



# ZEISS METROTOM 1

# ZEISS METROTOM 1

## Main features



### See even small details

#### Thanks to a high-resolution 6MP detector

Discover even small details with high resolution. An object with 15 cm in diameter can be reconstructed with 68  $\mu\text{m}$  voxel size\*.



### No maintenance

#### Closed micro-focus X-ray tube

Within a closed tube, the vacuum, created during manufacturing process, lasts over the lifetime of the X-ray tube and, therefore, no maintenance of the tube is required.



### Smart design

#### Small and flexible

The total space requirement is  $< 1.6 \text{ m}^2$  and can therefore be positioned very flexibly. It is not necessary to provide additional space for the service behind, above and on the right side of the system.



### Measure and inspect small to mid-size plastic parts

Plastic components with a height or diameter of up to 165 mm can be unexpectedly easily scanned and measured.



### Easiest operation

#### Scanning and evaluating by the touch of one button

The simplified setup of the CT results in a very simple operation with minimal influence by the operator. This leaves little room for error and therefore requires little training for the operator.

# ZEISS METROTOM 1

Technical specification



## The new simplicity in CT technology

### Technical specifications\*:

- Tube voltage: 160 kV
  - Target performance: 600 W
  - Measuring volume: 165 x 140 mm\*
  - Voxel size: ~ 68  $\mu\text{m}^*$
  - Detector: 2560 x 2560 px
  - Active temperature balancing
  - Dimensions: 1.750 x 1.820 x 870 mm
  - Weight: 2.100 kg
- 
- Distance Tube – Sample/Part: 555 mm\*
  - Distance Tube – Detector: 670 mm\*



\* Values might be subjects to minor changes.

### The new simplicity in CT technology

#### Power rating:

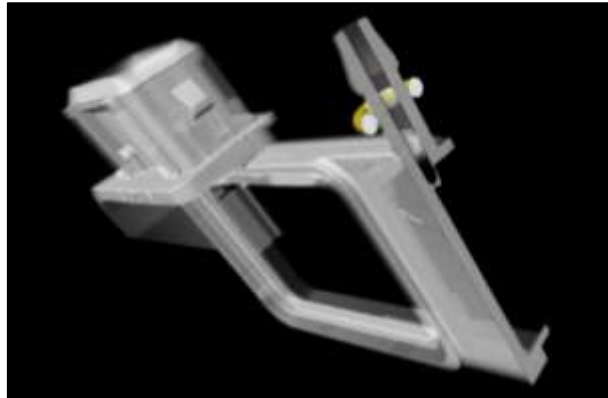
- Power supply: 3x220/340/374/400/440/484 V ~ (+-5%)
- Type of current: L1/L2/L3/(N)/PE
- Frequency: 50 - 60 Hz (+-3.5%)
- Max. power consumption: 6 kVA
- Typ. energy demand: 4 kWh
- Heat emission for typ. Energy demand: 1 kW
- Fuse: C25A



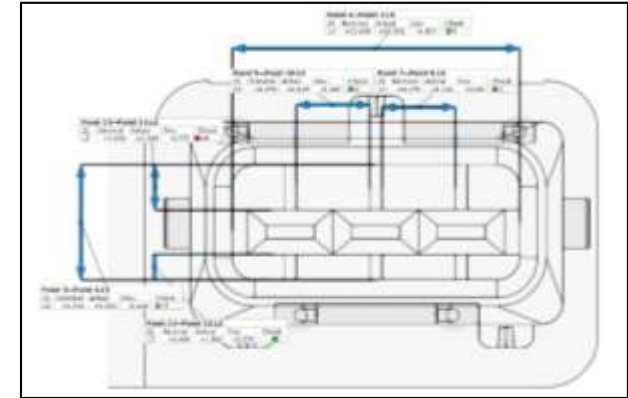
# Powerful solution powered by GOM Volume Inspect



