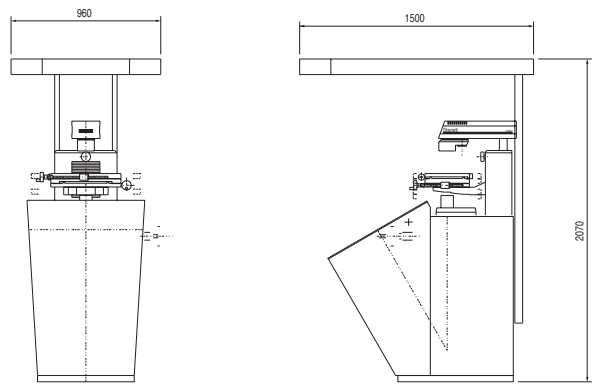# VF600



## Vertical Floor Standing Optical Projector

If your measuring requirements determine the use of a large screen, vertical axis projector then look no further than the Starrett VF600.

A design based upon 35 years of knowledge in the manufacture of high performing optical projectors, the VF600 has a market leading specification.

The VF600 is ideal for the larger components found in the electronics, pressings and extrusion industries.

With helix facility, single or multiple lens turret, choice of workstages and large range of digital readout options the VF600 is the ultimate in vertical axis profile projectors.

- ▸ Fully usable 600mm (24") diameter screen.

- ▸ Screen angled at an optimum 30° to give bright, easily viewed image, and allowing easy tracing or overlay work.

- ▸ Choice of two workstage size options with manual, motorised or CNC control.

- ▸ Fast traverse, quick release mechanism on X and Y axis.

- ▸ Supplied complete with full canopy and curtains.

- ▸ Single lens mount or 3-lens quick change turret using silo system for maximum lens protection.

- ▸ Available with the full range of Quadra-Chek readout systems.

- ▸ Electronic digital protractor.

- ▸ Comprehensive range of multi-element precision ground lenses.

- ▸ Large range of accessories available.

- ▸ Lamp mounted helix facility.

## Technical Specification

**Starrett**®

### Screen Diameter
600mm (24") with precision cross lines, calibration markings and overlay clips.

### Workstage
Top plate - 400 x 225mm (16 x 9").
Measuring Travel - 200mm x 100mm (8 x 4").

### Workstage Capacity
30kg (66lb) maximum.
(Evenly distributed).

### Illumination
**Profile** - Fan cooled, 150w halogen with yellow/green filter.
**Surface** - Fan cooled 100w lamp/fibre optic system.

### Measurement/display systems
**Linear** - Heidenhain scales (0.001mm resolution). Simple DRO or Quadra-Chek readout systems with edge sensing option.

**Angle** - Digital protractor (1 minute resolution). Quadra-Chek Q-Axis.

### Lenses
x10, x20, x25, x $31\frac{1}{4}$, x50, x100 (x5 to special order).

### Power Supply
110/120/230/240/250V.AC 50/60Hz.
Consumption 5A.

**Visit our Web-Site at www.starrett-precision.co.uk**

# Starrett

®

## Precision Optical

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| VF600 Specification: | SR121 | SR221 | SR221e | SR515 | SR515 CNC |
|---|:---:|:---:|:---:|:---:|:---:|
| Rigid steel body | ● | ● | ● | ● | ● |
| Standard workstage 200 x 100mm travel | ● | ● | ● | ● | ● |
| Extended workstage 250 x 150mm travel | ○ | ○ | ○ | ○ | ○ |
| Anti-corrosion nickel plated workstage top | | | | | |
| Rotary screen & clips | ● | ● | ● | ● | ● |
| Handwheel X and Y drive control | ● | ● | ● | ● | |
| Motorised joystick control | ○ | ○ | ○ | ○ | |
| CNC control | | | | | ● |
| Angular digital protractor | ● | ● | ● | ● | ● |
| Angular digital measurement in QC DRO | | | | | |
| X-Y axis only digital readout | ● | | | | |
| Geometric function digital readout | | | ● | ● | |
| Computer with geometric s/ware readout. | | | | ● | ● |
| On screen edge sensing | | | ● | ● | ● |
| Internal edge sensor | | | | | |
| Single interchangeable lens mount | ● | ● | ● | ● | ● |
| Dual lens slide | | | | | |
| Multi lens turret | ○ | ○ | ○ | ○ | ○ |
| Fibre optic surface illumination | ● | ● | ● | ● | ● |
| On-axis surface illumination | | | | | |
| Single condenser | | | | | |
| Dual condenser slide | | | | | |
| Multi condenser turret | ● | ● | ● | ● | ● |
| Yellow/green light filter | ● | ● | ● | ● | ● |
| Available lenses (See guide below) | ○ | ○ | ○ | ○ | ○ |
| X5 magnification lens | ○ | ○ | ○ | ○ | ○ |
| X31¼ magnification lens option | ○ | ○ | ○ | ○ | ○ |
| Standard or deluxe support cabinet | | | | | |
| Canopy and curtains | ● | ● | ● | ● | ● |
| Work holding accessories | ○ | ○ | ○ | ○ | ○ |
| Magnification checking graticule | ○ | ○ | ○ | ○ | ○ |
| OV² Optical video adaptor | | | | | |
| Screen overlay templates | ○ | ○ | ○ | ○ | ○ |

Standard ● Optional ○

| Guide to Maximum Component Size (mm) | | | | | | |
|---|:---:|:---:|:---:|:---:|:---:|:---:|
| **Magnification** | **X5** | **X10** | **X20** | **X25** | **X50** | **X100** |
| Field of View | 120 | 60 | 30 | 24 | 12 | 6 |
| Working Distance | 220 | 138 | 127 | 103 | 88 | 44 |
| Max Work Diameter — Half Field | 140 | 140 | 140 | 140 | 140 | 140 |
| Max Work Diameter — Full Field | 140 | 140 | 140 | 140 | 140 | 98 |
| Projected Image | Fully Reversed | | | | | |
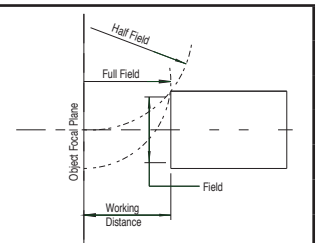
## Terminology:

**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.*