

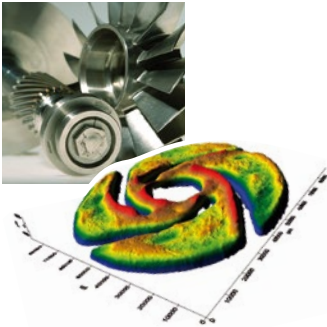
PRODUCT

# cyberSCAN CT 600S

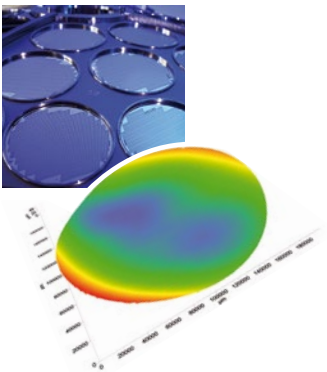
- SCANNING GANTRY SYSTEM FOR LARGE SAMPLES OR PRODUCTION TRAYS
- LARGE 600 MM X 600 MM SCANNING AREA
- USER FRIENDLY CONCEPT
- SOPHISTICATED ANALYSIS AND AUTOMATION SOFTWARE



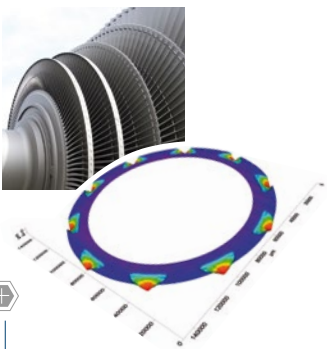
Topography of an impeller part



Flatness of a silicon wafer



Flatness of an turbine gasket



## OVERVIEW

The cyberSCAN CT 600S is a non-contact profilometer with a 600 mm x-, y-motion system. The gantry system covers an area of 24". The massive gantry design with air bearings is moving the sensor/camera assembly while the sample is fixed on the granite platform. The CT 600S is ideal for measuring parts that are large and heavy. The weight of the sample is not affecting the motion accuracy of the system. 3D circular or ellipsoidal raster scans can be performed. In combination with the fast chromatic white light sensors the inspection time is minimized. The sensors are available with a z-resolution down to 3 nm and a measurement range up to 25 mm. With our multisensory technology several sensor heads can be mounted simultaneously.

## APPLICATIONS

Typical applications for the CT 600S are the analysis and quality control of large and heavy parts, such as machined parts, glass and other optical components. Geometry and position measurement of highly contoured objects like lenses, gaskets, turbine blades, as well as flatness and coplanarity analysis are other popular applications. The CT 600S maintains high accuracy across the entire travel, larger parts such as optical components, machined parts or gaskets are inspected fast and precisely.

- Gaskets and large mechanical parts
- Lenses and other optical components
- Printed products, systems or devices
- Device packaging, printed circuits etc. in production trays
- 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 10.000 x 10.000 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

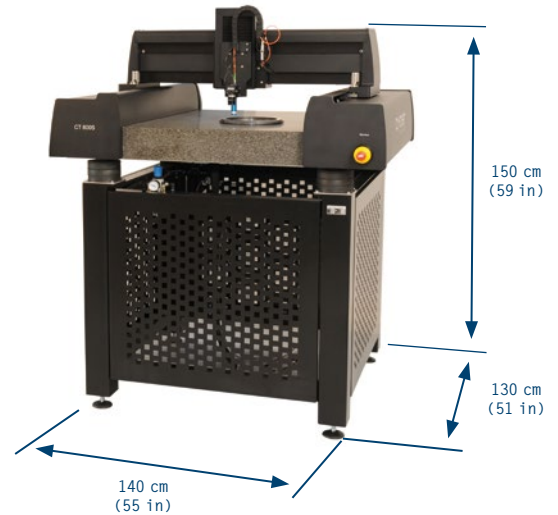
- Fast and accurate gantry system with air bearings
- Measurement speed: 4 kHz (14 kHz optional)
- 600 mm travel in x- and y-direction, lateral resolution 0.05  $\mu\text{m}$ , motorized z-axis
- 2D profiles and 3D topographical maps
- Large scanning area, up to the maximum travel of 600 mm at maximum x-, y-, z-resolution
- Chromatic white light sensors
- Resolution down to 3 nm, measurement range up to 25 mm
- High resolution off-axis camera

## SYSTEM INCLUDES

- CT 600S base unit with motorized x-, y- and z-stage
- One sensor of choice (see sensor specifications)
- System control console
- Joy-Stick Control
- PC Workstation (current version)
- Factory installed Windows XP and cyberTECHNOLOGIES SCAN SUITE license
- 22" 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 and controller (14 kHz)
- Additional sensors
- Square shaped optical flat for flatness calibration
- Traceable calibration tools and certification targets



## SPECIFICATIONS

### DIMENSIONS (L X W X H)

1400 x 1300 x 1500 [mm] Gantry System  
(55 x 51 x 59 [in])

1000 x 1100 x 1200 [mm] Control Console  
(39 x 43 x 47 [in])

### WEIGHT

650 kg (1220 lbs)

### SYSTEM CONTROLLER

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

### WORKSTATION PC

Inquire about current specification,  
22" 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)

### AVAILABLE SENSORS

Confocal White Light Sensors