

# SM350 PROFILE PROJECTOR

The 2010 SM350 is an all new design. This vertical 14" / 350mm screen bench projector features an option where the focus axis can also be used as a 3rd measurement axis.

This enables Z axis height measurements to be taken using a touch trigger probe. Another new feature is the option of a three lens turret for instant lens changes without re-calibration.

## Standard Features

- Fully usable 340mm screen
- Digital screen protractor
- Built in helix adjustment
- Sturdy all-steel design
- Cross roller bearings
- Quick release 'X' and 'Y' travel
- Erect image
- Easy-view vertical screen
- Large stage travel 10" (250mm) x 5" (125mm)
- Rotating chart clips
- Fibre optic illumination for surface measurement
- Includes 10x lens

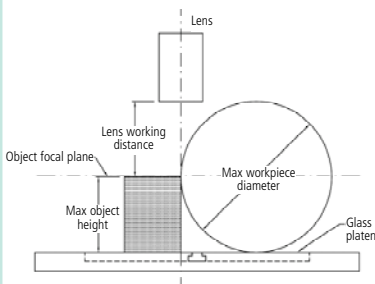
## Optional Features

- Automated measurement system with joystick control
- Automatic edge sensing
- Motorised focus axis
- Heavy duty cabinet
- Touch trigger probe for fast Z axis measurement
- 3-Position turret



SM350

Vertical stage systems



SM350 Lens Working Capacity mm / (inches)

Magnification	x10	x20	x25	x50	x100
Field of view	34 (1.33)	17 (0.66)	13.5 (0.53)	6.8 (0.26)	3.4 (0.13)
Workpiece distance	83.98 (3.30)	37.05 (1.45)	29.42 (1.15)	16.58 (0.65)	41.18 (1.62)
Max work diameter (Full field)	170.67 (6.71)	129.9 (5.11)	74.82 (2.94)	37.43 (1.47)	90.94 (3.58)
Max work diameter (Half field)	220 (8.66)	162.27 (6.38)	52.62 (2.07)	51.51 (2.02)	139.94 (5.50)
Max workpiece height	114 (4.48)	113 (4.44)	106 (4.17)	111 (4.37)	103 (4.05)

## Basic Machine

Type	Bench standing with vertical light path
Screen	Rotating 340mm (14") diameter, vertically mounted with hood
Image	Erect and reversed
Power supply	220 / 240 volt 50Hz or 110 volt 60Hz
Weight	133kg

## The basic SM350 model consists of

- 340mm (14") screen with 90 degree crosslines and chart clips
- Profile illumination with halogen lamp and green filter
- Lens magnification choice: x10, x20, x25, x50, x100
- Surface illumination (fibre optic)
- Helix adjustment of light source for accurate thread form projection
- SA-2510 precision workstage with 250 x 125mm measuring range, 0.0005mm
- Digital angle measurement

## Optical System

Lens mount	Single, quick change with lock nut, optional 3 lens turret
Lens magnification	x10, x20, x25, x50, x100
Focusing	By hand wheel
Magnification accuracy	Profile 0.05%. Surface 0.1%
Helix adjustment	$\pm 7^\circ$ by light source alignment
Light source	Profile illumination 12v 100w lamp Surface illumination 12v 100w lamp
Surface Illumination	Twin adjustable fibre optic light guides

## Measuring options

**XLS:** A simple 2 axis digital readout for X&Y measurement

**GXL:** Incorporates geometric functions for skew alignment, angle radii measurement, pitch circle diameter and construction of intersect points etc

**GXL-E:** As GXL with screen mounted automatic profile edge sensor. As an option the sensor can be fitted internally

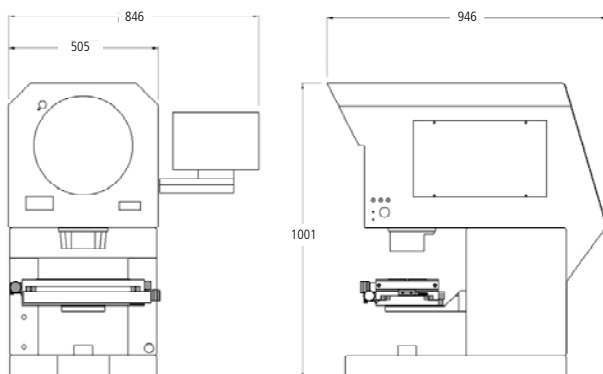
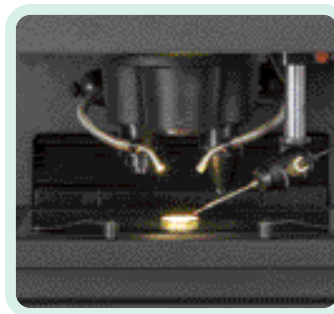
**Fusion 2:** Fusion PC based measuring system produces dimensioned part drawing, includes geometric tolerancing, SPC, full reporting with pass / fail analysis, auto Excel™ link and auto sequence program

**Fusion 2-E:** As Fusion 2 with screen mounted automatic profile edge sensor. As an option the sensor can be mounted externally.

**Fusion-2E-CNC:** Fusion PC based measuring system, motorised X & Y axis with joystick control and CNC position programming for automatic measuring.

## Accessories

See page 81.



SM350-GXL