

Precision, Quality, Innovation

# HB400



## HORIZONTAL BENCH-TOP OPTICAL COMPARATOR

### HB400

The HB400 Optical Comparator provides exceptional performance with a 16" (400mm) diameter viewing screen, LED lighting, and 110lbs (50kg) workstage load capacity. Available with optical and/or video edge detection which removes operator subjectivity in locating edges of parts being measured. A bayonet style lens mounting system accepts a choice of six fixed interchangeable lenses as well as the 0V2 Zoom or TOV2 fixed telecentric magnification video camera systems. Motorized stage, fully automatic CNC controls and swing-away lamp house are all optional features. This comparator provides performance previously only available with floor standing models.

#### FEATURES AND SPECIFICATIONS

- 16" x 6" X-Y travel workstage (400mm x 150mm)
- All metal construction with hard-anodized stage tooling plate
- Single bayonet-style lens mounting system
- Collimating condenser with yellow/green filter and provision to mount further accessories
- Linear encoder (glass scale) with 20µin (0.5µm) resolution on both X and Y axes
- LED profile and surface illumination
- Fixed duplex fiber optic surface illumination
- Digital protractor for accurate angle measurement (1' resolution) via Q-axis readout
- Available with MetLogix<sup>™</sup> M1 tablet, M2 or M3 measuring software touch-screen and PC, or Mx-Series digital readout.
- Fine adjustment on all axes
- Quick release mechanism on the X-axis

- OPTIONS
- Six interchangeable fixed magnification lenses including 10x, 20x, 25x, 31.25x, 50x and 100x
- Optional 5x fixed or interchangeable lens system available by special order
- Automatic optical edge detection
- Automatic video edge detection (available only with OV2 or TOV2 video cameras and M3 software)
- OV2 Video Camera with 6.5:1 zoom lens
- TOV2 Telecentric Video Camera with choice of 0.3x or 0.5x fixed magnification lens
- Motorized X and Y axes
- Fully automatic CNC controls
- Swing-away lamp house
- Canopy and curtains- free standing design (see Pg. 51)
- Purpose built cabinet stand
- Extensive line of accessories







Optional 5x Lens

#### **OPERATOR INTERFACE**

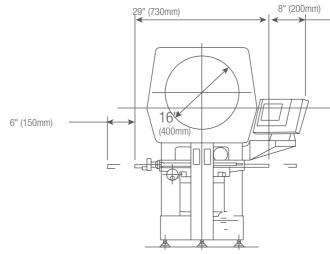
Feature	M1	M2
Optical edge detection (Option)	Х	Х
Geometric Functions	Х	Х
Graphic Based Constructions	-	Х
Tolerancing	-	Х
Data export reporting	Х	Х
Part programming and playback	-	Х
Operating system	MLX Android <sup>™</sup>	MS Windows®
Part view display	-	Х
Feature annotation	-	Х
CNC drive option	-	-
Video edge detection (option)	-	-
CAD file import and export option	-	-
Software developer	MetLogix™	MetLogix™

#### SPECIFICATIONS

		HB400
	Horizontal Travel	16" (400mm)
	Vertical Travel	6" (150mm)
	Focus Travel	2" (50mm)
	Top Plate*	21" x 5" (530mm x 120mm)
	Image	Erect and reversed
*With machined slots for easy fixturing		

\*With machined slots for easy fixturing

#### HB400 DIMENSIONS

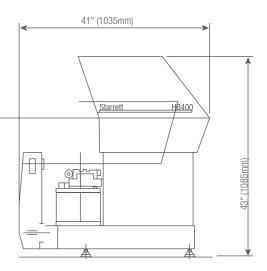




M3	Mx100	Mx200
Х	-	Х
Х	-	Х
Х	-	Х
Х	-	Х
Х	Х	Х
Х	-	Х
Windows®	MLX Android <sup>™</sup>	MLX Android <sup>™</sup>
Х	-	-
Х	-	-
Х	-	-
Х	-	-
Х	-	-
MetLogix™	MetLogix™	MetLogix™

#### WEIGHT AND DIMENSIONS

	HB400
Net Weight	320lbs
Iver weight	145kg
Shipping Woight	385lbs
Shipping Weight	175kg
Shipping Dimensions	49" x 32" x 51"
	(125cm x 81cm x 130cm)



#### STARRETT PRODUCT LINES

**Band Saw Blades** 

Force Measurement

Jobsite & Workshop Tools

Laser Measurement

Metrology Equipment

**Precision Granite** 

**Precision Ground Solutions** 

**Precision Measuring Tools** 

PTA & Hand Tools

Service

Webber Gage Blocks

# METROLOGY SYSTEMS





www.starrett-metrology.co.uk





Phone: 00 44 (0)1835 863501 | Email: Metrology@starrett.co.uk Oxnam Road, Jedburgh TD8 6LR Scotland UK