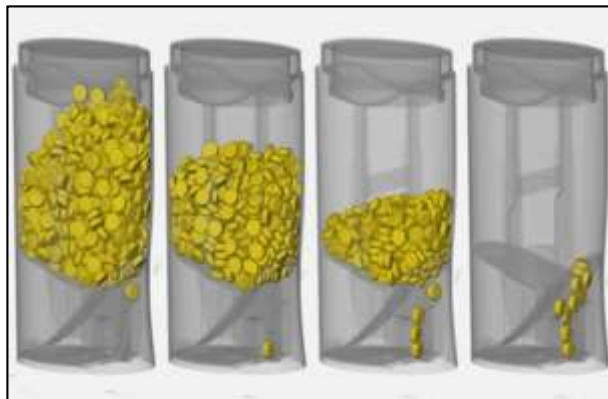
Volume visualisation



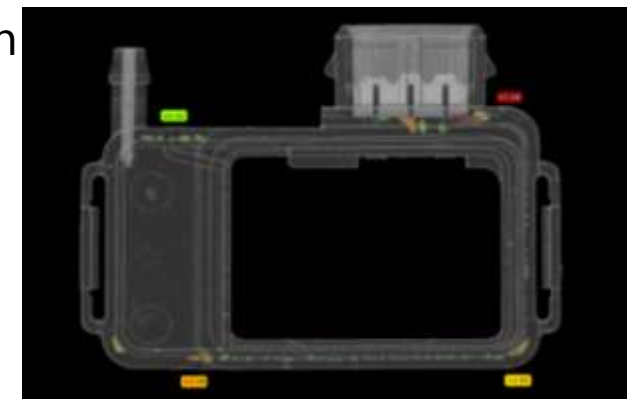
Dimensional Metrology



Trend Analysis and Comparisons



Defect detection and inspection



# ZEISS METROTOM 1

First 7 reasons to buy



## The new simplicity in CT technology

### 1. Best in-class performance

The ZEISS METROTOM 1 is a 160 kV CT system with a 600 W tube. In combination with a 2.5k detector it provides high image quality. All of that with a very good price-performance ratio.

### 2. Low cost-of-ownership

The tube of the ZEISS METROTOM 1 will need no maintenance when in operation. This makes the whole system low in maintenance and reduces therefore the cost-of-ownership.

### 3. Simple operation

The simplified setup of the CT leads to a very easy operation with small operator influence. This leaves little room for mistakes and, hence, requires only little training for the operator.

### 4. Small footprint

Due to the small footprint of only 1750x1820x870 mm\* the system can be positioned very flexibly. It is not necessary to provide extra space for service behind, above, and on the right of the system.



### 5. Easy installation

The system will be delivered in one part so that it can be easily installed at the customer's site, even if there are infrastructural restrictions, e.g. small doors or wall heights.

### 6. Worldwide sales and service centers for local support

Native speaking service technicians and trainers available.

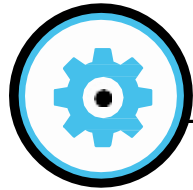
### 7. GOM CT Professional

Leading CT software with additional features for your needs – one software for scanning and analysis, including GOM Volume Inspect.

\* Values might be subjects to minor changes.

