

Autocollimating Alignment Telescope | D-275



The Model D-275 Autocollimating Alignment Telescope can be focused from 16 inch (406.4 mm) to infinity, to align any number of points along its optical axis. Due to the fact that the mechanical axis of the tube and the optical axis of the instrument are parallel within 3 arc seconds, the instrument is easily adaptable to jigs and setups using a dial indicator.

A reflective surface may be established normal to the optical axis by utilizing the autocollimating feature. The Model D-275 provides the most-pertinent features at a low price.

The Model D-275V incorporates a video option with the alignment telescope, allowing the user to view the image of objects and alignment patterns on a video monitor. The D-275V includes a video camera, monitor, relay lens, mounting brackets and all connecting cables.

- Telescope for simplest, most accurate alignment
- Establish 2-axis perpendicularity to line of sight through autocollimation
- Annular rings and crossed-line reticles allow uncluttered view of reference and easy reading
- Telescope tube is made of hardened stainless steel
- Outer diameter of telescope tube is concentric to optical axis to within 0.000 3 inch at 16 inch (7.6 µm at 406.4 mm)
- Low cost permits semipermanent installation in fixtures

Optional Accessories

- D-165 High Intensity Light Source (may be required when autocollimating off of low reflectivity surfaces or small mirrors)
- D-247 Table Instrument Stand
- D-276/D-277/D-295/Nikon Type C Adjustable Instrument Stands
- D-416B 220V 50Hz Power Supply
- 105-2761-275 Video Subsystem (included with D-275V)

2223 West San Bernardino Road West Covina, California 91790

Phone: (626) 962-5181 Fax: (626) 962-5188

www.davidsonoptronics.com sales@davidsonoptronics.com

Specifications		
Magnification:		24X
Focusing Range:		16 inch (406 mm) to infinity
Resolution:		5 arc sec
Field of View:		26 inch at 100 ft (660 mm at 30 m)
Light Source:		Incandescent lamp with D-416, 6 VDC variable power supply 110V/ 60Hz or 220V/ 50Hz
Reticles:	Autocollimating:	Fifteen concentric circles 1 arc min apart (30 arc min field)
	Eyepiece:	Cross hair width 0.000 25 inch (6.5 μ m) wide lines
Telescope Tube:		2.249 66 inch (57 mm) diameter (Designed to fit NAS-900 Spherical Mount) Concentric to optical axis within 0.000 3 inch at 16 inch (7.6 μ m at 406 mm)
Carrying Case:		Hardwood
Housing Finish:		Ivory Enamel
Weight:		13 lbs (5.9 kg)
Shipping Weight:		24 lbs (10.9 kg)

