

# 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