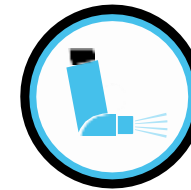
# Application Examples

# Applications



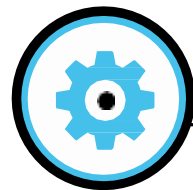
## Industry

- ✓ Injection molded parts
- ✓ Light metal parts
- ✓ Composites



## Medical

- ✓ Injectors
- ✓ Dental
- ✓ Injection molded parts



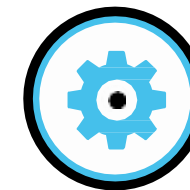
## Education

- ✓ Universities
- ✓ Engineering labs



## Automotive

- ✓ Alu casting
- ✓ Dashboard components



## Consumer goods

- ✓ Packaging
- ✓ Assembly
- ✓ 3D printed plastic parts



## 03

## Examples

### Example: Plastic cover

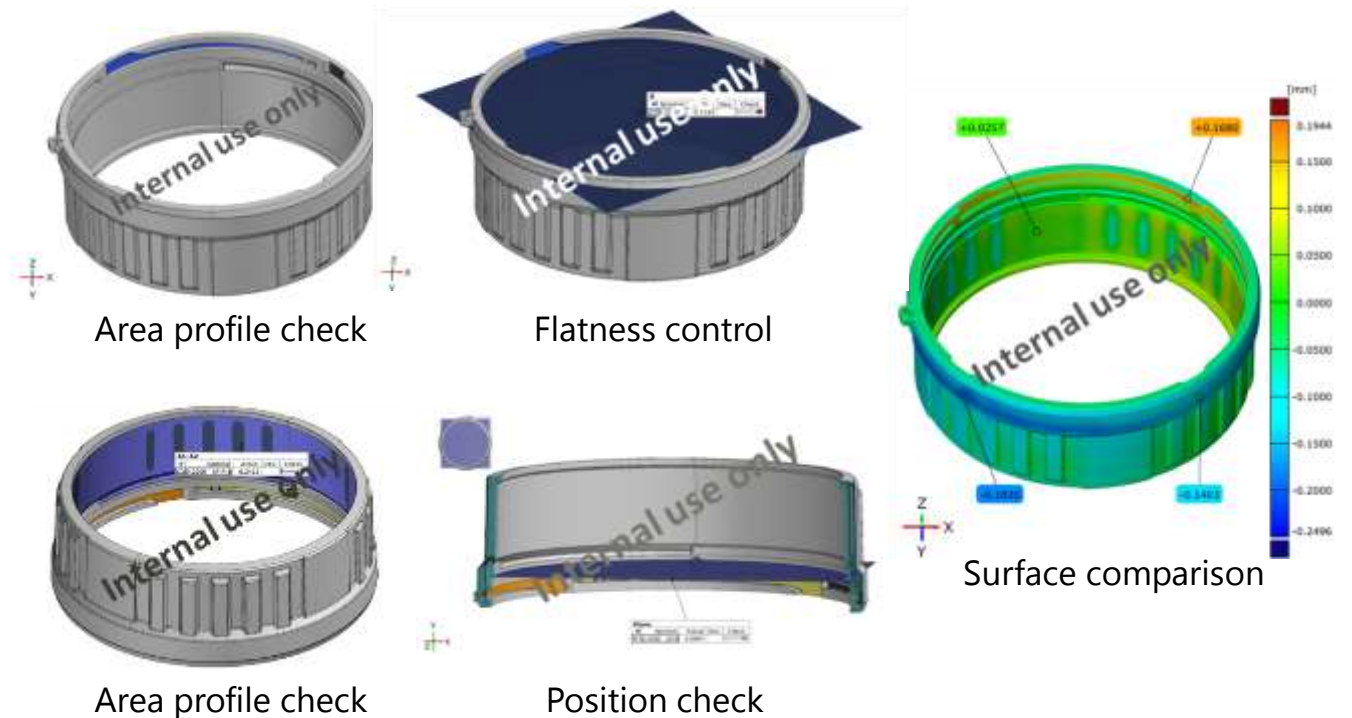


Inspection and dimensional, surface and flatness control  
of plastic cover ring  
Position and area profile check

### HOW?

- ZEISS METROTOM 1
- GOM CT professional / GOM Volume Inspect

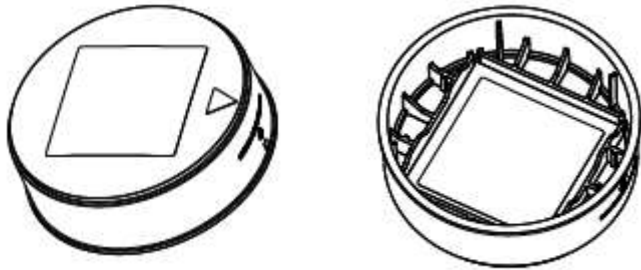
### Ease-of-use, low costs & small footprint



