

# Autocollimators & Accessories

Measuring angle, straightness, flatness, squareness, and parallelism



# Visual autocollimators: flexible, affordable, easy-to-use and read

The visual autocollimators are extremely accurate instruments with a wide variety of applications.

They are normally supplied with the eyepiece positioned for straight through viewing, although the TA51 is available with the eyepiece positioned for right angle viewing if required. Measurements are made using a graticule in the eyepiece viewing system with or without micrometers.

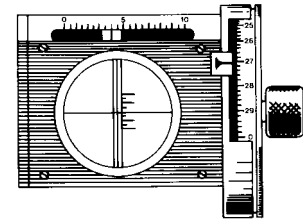
The Taylor Hobson VA900 and TA51 Autocollimators incorporate a micrometer in the eyepiece viewing system for the precise measurements of angular displacement. The TA51 has two micrometers, one in each axis of measurement.

On single axis types, the instrument is rotated through 90 degrees to measure in a second plane.

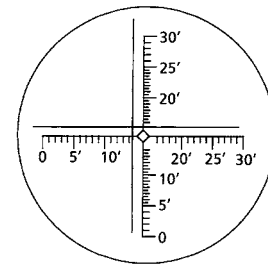
The micrometer is used to move the eyepiece graticule across the field of view until it coincides with the reflected target graticule image. The angular displacement of the reflector can then be read directly from the micrometer scale.

The TA51 Autocollimator is normally supplied with a light field graticule. Only one setting line is used in instruments fitted with dark field graticules.

The VA900 and TA60 Minidekkor Autocollimators are normally fitted with dark field graticules as standard for a better visual contrast from low reflectivity surfaces or a small reflector. However, light field graticule variants can be supplied on request.



Field of view through eyepiece



VA900 Graticule



## TA60 Dual Axis Minidekkor

code 142-10

- **Affordable, lightweight and portable**
- **Wide range of measurement**
- **Can measure X and Y axes at the same time using a graticule**
- **Can measure components of low reflectivity or with small surface area**

The TA60 Minidekkor is an inexpensive visual Autocollimator using a two axes graticule for general measuring duties in workshop and tool room. The standard Minidekkor is provided with a dark field graticule, forming an illuminated cross line image on a dark background. This offers the advantage of clear images being obtained from low reflectivity surfaces such as unsilvered glass, and from surfaces as small as 3mm (0.125in) in diameter.

With the addition of a microscope objective and linear measuring device, the Minidekkor can be used for measuring radius of curvature of a lens or mirror and, for example, the spacing of electrodes enclosed in a glass envelope.

This Autocollimator is supplied as standard without mounting fixtures. Therefore, when ordering it is important to consider the applications and select the appropriate mounting accessories.



## Electro optical metrology

Taylor Hobson has been selling electro-optical metrology products since the last 1930s and the range includes Micro Alignment Telescopes (used for checking and setting straightness and alignment) Autocollimators (for accurate measurement of small angular displacements), clinometers and "Talyvel" electronic levels. Used in a range of applications in industries such as machine tools, aerospace, marine and steel rolling, the Taylor Hobson range combines high accuracy and repeatability with fast response and operational convenience.

To provide focused technical support to all its electro-optical metrology customers, Taylor Hobson has a dedicated technical support centre:

## Spectrum Metrology

Customers with electro-optical measurement needs often require not only equipment but also advice on solving a specific manufacturing or calibration problem. With many years experience in electro-optical metrology, Spectrum Metrology provides rapid technical and application support via phone, fax, e-mail or on-site visits. A full demonstration and training facility is available either on-site or in Spectrum Metrology's demonstration room.

Spectrum Metrology is also the authorised repair agent to Taylor Hobson for the electro optical metrology range and holds a wide stock of ex-demonstration equipment for hire or sale.

Spectrum Metrology can be contacted on:

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