

# OPTICAL PROFILE PROJECTORS

HE400

HB400

**HD400**

VB400

VF600

HF600

HF750

HS600

HS750

HS1000



## **HD400** HORIZONTAL BENCHTOP OPTICAL PROJECTOR



# Starrett®

METROLOGY  SOLUTIONS

[www.starrett-precision.co.uk](http://www.starrett-precision.co.uk)



A robust, compact horizontal axis bench top projector, the HD400 provides a vertically correct image on a fully usable 400mm (16") diameter screen. With a significantly larger measuring capacity, this projector provides a measurement range previously only possible on floor-standing units.

Key features on this projector include:

- Dual lens slide providing an ultra-quick lens change
- One third more X-axis travel than the single lens HB400.



## Features & Specifications

- Available with a choice of the new Metlogix M2 or Quadra-Chek readout systems (as shown).
- Fully usable 400mm / 16" diameter screen with precision cross lines, overlay clips and integral hood.
- Large measuring travel: 406mm / 16" X-axis, 152mm / 6" Y-Axis.
- Fully retractable duplex fibre optic surface illumination.
- Fine adjustment on all axes, plus zero backlash, fast traverse mechanism on the X-axis.
- Exceptionally stable, all metal construction for optimum performance and accuracy.
- Dual lens slide with quick action change.
- Dual mirror design giving a vertically correct image.
- High precision workstage with 540 x 130mm / 21.25 x 5" top plate, with machined slots for easy fixturing.
- Motorised and CNC workstage options available.
- Stage weight capacity: 50kg / 110lbs (evenly distributed).
- 10x, 20x, 25x, 31.25x 50x and 100x lenses available.
- Rotary workstage helix adjustment
- 0.001mm resolution Heidenhain linear scales.
- Automatic edge detection option.
- Purpose built support cabinet available as an option.
- Large range of accessories available, including screen overlay templates.
- Power supply 110 / 120 / 230 / 240 / 250V AC 50 / 60Hz.

## M2 Touchscreen Readout

The Metlogix M2 readout has a broad range of powerful, user-friendly functions on a compact, icon based touchscreen interface in place of the traditional control.



## Quadra-Chek Readouts

The Quadra-Chek readout range is considered as the industry standard for the precision measurement and inspection of geometric components.

Their design reflects a deep understanding of user needs, with an intuitive user interface and simple, meaningful visual displays; innovations that improve operator productivity, reduce errors and save time and money.



READOUT OPTIONS								
SPECIFICATION:	QUADRA-CHEK						METLOGIX	
	SR121	SR221	SR221e	QC321	QC321e	SR515	M2	M2e
Touchscreen operation				•	•		•	•
Angular digital measurement in readout	•	•	•	•	•	•	•	•
X-Y-Q axis only digital readout	•							
Geometric function digital readout		•	•	•	•	•	•	•
Computer with geometric s/ware readout.						•		
On screen edge sensing			•		•	•		•
Functions •								

## Field of View Terminology:

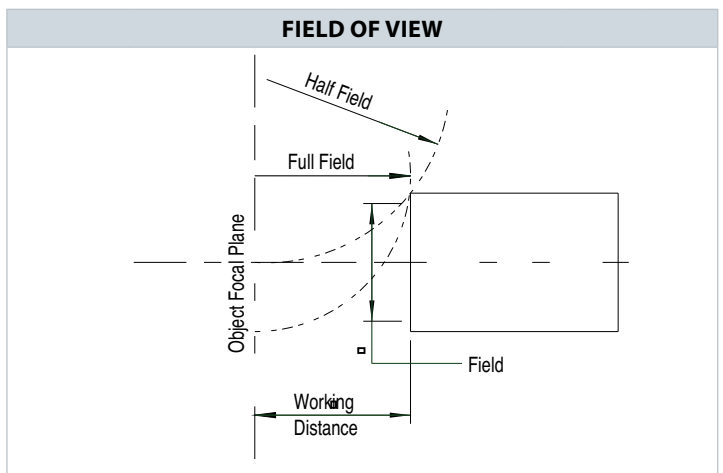
**Working Distance:** Is the distance between the objective lens and the component when the component is in focus.

