

Inspecting wheels at full speed.



ZEISS BOSELLO WRE thunder



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Inspecting alloy wheels quickly in the cycle of production? With ZEISS BOSELLO WRE thunder – as one of the fastest systems for 2D X-ray inspection of alloy wheels – this is possible. You can check a wide range of wheel models and detect unconformities according to most of the foundry automotive specifications.



SECURE GRIP

The individually driven and motor-controlled rollers ensure a strong and secure hold as well as high speed and accuracy for 360° inspection. Even heavy and large wheels can be safely inspected and transported due to the extremely robust multiple chain conveyor.



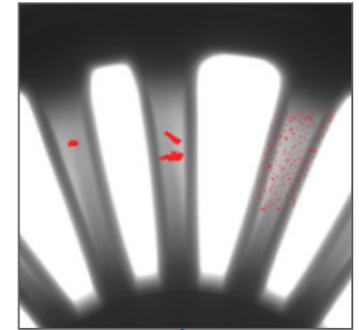
SAVE TIME

The pass-through concept of the system and a fast change of wheels in less than 2.5 seconds, allows fastest inline inspection. This also applies when inspecting different sizes of wheels.



AUTOMATIC INSPECTION

The automatic classification and inspection of wheels with the in-house developed ADR software ensures reliable quality assurance for best quality of your parts. Non-compliant wheels are automatically rejected.



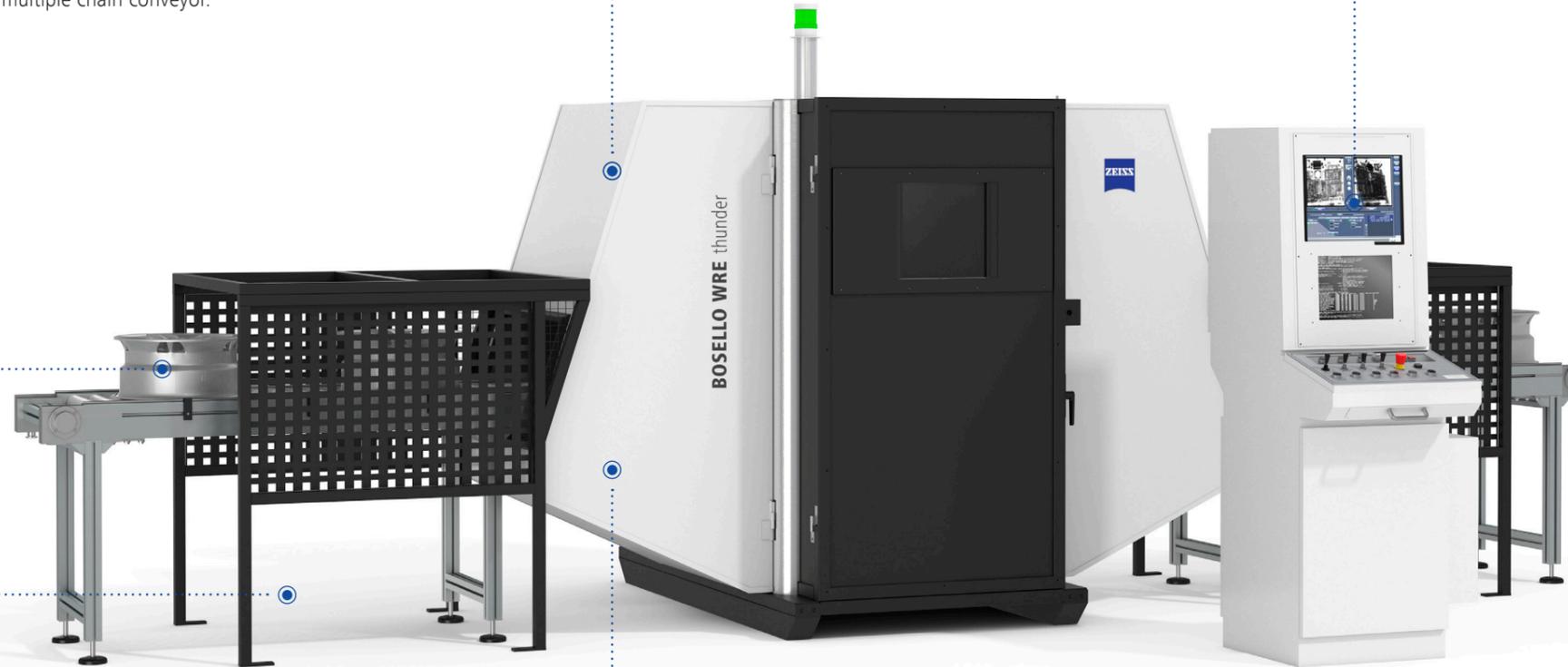
SAVE SPACE

Inspect your wheels on the smallest space in your production. With ZEISS BOSELLO WRE having a footprint of only 6 m², you save a lot of valuable space!



