

XT-6 SMT setup

Universal AXI system with Hexaglide motion

The XT-6 platform is a highly flexible automated X-ray inspection system with minimum footprint and a parallel-kinematic Hexaglide manipulation unit for extreme-angle off-axis image acquisition with high resolution. It is suitable for high quality X-ray analysis of electronic assemblies and material analysis of parts that require flexible part

The XT-6 platform is available in the following configurations:

XT-6 Transmission (2D) + SFTTM + Off-Axis (2.5D)

Inspection & Process Software

- PC-Station with multi-core processor setup
- Windows 10 platform
- MIPS Inspection Platform
 - Advanced algorithm library
 - CAD import for automatic inspection list generation
 - Automatic Tree Classification (ATC) for Auto-Rule-Generation
 - Offline programming for AXI program generation & simulation, tuning and defect reference catalogue
- Verification & Process control
 - MIPS Verify link with closed loop repair
 - MIPS Process with real time SPC



Features and Benefits

- Flexible AXI system for island of automation configurations
- Microfocus X-ray tube (sealed tube / maintenance free)
- Multiple programmable motion system with servo drives
- Digital CMOS flatpanel detector
- Automatic grey-level and geometrical calibration
- Barcode scanner for serial number and product type selection
- Full product traceability via customized MES-Interface



XT-6/XT-6A SMT setup

Applications

Electronic components and solder joint

A unique advanced algorithm library is available for electronic and medical applications, specifically for module, component and solder-joint inspection.

All standard SMD and THT/PTH components

- BGA & dedicated off-axis head-in-pillow (HIP) algorithm
- Comprehensive QFN & gullwing algorithm
- Robust solder / heatsink void inspection
- Pin in paste barrel fill measurement
- Discrete down to 1005 pitches

For small casting parts, medical implants or small automotive parts:

- Inclusions
- Assembly Test
- Metrology

Specifications

Facilities

Dimensions:	1940 mm (H) x 2250 mm (W) x 1610 mm (D)
Weight:	2.000 kg
Safe Operating Temperature:	15° - 28 °C optimal 20° - 25° C
Power Consumption:	max. 6 kW
Line Voltage:	220 VAC, single phase, 16 A
Air:	5-7 Bar, < 2 l/min, filtered (30μ), dry, oil free

X-ray Image Chain		
X-ray Source (sealed tube)		
Energy:	<u>SMT-Setup</u>	
	130 kV/40 W	
Grey resolution:	up to 14 Bit	
Detector Types:		
CMOS Flatpanel Detector	50 µm pixel size (5 MPix)	
	75 μm pixel size (3 MPix)	
Inspection features		
Max. sample size:_	400 mm x 350 mm	
Max. inspection area:	400 mm x 350 mm	
Min. sample size	100 mm x 50 mm	
Sample thickness	0,8 - 10 mm	
Max. sample weight:	5 kg	
Angle shot capability:	0 - 65 dgr	
Resolution	down to 3 µm / pix	
Inspection speed		
Transmission	up to 2 images /s	
Off-Axis	up to 2 images /s	

Motion System			
Parallel-kinematic Hexaglide unit with 6 axes			
x,y (linear drives)	sample table		
Position repeatability	+/- 5 μm		
X-ray tube (sealed):	Z-drive		
Handling			
XT-6A	single lane, in-out same side		

Assembly clearance		
Topside (incl. sample thickness):	160 mm	
Bottom side (excl. sample thickness):	35 mm	
Min. edge clearance for clamping:	3 mm	

Options

Barcodereader

Heavy duty transport system

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DSX55/01



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