

High performance on the smallest space.



ZEISS BOSELLO HEX



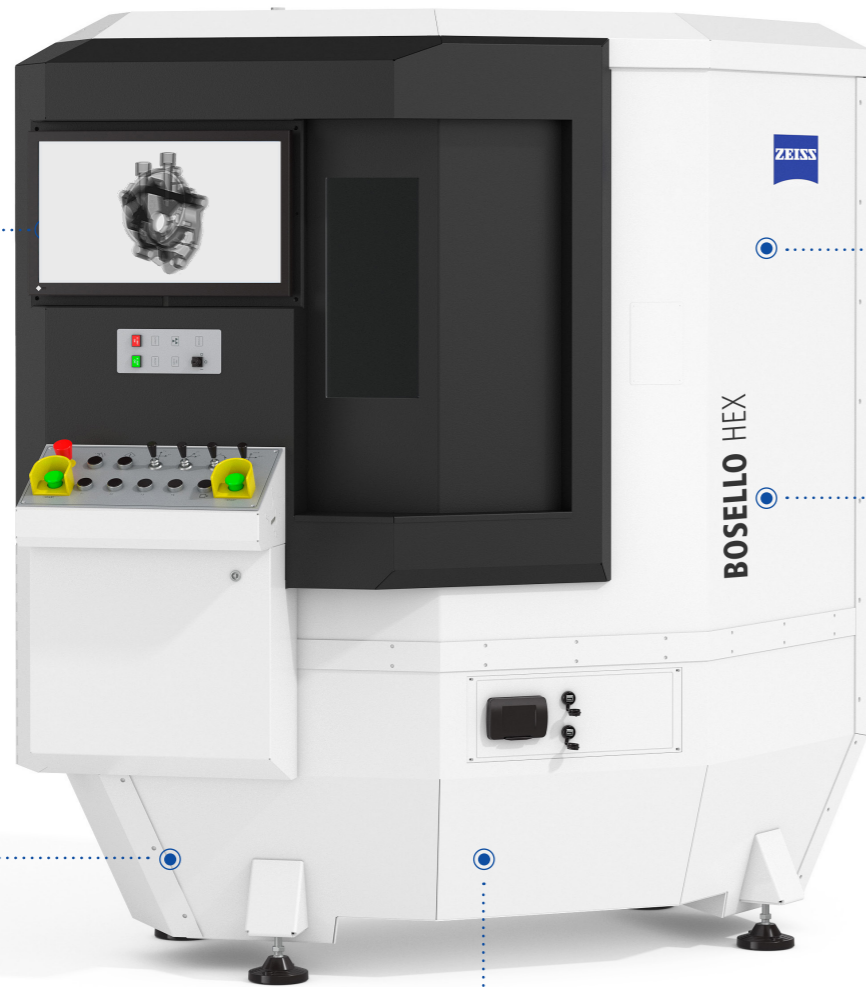
ZEISS BOSELLO HEX

ZEISS BOSELLO HEX enables fast inspections of small to mid-sized castings in a very small place – for everyone. With this system you can flexibly configure your optimum 2D X-ray solution that fits your needs and your budget!



EASY TO USE

The user-friendly and intuitive programming and teach-in procedure allows an easy operation of the system and software.



SAVE SPACE

Inspect your castings on the smallest space in your lab. With ZEISS BOSELLO HEX having a footprint of only 3 m², you save a lot of valuable space!



CLEVER AND ROBUST DESIGN

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.



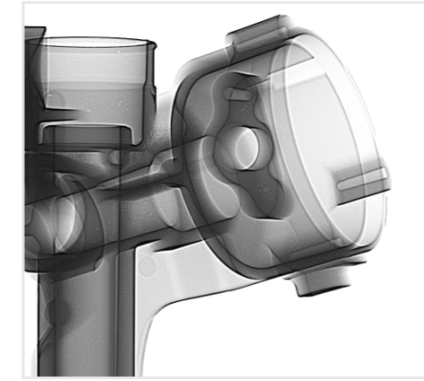
GET SHARP RESULTS

The unique image processing algorithms of our software guarantee best 2D image quality. Using additional filters and image corrections, the software can visualize even small defects more reliably.

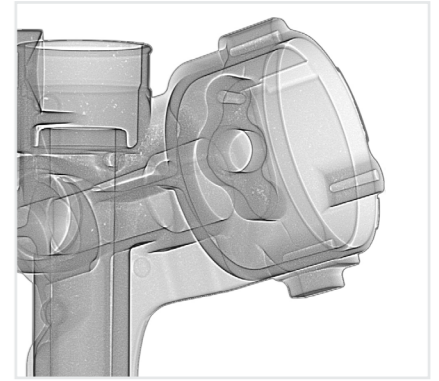
Unprocessed image



Intermediate processed image



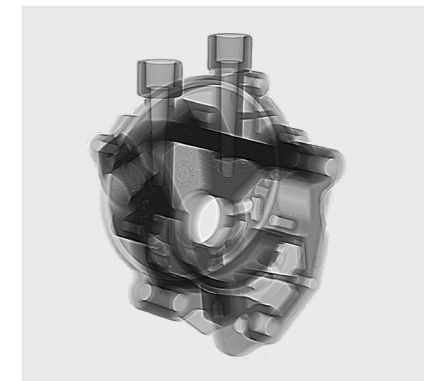
Final processed image



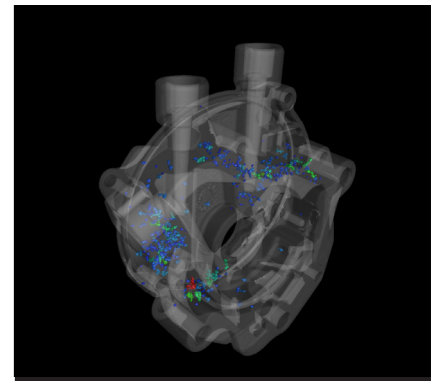
SEE IT IN 3D

All 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 and location in a third-party software.