ROBUST & RELIABLE

ZEISS BOSELLO WRE thunder has proven to be the perfect fit for the production environment for almost 20 years. With its strong and robust mechanical structure it is designed for long and continuous use in a heavy industrial environment.



System description

Sensor technology	8 inches Flat panel detector
Software	Automated Evaluation: ADR (Automated Defect Recognition)
Applications	2D X-ray inspection of alloy wheels

Radiation generation and sensor technology

ZEISS BOSELLO WRE thunder		3	3/T	
X-ray tube	Max. tube voltage	in kV	160	160
	Max. target performance	in W	800/1800 640/640	800/1800 640/640
	Focal spot size acc. EN12543 ¹⁾	in mm	0.4/1.0 1.0/1.0	0.4/1.0 0.1/1.0
Flat panel detector 8 inch	Number of pixels		1024 x 1024	1024 x 1024
	Pixel size	in µm	200	200
	Active area	in mm	200 x 200	200 x 200
	Frame rate (14 bit ADC)	in fps	15/30 (1 x 1/2 x 2 Binning)	15/30 (1 x 1/2 x 2 Binning)

Workpiece

ZEISS BOSELLO WRE thunder		3	3/T
Wheel dimensions range		4J x 13'' - 11J x 22''	4J x 14'' - 11J x 26''
Max. workpiece weight	in kg	50	50

Axes

ZEISS BOSELLO WRE thunder		3	3/T
Tilt angle beam		+45°/-35°	+45°/-35°
Total number of axes		6 + 2 CNC control; driven by stepping motors	6 + 2 CNC control; driven by stepping motors
Axes speed	in m/min	up to 15	up to 15

Technical features

ZEISS BOSELLO WRE thunder		3	3/T
Radiation shielded cabinet		Self-contained lead and steel, movable by crane or forklift	Self-contained lead and steel, movable by crane or forklift
Protective enclosure		In compliance with the strictest international regulations for fully shielded radiation devices.	In compliance with the strictest international regulations for fully shielded radiation devices.
Loading door type		Pneumatic single-leaf horizontal sliding door	Pneumatic single-leaf horizontal sliding door
Loading time (image to image)	in s	≤ 2.5	≤ 2.5

Requirements for operational readiness

ZEISS BOSELLO WRE thunder		3	3/T
Power rating		Power supply: 2 x 230 V AC (±10%) 50 Hz single phase Max. power consumption: 2 x 4 kVA	Power supply: 2 x 230 V AC (± 10%) 50 Hz single phase Max. power consumption: 2 x 4 kVA

Approvals

Disposal		ZEISS products and packaging returned to us are disposed of in accordance with applicable legal provisions.	
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1) Deviation from EN 12543-2: evaluation of the focal spot based on 25% threshold.

