

Optical Comparator for Dimensional Measurement

An optical comparator projects a magnified image of a part onto a screen for measurement and inspection. It is used for non-contact measurement of dimensions and features of small parts.



Overview

Precision Dimensional Measurement

The Optical Comparator, also known as a profile projector, is a vital tool for high-precision non-contact measurement and inspection. By projecting a magnified image of a part onto a screen, it allows operators to accurately assess dimensions and complex features. This device is essential for quality control in industries manufacturing small, intricate components such as gears, threads, and electronic parts.

Technical Capabilities

Inspection Capabilities

- Surface finish
- Roundness
- Concentricity

Measurable Dimensions

Length, Width, Diameter, Angle, Radius

System Components

System Architecture

- Light source
- Lens system
- Worktable
- Projection screen

Applications

Suitable For

Gears • Threads • Electronic Components