

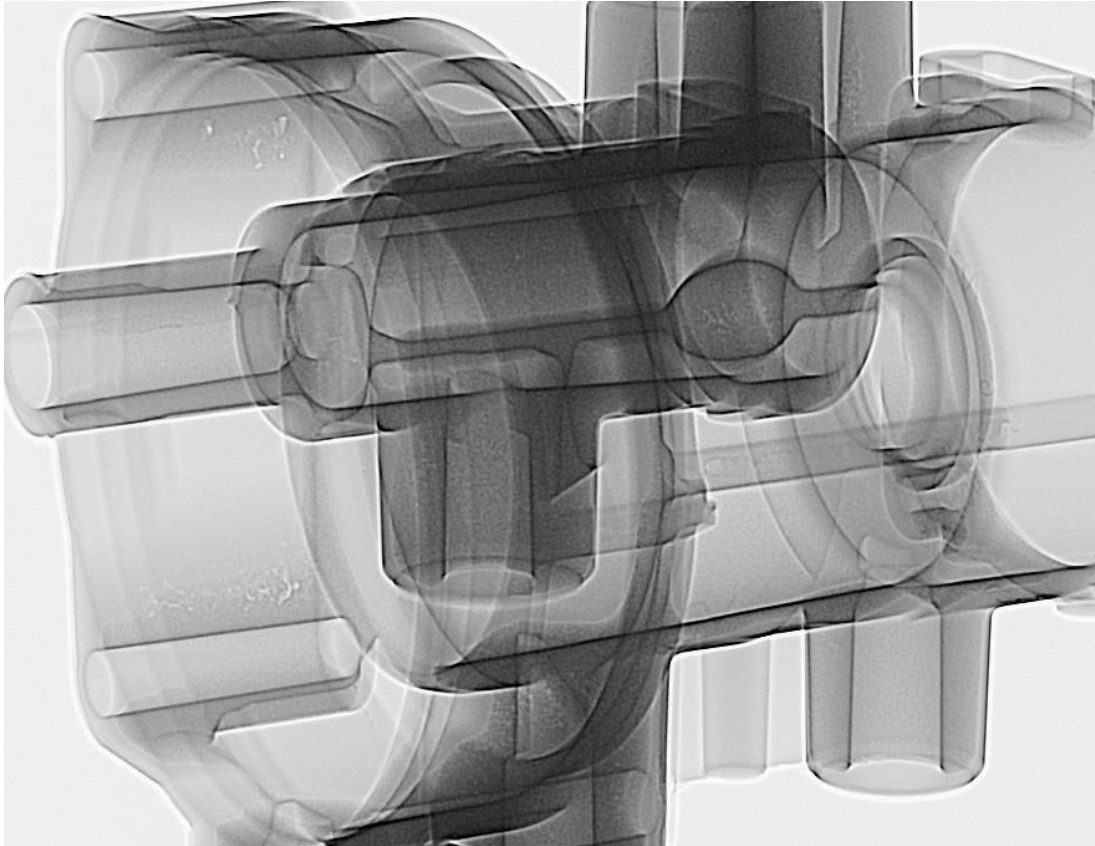
High performance on the smallest space.

ZEISS BOSELLO HEX



ZEISS BOSELLO HEX

2D X-ray technology



WHY

With 2D X-ray technology you get **insights** about the quality of your parts.

HOW

By capturing your part, you can inspect defects beneath the surface. This reliable quality assurance can reduce costs by **detecting flaws**.

WHAT

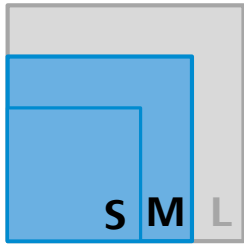
With ZEISS BOSELLO HEX you get **reliable 2D X-ray technology** for your **inspection processes** with the option to take a detailed look at your parts also in 3D.