**Field of View (FOV):** Is the viewing area of the component. A 30mm FOV using a 10x lens would produce a screen image of 300mm.

**Half Field View:** Is the maximum size a component can be projected to the centre of the screen before colliding with the lens.

**Full Field View:** Is the maximum size a component can be projected over the full screen before colliding with the lens.

**Projected Image:** Is how a component is projected onto the screen in relation to its placement on the workstage.



GUIDE TO MAXIMUM COMPONENT SIZE (MM)							
MAGNIFICATION		X5	X10	X20	X25	X50	X100
Field of View		80	40	20	16	8	4
Working Distance		135	80	76	62	50	41
Max Work Diameter	Half Field	280	245	245	263	185	106
	Full Field	280	180	200	250	125	98
Projected Image		Vertically Correct					

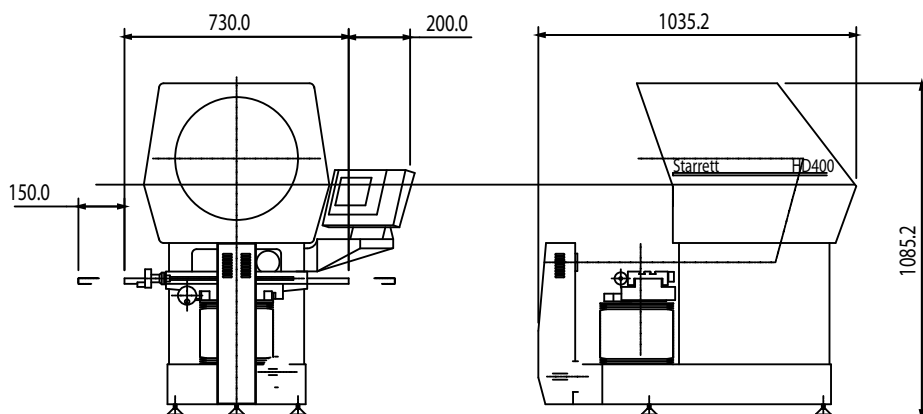
## HD400 Dimensions

HD400 dimensions are as listed in the image, all measurements are in millimetres.

Gross Weight: 170kg.

Nett Weight: 145kg.

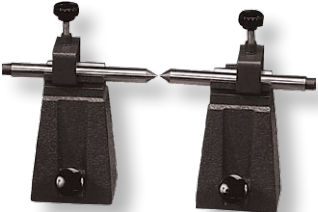


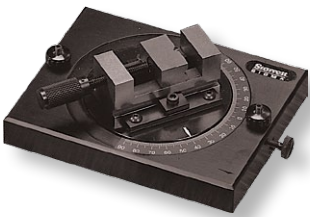
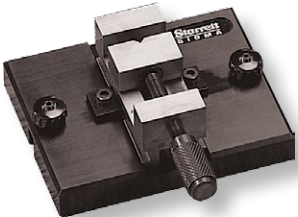

Shipping dimensions: 120 x 80 x 127cm.



## Accessories

Starrett manufacture a comprehensive range of fixtures and accessories to suit our full range of profile projectors.

Each accessory is made from the highest quality material and is machined, assembled and inspected to the same stringent quality standards as the projector itself.

ACCESSORIES					
					
PART NO	DESCRIPTION	PART NO	DESCRIPTION	PART NO	DESCRIPTION
7P000	Precision Centres and Vees	7U000	Vertical Glass Plate Holder	4U000	Magnification Check Graticule
					
PART NO	DESCRIPTION	PART NO	DESCRIPTION	PART NO	DESCRIPTION
4H003	32mm Capacity Rotary Vice	4H002	32mm Capacity Fixed Vice	4H004	Universal Rotary Vee Block

## PROJECTOR SUPPORT CABINET



PART NO	DESCRIPTION
7R000	Standard Projector Support Cabinet with single fixed shelf.

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