

FLYING SPOT SCANNER 310

Flexible, standalone ROI inspection

The Flying Spot Scanner (FSS) provides OCT measurements for distance, thickness and topography based on a unique break-through technology that enables high-speed, non-contact inspection for quality assurance across a wide range of materials and surfaces. The FSS 310 version will fundamentally change the semiconductor market. Thanks to its huge scan area of 310 mm, a 12-inch diameter wafer can be fully checked for TTV, bow and warp in less than 10 seconds. Including handling, this enables a throughput of over 300 wafers per hour. Thanks to the movable mirror system, long paths of linear axes are replaced by short rotary movements, which significantly reduces measuring times and does away with the need for a precision axis.

Multiple software interfaces and tools enable you to easily set up your application. You can define your own measurement procedure by creating a list of measurement geometries. The standalone optical sensor CHRocodile 2 IT stores the customized procedure and autonomously controls the probe. Finally, the software visualizes the results and statistics.



DISTANCE

THICKNESS

TOPOGRAPHY

EFFICIENT

- ▶ Precise on a wide range of materials
- ▶ Flexible inspection in lowest possible cycle time
- ▶ Nanometer resolution

VERSATILE

- ▶ High-speed region of interest inspection for 100% offline and inline quality control
- ▶ Ultra-fast ROI inspection with user-definable scan trajectories

USER-FRIENDLY & SAFE

- ▶ Simple to integrate
- ▶ Non-contact, non-destructive
- ▶ Robust
- ▶ Pilot laser



TECHNICAL SPECIFICATIONS OF FLYING SPOT SCANNER

Flying Spot Scanner 310 mm (CHRcodile 2IT DW)

Measured value	Thickness, distance
Measuring rate	Up to 70,000 Hz
Measuring range	Depends on CHRcodile 2 IT sensor used
Working distance	150 mm
Max. jump speed ¹⁾	10 m/s
Scan area (diameter)	310 mm
Lateral resolution CHRcodile 2 IT DW	20 µm
Numerical aperture	0.018
Measurement angle to surface	90° ± 1°
Operating temperature	+10°C to +30°C
Dimensions (h x d) with optics	742 mm x 360 mm
Weight (lens plus scanner)	29.1 kg
Supply voltage	24 V DC (with separate power supply 90 - 264 V AC)
Rated power	Max. 60 W
Item number	5102900

1) Max. movement speed of measurement spot

The given data was generated for a typical application and may be different given other circumstances. Furthermore, misprints, changes and/or innovations may lead to differences in the listed measurements, technical data and features. All information is therefore non-binding and technical data, measurements and features are not guaranteed.

Precitec 3D Metrology - measure more precisely with light