## 03

### Examples

#### Example: Inspection window



Inspection and dimensional, surface and flatness control of plastic inspection window  
Position, wall thickness and area profile check

#### HOW?

- ZEISS METROTOM 1
- GOM CT professional / GOM Volume Inspect

#### Ease-of-use, low costs & small footprint



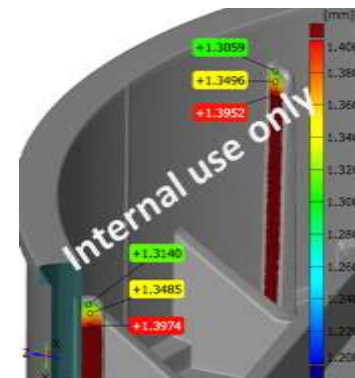
3D Volume



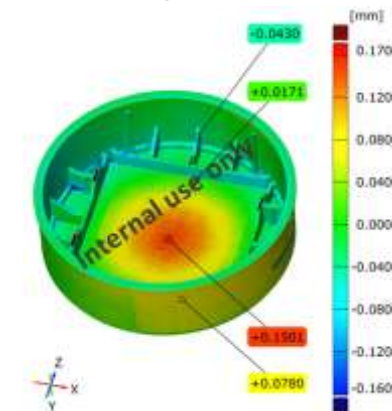
Area profile check



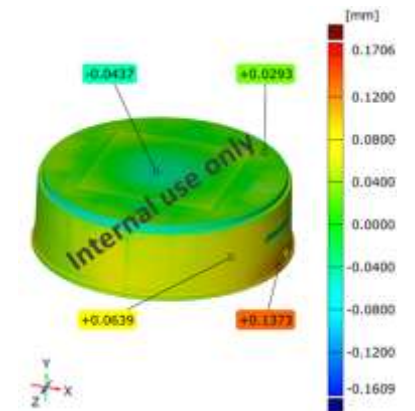
Flatness control



Wall thickness check



Surface comparison



Surface comparison

## 03

## Examples

### Example: Screw cap



Inspection and dimensional, surface and flatness control  
of plastic screw caps  
Distance measurements

### HOW?

- ZEISS METROTOM 1
- GOM CT professional / GOM Volume Inspect

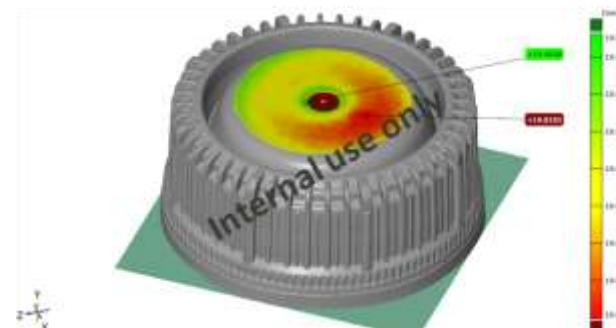
### Ease-of-use, low costs & small footprint