Fields of applications

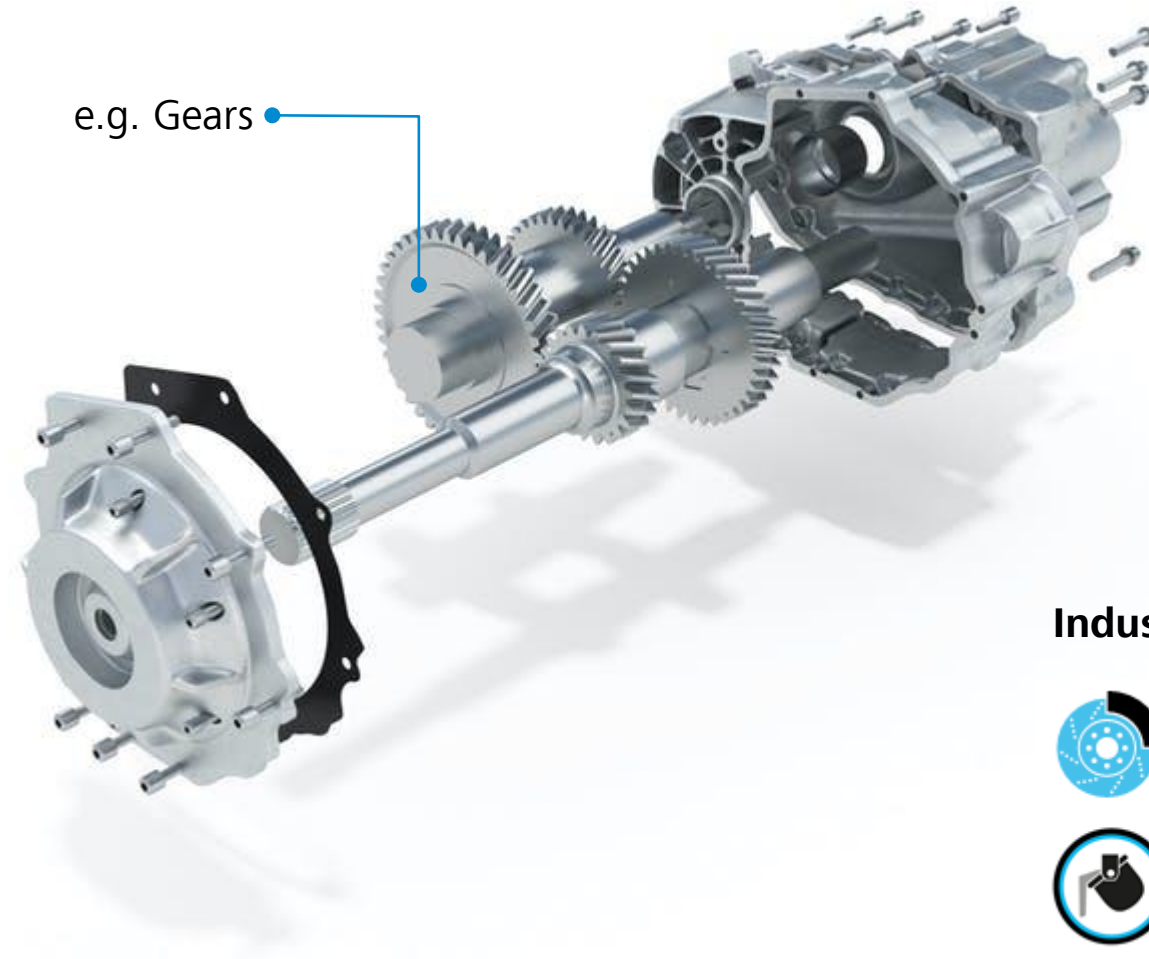
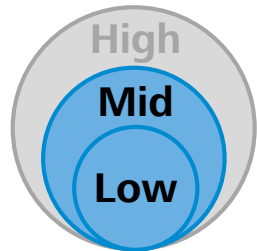
ZEISS BOSELLO HEX



Part size



Part density



Industries



Automotive



Foundry

ZEISS BOSELLO HEX

Key characteristics



EASY TO USE

Simple operation

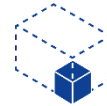
In order to operate the system, only little knowledge is required to operate the system. The user-friendly and intuitive programming and teach-in procedure allows an easy operation of the system and software.



GET SHARP RESULTS

For a reliable quality control

Spot even the smallest defects! Unique image processing algorithms of our software make this possible.



SAVE SPACE

Thanks to a small footprint

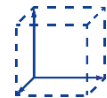
With ZEISS BOSELLO HEX having a footprint of only 3 m², you save a lot of valuable space!



CLEVER AND ROBUST DESIGN

Made for the production environment

With its robust design, ZEISS BOSELLO HEX is perfectly built for the production environment. The cabinet is completely self-contained and allows easy transportation and installation.



