

PRODUCT

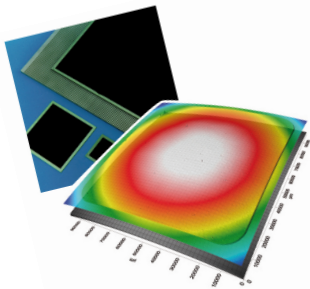
cyberSCAN

CT 600ST

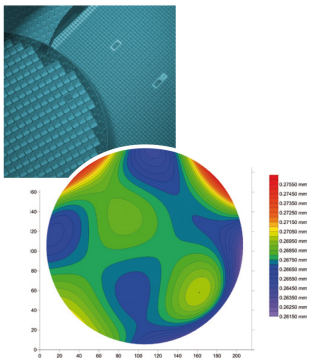
- DUAL NON-CONTACT MEASUREMENT SYSTEM FOR LARGE PARTS
- 3D MAPPING OF THICKNESS, BOW, WARPAGE AND ROUGHNESS
- USER FRIENDLY CONCEPT
- SOPHISTICATED ANALYSIS AND AUTOMATION SOFTWARE



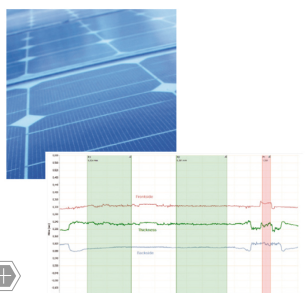
Thickness of a Fuel Cell Component



Wafer Thickness Map (TTV)



Front- and Backside Metallization of a Solar Cell



OVERVIEW

The cyberSCAN CT 600ST is a double-sided non-contact profilometer with a 600 mm x-, y-motion system. The gantry system covers an area of 24". The motion system combines mechanical axes with high precise air bearings for maximum motion accuracy. In combination with the fast chromatic white light linesensors the inspection time is minimized. The CT 600ST is ideal for measuring large parts. The sensors are available with a z-resolution down to 20 nm with integrated autofocus function for top & bottom sensor. The multisensory technology allows to mount several sensor heads simultaneously.

APPLICATIONS

Typical applications for the CT 600ST are the analysis and quality control of large parts, such as large wafers, PCBs, substrates, glass and other optical components. Thickness, geometry and position measurement of highly contoured objects like lenses, gaskets, turbine blades, as well as flatness and coplanarity analysis are other popular applications.

- Total thickness variation (TTV)
- Flatness, warpage and bow
- Printed products, systems or devices
- Panel level packaging devices
- Fuel cell elements
- Medical devices

SOFTWARE

The proprietary cyberTECHNOLOGIES, Windows based software package SCAN SUITE combines system control, data collection and data analysis in a user friendly interface. Comprehensive profile, 3D and roughness analyses conforming to DIN ISO are included. The software can handle up to 20.000 x 20.000 data points in one scan. An outstanding feature is the ASCAN Software:

- Automation of measurement routines
- Easy programming using tasks and templates
- Offset and fiducial correction
- Built-in SPC Charts with reporting function
- Flexible, user defined data output format
- Barcode or user field input
- Step & Repeat function
- Comprehensive user management for access control

TECHNOLOGY

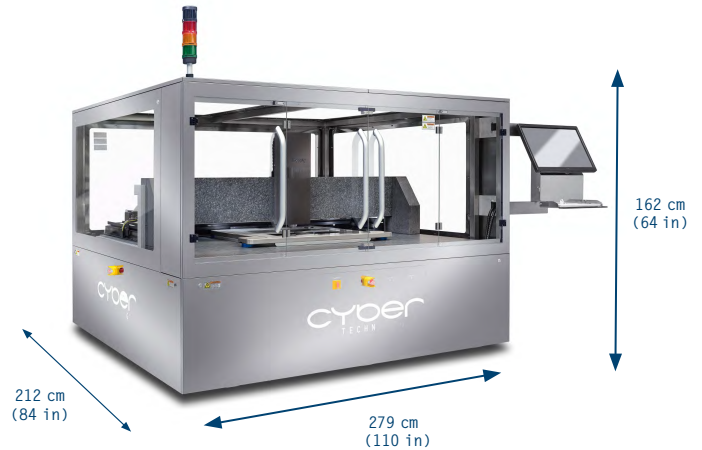
- Fast and accurate gantry system with air bearings
- Measurement speed: 2000 datapoints/sec. (6000 datapoints/sec. optional)
- 600 mm travel in x- and y-direction, lateral resolution 0.05 µm
- Motorized z-axis for top & bottom sensor
- 2D profiles and 3D topographical maps Large scanning area, up to the maximum travel of 600 mm at maximum x-, y-, z-resolution
- Chromatic white light sensors
- Resolution down to 20 nm
- High resolution off-axis camera

SYSTEM INCLUDES

- CT 600ST base unit with motorized x-, y- and z-stage
- Two sensors of choice (see sensor specifications)
- System control console
- Joy-Stick Control
- PC Workstation (current version)
- Factory installed Windows 10 and cyberTECHNOLOGIES SCAN SUITE license
- 24" widescreen monitor, keyboard, mouse
- Reference manuals and user guides

OPTIONS

- ASCAN Software for automation of measurement tasks and analyses, 2D and 3D, Step & Repeat
- High speed sensor & controller (6000 datapoints / sec.)
- Additional sensors
- Traceable calibration tools and certification targets



SPECIFICATIONS

DIMENSIONS (L X W X H)

2785 x 2120 x 1620 [mm]
(110 x 84 x 64 [in])
including control panel
and signal tower

WEIGHT

2500 kg (5500 lbs)

SYSTEM CONTROLLER

Includes Motion Control,
Sensor Controller (4 kHz), Power Supplies,
USB Interface to Workstation

WORKSTATION PC

Inquire about current specification,
24" widescreen monitor

CONNECTIONS

Ethernet, DVD Drive, USB (front and back side),
Parallel Port, Keyboard, Mouse, DVI and Analog
Video Output

POWER REQUIREMENTS

100-240 V AC, 50-60 Hz, 2.0 amps (240 V), 5 amps (100V)

OPERATING TEMPERATURE

20°C (68F)

MEASUREMENT SURFACE SIZE

600 x 600 [mm] (24 x 24 [in])

LINEAR ENCODER RESOLUTION

0.05 µm (2 µin)

MINIMUM LATERAL RESOLUTION

1 micron

TRAVEL LIMITS IN X AND Y (MOTORIZED)

600 x 600 [mm] (24 x 24 [in])

TRAVEL LIMIT IN Z (MOTORIZED)

100 mm (4 in) (top & bottom)

AVAILABLE SENSORS

Confocal White Light Sensors