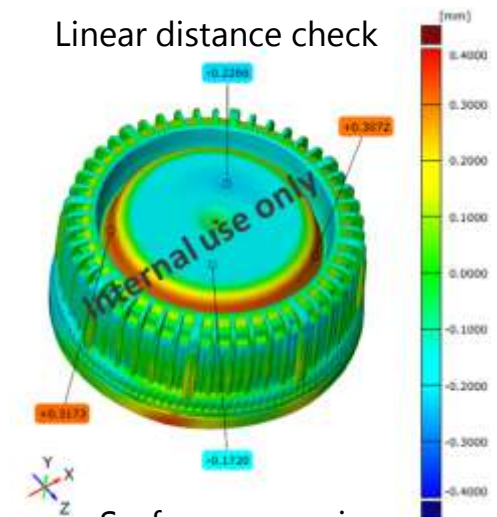
3D Volume



Linear distance check



Distance measurement



Surface comparison

## 03 Examples

### Example: Housing

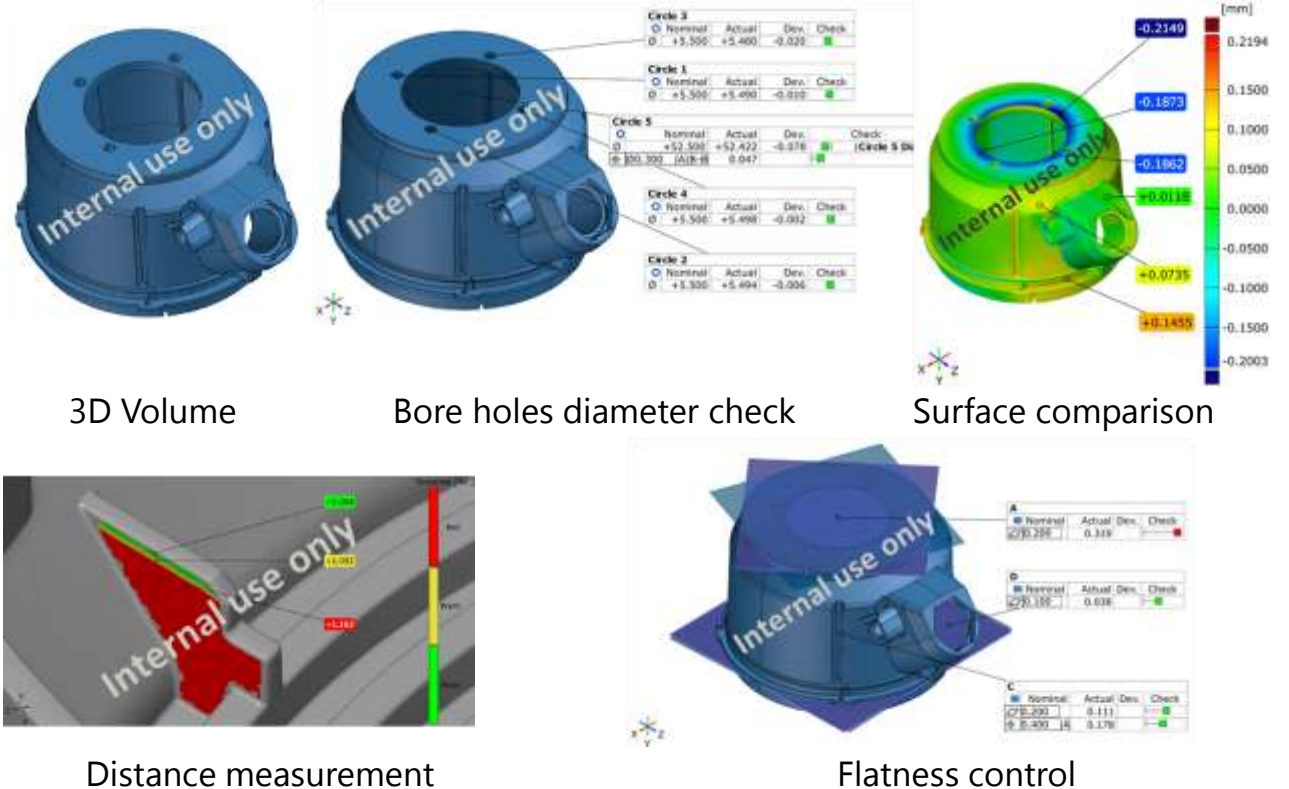


Inspection and dimensional, surface and flatness control  
of plastic screw caps  
Distance measurements

#### HOW?

- ZEISS METROTOM 1
- GOM CT professional / GOM Volume Inspect

### Ease-of-use, low costs & small footprint





Seeing beyond