEASURING
FEATURES ON:

- Camshafts
- Sliding Camshaft Elements
- Complex Cylindrical Parts



Model 1302 Gage Specifications

Accuracy Specifications

Radial Accuracy ⁱ	±0.5 µm
Radial Resolution ⁱ	0.016 µm
Axial Accuracy	±2 µm over 100 mm
Angular Resolution	<0.036 arc second (<0.00001°)
Spindle Total Runout	<0.15 µm

General Specifications

Rotation Speed Max.	40 rpm
Swing Diameter ⁱⁱ	178mm (7")
Carriage Speed	3,048mm (120") per minute
Part Length Max.	305mm (12")

Base Gage Dimensions

Gage Height	1,214mm (47.81")
Gage Width	1,156mm (45.50")
Gage Depth	1,111mm (43.75")
Gage Weight	2,270 kg (5,000 lb)

Parameters Supported

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

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 105mm (4.13") with Camtracker option

ⁱⁱⁱ With Camtracker option.