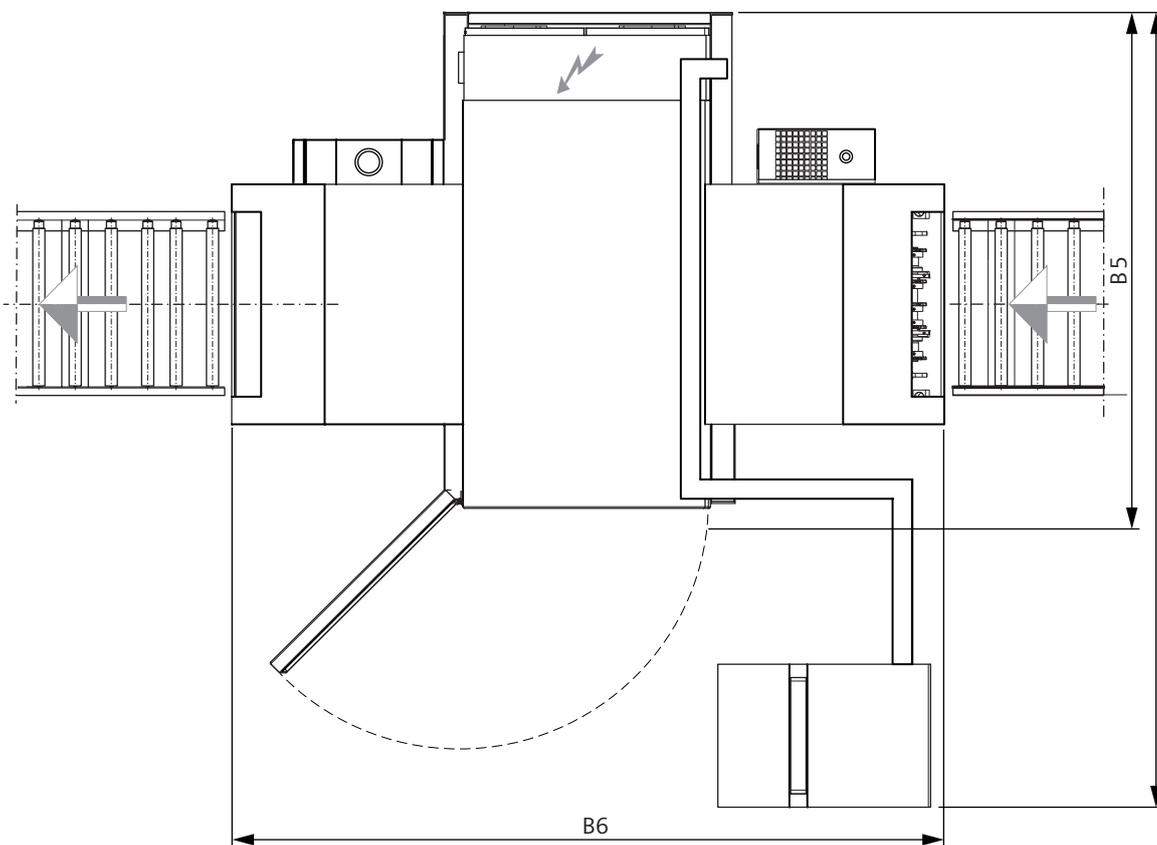
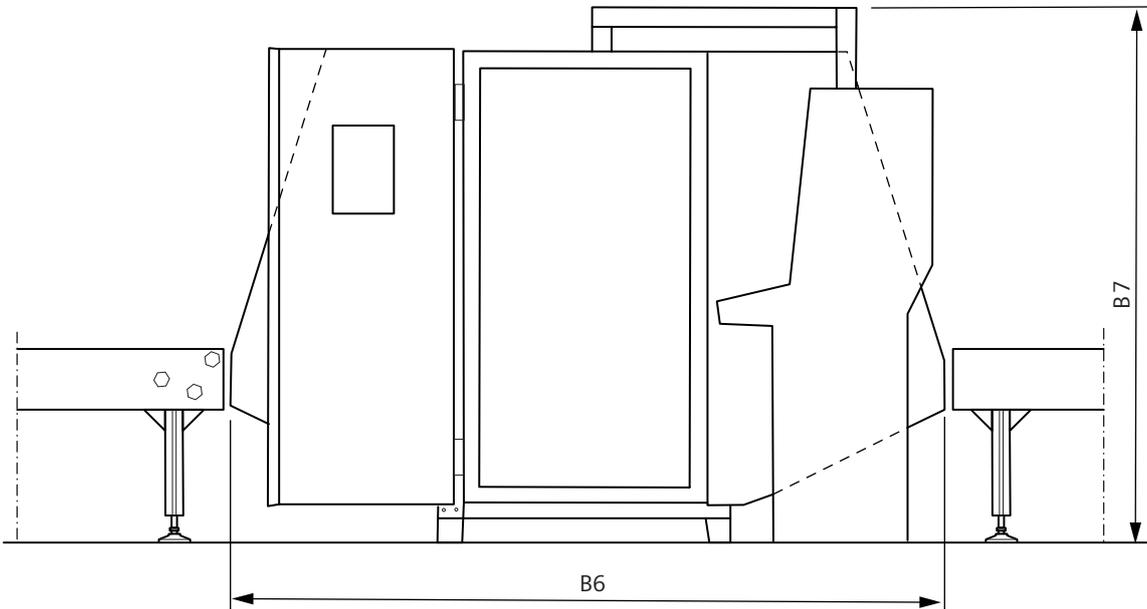
ZEISS BOSELLO WRE thunder
sizes

Dimensions in mm

Weight in kg

Overall machine dimensions

	Width	Length	Height	
	B6	B5	B7	
3	2900	2000	2000	4500
3/T	2900	2000	2000	4500



Carl Zeiss

Industrielle Messtechnik GmbH

73446 Oberkochen / Germany

Sales: +49 7364 20-6336

Service: +49 7364 20-6337

Fax: +49 7364 20-3870

Email: info.metrology.de@zeiss.com

Internet: www.zeiss.de/bosello

Carl Zeiss

Industrial Metrology, LLC

6250 Sycamore Lane North

Maple Grove, MN 55369/USA

Phone: +1 763 744-2400

Fax: +1 763 533-0219

Email: info.metrology.us@zeiss.com

Internet: www.zeiss.com/bosello