

# ADCOLE 1200-DH

## DUAL-HEAD SHAFT GAGE

For manufacturers requiring a higher inspection throughput rate than the single head 1200 gage provides — or a single gage for both crankshaft and camshaft inspection without the need to change followers — Adcole offers the 1200 Dual Head (1200-DH) option. This fast, flexible solution features two measuring heads that operate simultaneously with length capacities ranging from 26-60". The DH option increases throughput inspection volume by enabling organizations to use both measurement heads to measure a crankshaft within the same inspection sequence or to use one measurement head to independently inspect a crankshaft, and the second measurement head to independently inspect a camshaft, each using a dedicated follower.

### Features

- Automatic, push-of-a-button gage measures parts with length capacities ranging from 965-1,520mm (38"-59.8")
- Includes high resolution glass scale angle encoder for accurate index measurements of rod journals and cam lobes to within <1 arc / second
- Provides precision flat granite surface plate that extends the entire length of the system
- Includes precision heavy-duty spindle bearing for long life and durability

### Benefits

- Offers fast adjustments of the tailstock to easily accommodate different length parts
- Provides fully programmable follower, carriage and headstock speeds
- Employs Program Builder gage programming software, enabling part measuring sequences, reports, inspection packages
- Delivers precise radial and length measurements
- Gives automatic probe wear correction data



THE MODEL 1200 IS  
IDEAL FOR MEASURING  
CHALLENGING  
FEATURES ON:

- Camshafts
- Crankshafts
- Heavy Diesel Shafts
- Other Cylindrical Parts



# Model 1200-DH Gage Specifications

|                                 | 1200-DH (38")                 | 1200-DH (60")        |
|---------------------------------|-------------------------------|----------------------|
| Accuracy Specifications         |                               |                      |
| Radial Accuracy <sup>i,ii</sup> | ±0.25 µm                      |                      |
| Radial Resolution               | 0.005 µm                      |                      |
| Axial Accuracy                  | ±1 µm / 100 mm                |                      |
| Angular Resolution              | <0.036 arc second (<0.00001°) |                      |
| Spindle Total Runout            | <0.1 µm                       |                      |
| General Specifications          |                               |                      |
| Rotation Speed                  | 1 to 20 rpm (Maximum 30 rpm)  |                      |
| Follower Stroke                 | 190mm (7.5")                  |                      |
| Swing Diameter                  | 302mm (11.88")                |                      |
| Part Weight Max.                | 340 kg (750 lb)               |                      |
| Part Length Max. <sup>iii</sup> | 965mm (38")                   | 1,520mm (59.8")      |
| Base Gage Dimensions            |                               |                      |
| Gage Height                     | 2,348mm (92.4")               | 2,889mm (113.8")     |
| Gage Width                      | 2,682mm (105.6")              |                      |
| Gage Depth                      | 1,270mm (50")                 |                      |
| Gage Weight                     | 4,310 kg (9,500 lb)           | 5,896 kg (13,000 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  $20 \pm 1^\circ \text{C}$ , Relative Humidity 40%-60%, Pressure 86KPa-106KPa.  
ii 10% of typical industry part tolerance or  $1 \mu\text{m}$  if tolerance less than  $10 \mu\text{m}$   
iii Max. part length is approximate. Actual length is dependent on center tooling style, part center hole configuration, amount of TS travel needed to clear customer part, etc.