SEE IT IN 3D

For a detailed inspection

CNC enhanced ZEISS BOSELLO HEX systems are CT ready, which means you can easily capture a set of images to generate 3D models of your castings. This option allows you to get more information about the defects, including its three-dimensional volume.



BEST SERVICE

Thanks to worldwide service and 24/7 support

Native speaking service technicians and trainers are available close to you – 24/7 to keep downtime at a minimum level.

#1

Easy to use

#1 Easy to use

Simple operation



Technical explanation and example

- Simple and intuitive workflow and process allow to quickly start effectively working.
- The user-friendly programming and teach-in procedure allow an easy operation of the system and software.



How you benefit

- Simple operation.
- No extensive knowledge required to operate the system.
- Low training effort.

#2

Get sharp results

#2 Get sharp results

For a reliable quality control



Technical explanation and example

- The unique image processing algorithms of our software guarantee best radioscopic image quality.
- Using additional filters and image processing functions, the software allows to visualize even small defects more reliably.

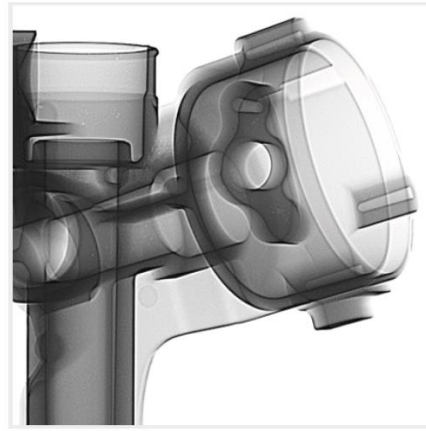


How you benefit

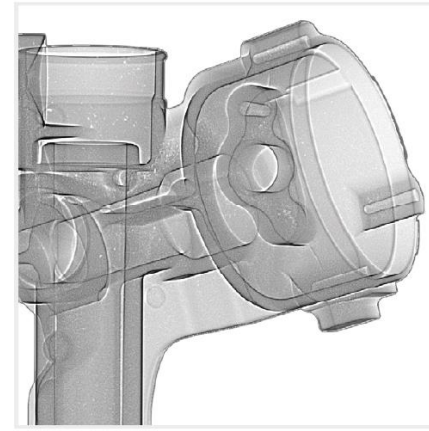
- Sharp image quality allows reliable quality control.
- Enhanced tools allow you to quickly look for defects at a first glance during real-time inspection.



Unprocessed image



Intermediate processed image



Final processed image

#3

Save space

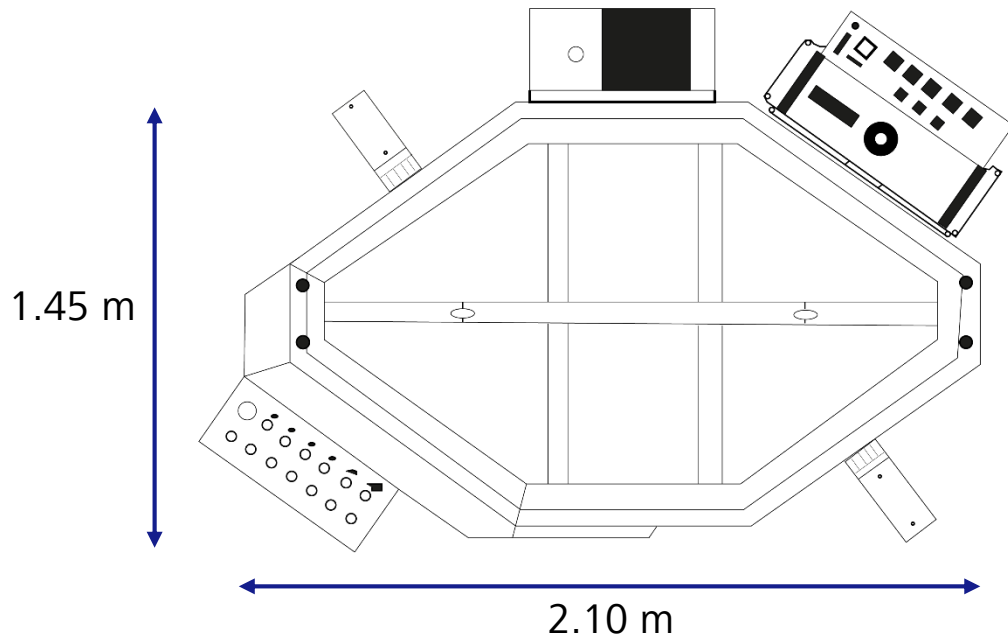
#3 Save space

Thanks to a small footprint



Technical explanation and example

- Small footprint: With ZEISS BOSELLO HEX having a footprint of only 3 m², you save a lot of valuable space!