2D



3D



System description	
Sensor technology	8 inches flat panel detector
Software	Operating software: BHT IP Plus with HDI ¹⁾
Applications	2D X-ray inspection

Radiation generation and sensor technology

ZEISS BOSELLO HEX		50.70 MAN/CNC		
X-ray tube	Max. tube voltage	in kV	160	225
	Max. target performance	in W	800/1800 640/640	800/1800
	Focal spot size acc. EN12543 ²⁾	in mm	0.4/1.0 1.0/1.0	0.4/1.0
	Collimator		Two axes motorized shutter (diaphragm) ³⁾	Two axes motorized shutter (diaphragm), programmable positions
Flat panel detector	Number of pixels		1024 x 1024	
	Pixel size	in µm	200	
	Active area	in mm	200 x 200	
	Frame rate (14 bit ADC)	in fps	15/30 (1 x 1/2 x 2 Binning)	
	Frame rate (16 bit ADC)	in fps	25/50 (1 x 1/2 x 2 Binning)	
Distance focal spot to detector		in mm	850	

Inspection range

ZEISS BOSELLO HEX		50.70 MAN/CNC		
In the image without image field extension	Max. Diameter	in mm	500	500
	Max. Height	in mm	700	700
	Max. Diameter	in mm	160	160
CT measuring cylinder ⁴⁾	Max. Diameter	in mm	160	160
	Max. Height	in mm	160	160

Workpiece size

ZEISS BOSELLO HEX		50.70 MAN/CNC		
Max. workpiece weight		in kg	25	25

Axes

ZEISS BOSELLO HEX		50.70 MAN/CNC		
Tilt angle beam			MAN	CNC
			±30°	±30° ¹⁾
Total number of axes			5 + 2 (with optional shutter) Manual control via joystick driven by DC motors	5 + 2 (shutter) CNC control driven by brushless motors
Axes speed		in m/min	up to 10	up to 15
Turntable		in mm	ø 300	ø 300

1) Options: „Extreme“ version with reference image function applications
2) Deviation from EN 12543-2: evaluation of the focal spot based on 25% threshold
3) Optional
4) CT option only available for ZEISS BOSELLO HEX 50.70 CNC

Technical features

ZEISS BOSELLO HEX

50.70 MAN/CNC

	160 kV	225 kV
Radiation shielded cabinet	Self contained lead and steel, movable by fork-lift	
Protective enclosure	In compliance with the strictest international regulations for fully shielded radiation devices.	

Requirements for operational readiness

ZEISS BOSELLO HEX

50.70 MAN/CNC

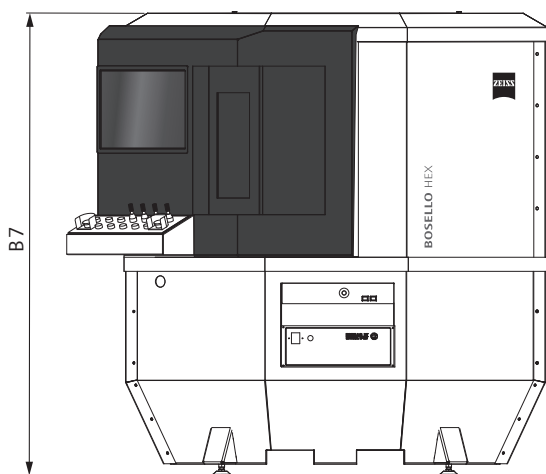
	160 kV	225 kV
Power rating	Power supply: 2 x 230 V AC (\pm 10%) 50 Hz single phase Max. power consumption: 2 x 4 kVA	Power supply: 2 x 230 V AC (\pm 10%) 50 Hz single phase Max. power consumption: 2 x 4 kVA

Approvals

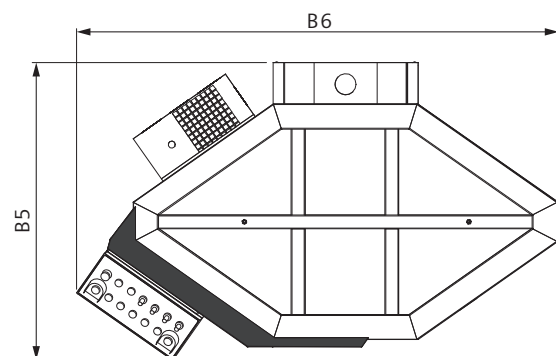
Entsorgung	ZEISS products and packaging returned to us are disposed of in accordance with applicable legal provisions.
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ZEISS BOSELLO HEX sizes	Dimensions in mm			Weight in kg
	Overall machine dimensions			
	Width	Length	Height	
	B6	B5	B7	
40.50 MAN 160 kV	2100	1450	2000	1500
50.70 MAN/CNC 160 kV	2100	1450	2000	1500
50.70 MAN/CNC 225 kV	2100	1450	2000	1950

ZEISS BOSELLO HEX frontal



ZEISS BOSELLO HEX top



1) Not available with the CT version

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