



Talyvel® 6 and Clinometers

For angular & level measurement, flatness,
parallelism, straightness & squareness



Applications

Civil engineering

- Remotely monitoring the tilt movement of structures
- Checking bridge arches for movement before and after construction
- Checking foundation settlement and levelling foundation pads
- Levelling radar, gyro and weapon platforms or large telescopes
- Checking level and straightness of rails

Machine tools

- Checking slideways for straightness and twist
- Checking columns for squareness to slideways
- Checking surface plates for flatness
- Monitoring the settlement of large machinery
- Measuring the camber on rolls
- Parallelism checking and setting

Marine engineering

- Checking the twist of marine engine bed plates
- Alignment of weapon mountings to reference platforms using differential mode
- Checking the parallelism of crankpins to main bearings on marine crankshafts

Talyvel 6 offers:

Wireless option with up to 10 metres range

Intuitive touch screen software on tablet PC/laptop

Quick, accurate and simple setting to gravity, or measurement of level

Unmatched stability of measurements

Large, clear display of dynamic measurement value on screen

Software in various languages including Chinese & Japanese

Unrivalled accuracy of 0.2 arc second over the centre measuring region

Fine ± 10 second range available (using the on-screen analogue meter)



The Talyvel instrument



Talyvel 6 Basic System (Code M112-4515-01)

This compact unit offers stable, high accuracy measurement. Its pendulum type transducer is suspended on fine wires and is silicon oil damped to reduce the effects of mechanical vibration during measurements. Built-in electronics allow the Talyvel level to interface directly to a PC using either the USB cable supplied or an optional wireless dongle. The level contains rechargeable batteries.

The Level Unit incorporates a clamp knob which, when screwed in, secures the pendulum during transport.



Talyvel 6 Differential System (Code M112-4516-01)

Two Level Units (A and B) can be controlled from the computer interface to provide a differential system for measuring the difference in inclination of two surfaces, as well as their departure from absolute level. Display of results from each Level Unit and their differential value are determined by selection of A, B or A-B.

The differential Talyvel is of particular value in applications such as measuring the relative deflections in buildings, in the production and assembly of precision machinery where there may be vibration and for monitoring twist or deflection on moving surfaces, eg ship's engines or machinery on oil rig platforms.



Wireless Dongle Accessory (Optional) (Code 112-4519-01)

The Talyvel can be used in wireless mode with the addition of an optional dedicated wireless receiver which plugs in to the computer USB port and has a range of up to 10 metres.

Computer with built-in Talyvel operator software

(included with all Talyvel systems)

The Talyvel 6 comes with a dedicated software interface which provides a simple button driven user interface for setting up and operating the Talyvel. A large display screen shows the 'live' measurement figures and sequential measurements are tabulated on screen and can be saved to file. An on-screen analogue meter indicates the direction of tilt of the Level Unit (eg for setting Micro Alignment Telescope line of sight horizontal) and can be switched to a fine ± 10 second range, which is very practical when setting to gravity.

Standard 3m USB cables are supplied with Talyvel 6; optional extension cables enable Talyvel 6 to be used at longer distances.

Various languages are selectable including Japanese and Chinese. Additional measurement options and reporting can be carried out using the optional Taylor Hobson optical analysis Software 112-2337 (see page 6).



Electro optical metrology

Taylor Hobson has been selling electro-optical metrology products since the late 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

Electro-optical measurement customers often require 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, e-mail or on-site visits. Full demonstration and training 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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