

**HE400**

HB400

HD400

VB400

VF600

HF600

HF750

HS600

HS750

HS1000



## **HE400** HORIZONTAL BENCHTOP OPTICAL PROJECTOR



# Starrett®

METROLOGY  SOLUTIONS

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



This machine offers a 400mm screen, 250mm x-axis table travel, bayonet fitting lenses and Q-axis angular readout; all to improve capacity and performance.

This latest horizontal projector is fitted with the industry leading Quadra-Chek or Metlogix digital readout systems as standard, making it simplicity itself to use, but having the power to satisfy the most complex of measuring requirements.

It is very competitively priced and built to the same mechanical standards as the rest of the Starrett range of projectors.

## 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: 254mm / 10" X-axis, 100mm / 4" 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.
- Lamphouse mounted helix adjustment for accurate threadform inspection.
- High precision workstage with 480 x 120mm / 18.9 x 4.7" top plate, with machined slot for easy fixturing.
- Stage weight capacity: 25kg / 55lbs (evenly distributed).
- 10x, 20x, 25x, 31.25x 50x and 100x lenses available.
- Screen driven rotary Q axis.
- 0.001mm resolution linear Heidenhain 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.

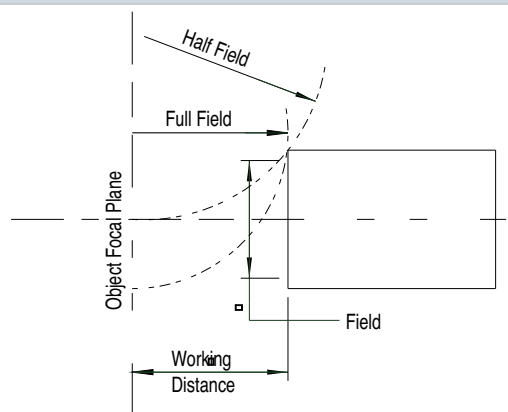
**Field of View (FOV):** Is the viewing area of the component. A 30mm FOV using a 10x lens would produce a screen image of 300mm.

**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.

### FIELD OF VIEW



### GUIDE TO MAXIMUM COMPONENT SIZE (MM)

MAGNIFICATION		X10	X20	X25	X50	X100
Field of View		40	20	16	8	4
Working Distance		80	82	70	53	43
Max Work Diameter	Half Field	145	148	138	154	134
	Full Field	148	148	150	130	100
Projected Image		Fully reversed				

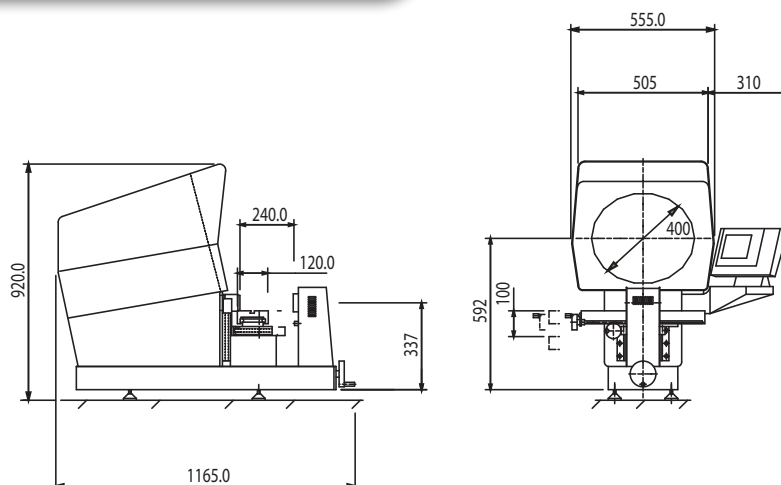
## HE400 Dimensions

HE400 dimensions are as listed in the image, all measurements are in millimetres.

Gross Weight: 135kg.

Nett Weight: 105kg.

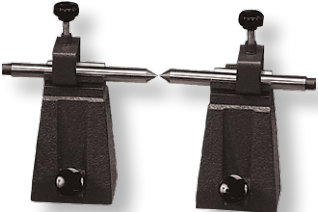


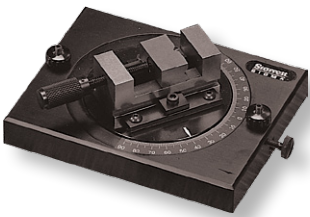
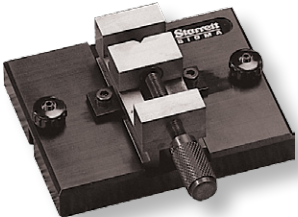

Shipping dimensions: 120 x 80 x 127cm.



## 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
4G000	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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