

# X SPECTION 3000



The Xspection 3000 is a single closed tube, single flat panel detector, and all-purpose high-resolution X-Ray machine intended to perform both circuit board defect detection and quality insurance for the SMT industry worldwide. The X-ray machine has two main variants: the conventional 100kV version and the top-of-the-line 130kV version.

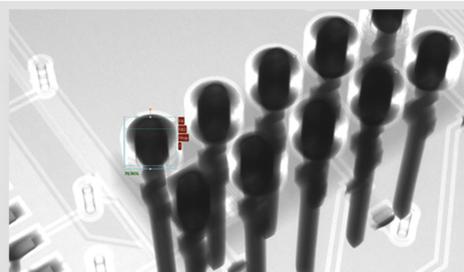
The Xspection 3000 is an evolution of the popular ScienScope X-scope 3000 introduced in 2011. Its development results from years of experience, the latest AI software, and customer feedback worldwide. Since its launch at SMTAI in MN in November 2022, industry experts have hailed the Xspection 3000 as the ultimate equipment for various applications, including but not limited to Multilayer PCBs, Voids, Semiconductors, Barrel Fill(TH), and Li Battery.

## HIGHLIGHTS

The new AI technology incorporates an advanced self-learning algorithm that can distinguish between bad and good images. It adapts to the data it receives and continually improves its ability to identify and categorize images accurately.



The enhanced TH barrel fill tool is designed to effectively identify and address voids that may occur during the through-hole filling process. By doing so, the improved tool aims to enhance the overall quality and reliability of the final product.



Two high-resolution color cameras (20 Megapixel each) improve the mapping accuracy and make possible barcode reading and optical inspection upgrades.



## FEATURES

- Fully integrated 100kV or 130kV microfocus sealed tube (for 160kV please contact us)
- Spot size down to 5µm
- Larger flat panel detector increases field of view
- Added one more mapping camera for close-up image capture
- Self-learning AI software makes programming easy
- XY table has been upgraded to servo driven for a faster cycle
- Optional 360-degree rotating stage is lighter and faster
- Accurate VOID calculation by better background definition
- Enhanced BGA tool reduces false alarms
- Industrial PC: Microsoft Windows 11

# X SPECTION 3000

	Xspection 3000 (Standard)	Xspection 3000 (Premium)	
<b>Hardware</b>	Maximum X and Y	25" X 20"	25" X 20" (650mm x 500mm)
	Maximum Tilt	45 (optional 70)	45 (optional 70)
	Inspection Speed	Servo XY	Servo XY
	Maximum X-Ray Power	100kV 5µm	130kV 5µm
	X-Ray Flat Panel Detector	5" X 5" 14bit	5" X 6" 14bit (2340 x 2882)
	Pixel Size	85µm	49µm
	360 Rotating Table	Optional	Optional
	Optical Inspection Camera	20 Megapixel Color X2	20 Megapixel Color X2
<b>Software</b>	CNC Programmable	Yes	Yes
	Fiducial	Yes	Yes
	Void Percentage Calc.	Yes	Yes
	BGA Measuring	Yes	Yes
	X-Ray Compressor	Optional	Optional
	Barcode	Optional (Optical Cameral)	Optional (Optical Cameral)
	Offline Programming	Optional	Optional
	Repair Station	Optional	Optional
	Windows 11 Ready	Yes	Yes
Dimension	1510mmX1510mmX1870mm 59.5in x 59.5in x 74in with tower light (2057mm/ 6'9")	1510mmX1510mmX1870mm 59.5in x 59.5in x 74in with tower light (2057mm/ 6'9")	
	Weight	1550 kg	1625 kg (Extra Lead Shield)
	Electric	110-240 AC	110-240 AC