How you benefit

- Only small space in your production is needed.
- Cost of ownership is kept at a minimum.
- Easy installation and positioning.

#4

Clever and
robust design

#4 **Clever and robust design**

Made for the production environment



Technical explanation and example

- With its robust design, ZEISS BOSELLO HEX is perfectly built for the production environment.
- The cabinet is completely self-contained.



How you benefit

- Reliable operation in a heavy industrial environment.
- Downtime is kept at a minimum.
- Allows easy transportation and installation of the system.



#5

Reference for
high quality

#5 Reference for high quality

For a reliable inspection



Technical explanation and example

- BHT IP Extreme software offers an add-on improvement with the ASTM standards applied by the main automotive manufacturers.
- Allows comparisons between captured 2D images and sample patterns containing defect references.

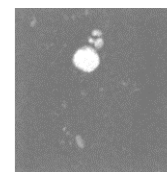
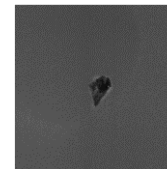
Reference defects [E2422]

Material	Thickness
Aluminium	1/4 inches
Type	Level
Gas holes	Level 1
Gas holes	
Round gas porosity	
Shrinkage cavity	
Elongated gas porosity	
Sponge shrinkage	
Less dense foreign material	
More dense foreign material	



How you benefit

- This option allows you to comply specific quality standards.
- Enhanced inspection quality with reference points for comparison.



#6

See it in 3D

#6 See it in 3D

For a detailed inspection



Technical explanation and example

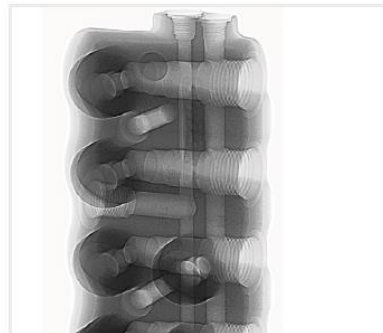
- CNC enhanced ZEISS BOSELLO HEX systems are CT ready, which means you can easily capture a set of images to generate 3D models of your castings in a third-party software.



How you benefit

- This option allows you to get more information about the defects, including its three-dimensional volume and location.
- Increased quality level.

2D



3D



#7

Guaranteed stability

#7 **Guaranteed stability**

State-of-the-art generators developed in-house



Technical explanation and example

- Our proprietary high-voltage generators are advanced products for diverse applications.
- High kV stability is guaranteed through an electronic control system that compensates possible fluctuations and micro-interruptions on the main supply line in real time.
- Two built-in automatic X-ray tubes warm-up programs are available: management and protection functions implemented in our generators' control electronics ensure proper X-ray tube operation, as well as an extended operation life.



How you benefit

- Solution out of one hand guarantees a stable operation of the system.
- Long operating life of the generator keep costs low.
- Know-how inhouse for fast support in case of breakdown.

