

Y.CT Compact Industrial Computed Tomography System



Y.CT Compact from YXLON has proven itself time after time in practice while setting standards in industrial computed tomography. A high image quality and short measuring times are only two of the outstanding features with which the system fulfills the highest specifications for production monitoring, quality control and during prototype development. The system has a broad spectrum for application, whereby it is particularly suited for inspecting medium-sized to large-scale casted parts made of light metal. The Y.CT Compact system is very reliable and displays rapid availability due to the high degree of standardization. Its compactness enables easy installation, operation and maintenance. Neither a radiation-shielded area nor special construction measures are necessary for set-up. Its attractive price-to-performance ratio makes it the perfect unit for small to mid-sized companies.

YXLON. The reason why.

- integrated radiation protection
- easy operation
- high scanning speed
- fast, simple commencement of line operation
- low demands on environmental conditions
- attractive price-to-performance ratio



Measurement Modes	Computed tomography	Fan beam, continuous rotation
	Radiography	Digital radiography
Inspection Envelope	Object weight	Up to 30 kg
	Object height	Up to 500 mm (Version M), 750 mm (Version XL)
	Object diameter	Up to 335 mm (450 mm with measuring circuit extension)
X-ray System		YXLON mini-focus tubes have very small focal spots at simultaneously very high energy levels of up to 450 kV, thus ensuring an outstanding spatial resolution.
	X-ray tube	Mini-focus X-ray tube
	Tube model / X-ray energy / Max. output	Y.TU 450-D09 / 20 - 450 keV / 1500 W or Y.TU 320-D05 / 10 - 320 keV / 1800 W or Y.TU 225-D04 / 20 - 225 keV / 1800 W
	Focal spot acc. to EN12543 standard	0.4 mm / 1.0 mm
	Cooling	Oil-air cooler OL4502 (for Y.TU 450-D09 and Y.TU 320-D05) water-air cooler WL3002 (for Y.TU 225-D04)
Radiation-shielded Cabinet	Material	Steel-lead-steel sandwich construction
	Dimensions (W x D x H)	1,850 mm x 1,800 mm x 2,350 mm (Version M) 1,850 mm x 1,800 mm x 2,550 mm (Version XL)
	Weight	450 kV XL: approx. 11.0 t; 450 kV M: approx. 10.0 t; 320 kV XL: approx. 7.5 t; 320 kV M: approx. 7.0 t; 225 kV XL: approx. 5.5 t; 225 kV M: approx. 5.2 t
	Radiation protection	Corresponds to fully shielded unit in compliance with German X-Ray Emission Regulation (RöV); < 1.0 µSv/h at distance of 10 cm
	Equipped with	Motorized loading door Service access to X-ray tube Safety and alarm facilities Camera Line laser Lighting
Manipulator	Turntable	ø 450 mm
	Object movement axes	Z (vertical), Z0 (rotation)
Performance	Spatial resolution	23 LP/cm (verification using YXLON Penetrameter)
	Measurement precision	< 0.1 mm possible
	Measurement time	Starting at 13 sec / sectional image
Image-Generating System	Detector system	LineScan 0250-16-50 LC A
	Resolution / Pitch	1984 Pixel / 254 µm 2356 Pixel / 254 µm with measuring circuit extension
	Sensor length	503 mm, 598 mm with measuring circuit extension
	Digitization	16 bit
	Equipped with	Water cooling, manually adjustable collimator
Depiction Characteristic	Magnification	Approx. 1.4 x
Software		YXLON.CT (current version)
Operating Unit		Workstation with 19" TFT monitor and PC rack, incl. integrated MGC41 microprocessor X-ray control unit; remote maintenance via internet or ISDN connection
Space Requirement		Approx. 20 m ² , incl. power supply units and operating area (guideline figure)
Infrastructure		3 phases+PE+N; 32 A / 400 V / 50 Hz
Options		Measuring circuit extension Software package for visualization, geometric measurement, reverse engineering Analysis station