

# Y.CT Vario

## The perfect system for fast, precise CT



Y.CT Vario is the new computed tomography system from YXLON. The system combines key up-to-date technologies to form a user-oriented solution for X-ray applications in computed tomography.

The Y.CT Vario system is highlighted by the perfect coordination between Y.XST225-VF, the new vario-focus X-ray system that uses variable focal-spot technology, the highly accurate polar manipulation concept and a modern, flat-panel detector. Together these 3 components guarantee an optimum combination of greater resolution and output performance while achieving perfected precision at the same time. Y.CT Vario analyzes the widest variety of materials in complex products from the metal, plastic and cast parts sectors, e.g. toward defining geometric dimension and positional tolerances, or testing both materials and completeness. It reliably ensures a high degree of detail detectability and outstanding image quality.

*YXLON. The reason why.*

- Precision through polar manipulation
- High image quality through variable focal-spot technology
- Rapid cone-beam CT



## Y.CT Vario

<b>Measurement Modes</b>	Computed tomography	Cone beam				
	Radiography	Digital radiography				
<b>Inspection Envelope</b>	Object weight	Up to 10 kg				
	Object height	Up to 250 mm				
	Object diameter	Up to 180 mm (320 mm with option 5.4 Field-of-View Extension)				
<b>X-Ray System</b>		Y.XST225-VF, the variofocus X-ray system from YXLON, offers a variable focal-spot size and simultaneous high-output performance for highest-resolution, low-noise images and rapid CT scans				
	X-ray tube	Y.TU225-V01				
	Voltage range	10 kV - 225 kV				
	Predefined focal-spot sizes					
	- For film acc. to EN12543 standard	250 µm	300 µm	500 µm	800 µm	
	- For digital technology	80 µm	95 µm	150 µm	320 µm	
	- measured using a duplex wire <sup>1</sup>					
	Max. output	290 W	540 W	1020 W	1600 W	
	Max. tube current at 225 kV	1.3 mA	2.4 mA	4.5 mA	7.1 mA	
	Cooling	Water-air cooling				
<b>Radiation-Shielded Cabinet</b>	Material	Steel-lead-steel sandwich construction				
	Dimensions (WxDxH)	1,950 mm x 1,600 mm x 1,860 mm				
	Weight	4.5 t				
	Radiation protection / Safety	Equivalent to fully shielded unit in compliance with German X-ray Emission Regulation (RöV); < 1.0 µSv/h at a distance of 100 mm Safety switches, Emergency shut-down				
	Equipped with	Manual loading door Illumination Emergency Stop Camera Leaded-glass window Servicing access Fully interchangeable manipulator module				
<b>Manipulator</b>	Turntable	Ø 300 mm				
	Movement axes	R (magnification axis) Phi (rotation angle lateral) ZD (detector vertical) ZO (object rotational) ZS (X-ray tube vertical)				
	<b>Image-Generating System</b>	Detector system	Y.Panel 2520 NDT			
		Resolution / Pitch	1920 pixels / 127 µm 1536 pixels / 127 µm			
		Sensor surface	Width: 244 mm, Height: 195 mm			
Digitization		14 bit				
	Scintillator	DRZ standard				
<b>Software</b>		YXLON.CT 3.7				
<b>Operating Unit</b>		Terminal with 20" TFT monitor, Host PC with Windows XP user interface 3D CT reconstruction unit Remote maintenance via internet or ISDN connection				
	<b>Space Requirement</b>	Min. 15 m <sup>2</sup>				
	<b>Infrastructure</b>	3 phases + PE + N; 32 A / 400 V / 50/60 Hz				
	<b>Options</b>		64 bit Evaluation PC			
		Field-of-view extension				

<sup>1</sup>Photodiode matrix size is 512 x 512 (400 µm) or 1024 x 1024 (200 µm).