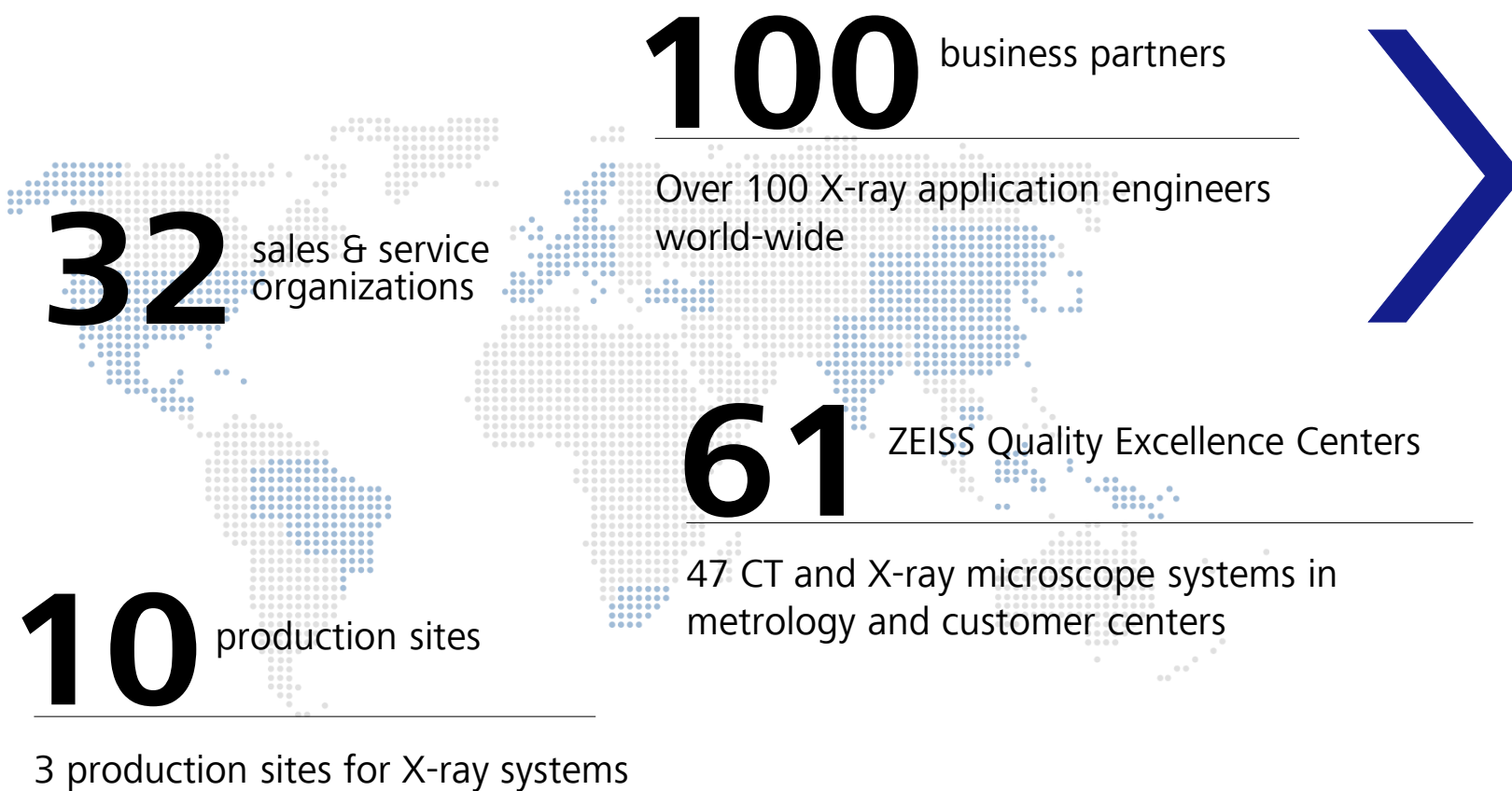


#8

Best service

#8 Best service

Thanks to worldwide service and 24/7 support



How you benefit

- ZEISS know-how & application technicians available globally.
- Service & support very close to the customer means fast reaction times.
- Less downtime and more security.
- All spare parts on stock for fast support.

#9

**One-stop
solutions provider**

#9 One-stop solutions provider

We provide you the optimum solution for your needs



Technical explanation and example

- Not only a system but a solution will be provided, including software, accessories, and services.
- ZEISS offers a full package of software for image acquisition, reconstruction, visualization / evaluation and data management out of one hand – for a smooth workflow.



How you benefit

- One contact can help in case of problems.
- All tools are aligned with each other.
- Customer gets customized solution based on their requirements and application.
- With the full software package the customer gets full control over the entire production and quality assurance process.

#9 One-stop solutions provider

ZEISS X-Ray Series



SYSTEMS



2D radiography
Computed tomography
X-ray microscopy

SOFTWARE



Image Acquisition
Image Evaluation
Data Management & Industry 4.0

ZEISS X-Ray Series
Make the Invisible Visible

APPLICATIONS



Additive manufacturing
Alu casting
Battery
Blade
Electronics
Oil & Gas

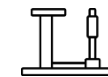
Plastic parts
Composites
Multi-material parts
Assemblies
Material research
Life sciences

SERVICES



On-site trainings
Classroom seminars
eLearning

ACCESSORIES



Sample holders
Set-up table

Retrofit solutions
Automization solutions

#10 Configuration standards

#10 Configuration standards

ZEISS BOSELLO HEX



Compatible Software

- BHT IP PLUS
- BHT IP Extreme available for ASTM reference image comparison

**High performance
on the smallest space**

ZEISS BOSELLO HEX

