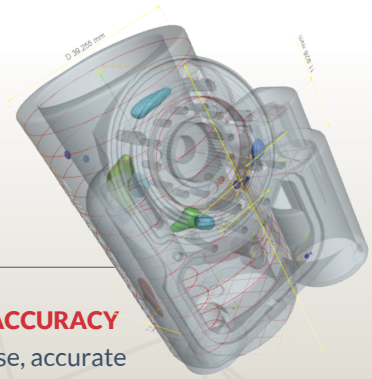
CXMM 50

NORTH STAR IMAGING
NSI
AN ITW COMPANY

Accurate & Precise



A True X-ray based Coordinate Measuring Machine

ENGINEERED FOR METROLOGY
Built-in temperature control and vibration isolated granite table

NONDESTRUCTIVE MEASUREMENTS
Measure the inside and outside of workpieces

VERIFIABLE ACCURACY
Ensures precise, accurate measurements in accordance with VDI/VDE 2630 part 1.3

High precision. Easy operation.

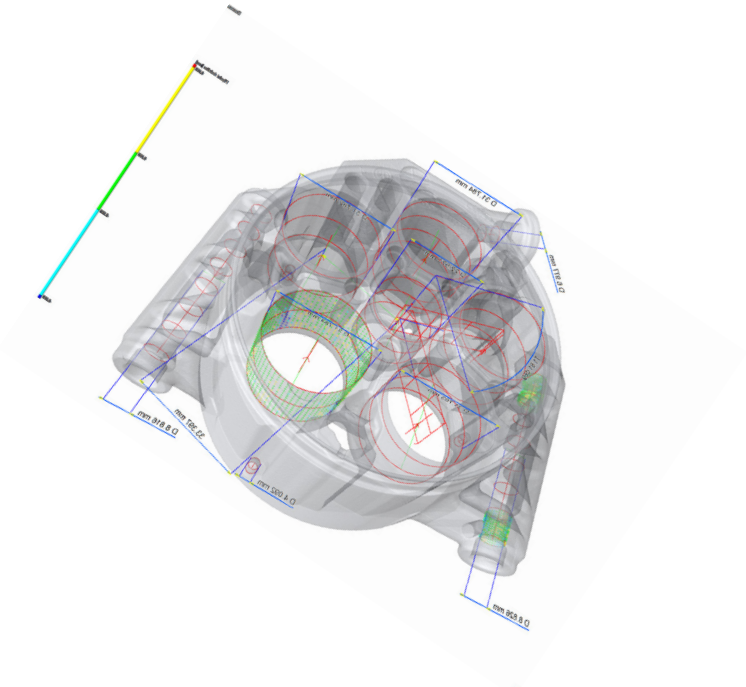
Seamlessly acquire full internal and external measurements of your components with the CXMM 50, a true X-ray based coordinate measuring machine. Whether you need to measure the inside of a fuel injector or the coating thickness on a heart valve, the CXMM 50 was designed to give the user an unparalleled product development and quality control tool.

Designed with the User in Mind:

- Control the workpiece with the variable speed joystick and highly repeatable manipulator
- Observe measurements in action through a brightly lit large leaded glass viewing window
- Easily access the X-ray source for routine maintenance through front panel
- Comfortably sit on our ergonomic desk chair or stand in front of the adjustable height desk

Software:

- Quickly acquire, process, and archive images with a user friendly interface
- Output/Input images in multiple non-proprietary formats. DICONDE compliant.
- Programmable motion control software for automated scanning with automatic image processing and achieving capabilities
- Reconstruct 3D models quickly using our 5-step guided wizard



225 kV
Max X-ray Energy

3.5µm + L/50
Accuracy*

30 cm x 30 cm
Nominal Workpiece Envelope

*Sphere distance error in accordance with VDI/VDE 2630 part 1.3. The given accuracies are valid for the operating conditions detailed in the test procedure.

System Capabilities

Geometric Magnification	Max ~330x
Overall Maximum System Detectability	2 µm

X-Ray Source

Voltage Range	20 kV to 225kV
Minimum Focal Spot Size	<5 µm
X-Ray Tube Types	Micro-focus Open or Sealed

X-Ray Detector

Our applications specialists will recommend the best combination of signal to noise ratio, contrast sensitivity, efficiency, and image lag. All detectors meet ASTM E2597.

Detector Type	Flat Panel (DDA)
Grade Option	CT Premium – 16 Bit
Detector Size	25 cm x 20 cm [9.8 in x 7.9in] Several Available

Manipulator

Maximum Sample Weight	11.3 kg [25 lbs]
Workpiece Travel	Vertical: 33 cm [13 in] Horizontal, X- axis: 33 cm [13 in] Horizontal, Z-axis: 112 cm [44 in] Rotation: 360° Continuous
Nominal Workpiece Envelope	Diameter: 30 cm [12 in] Height: 30 cm [12 in]
Max Tube to Detector Distance	132 cm [52 in]

Cabinet

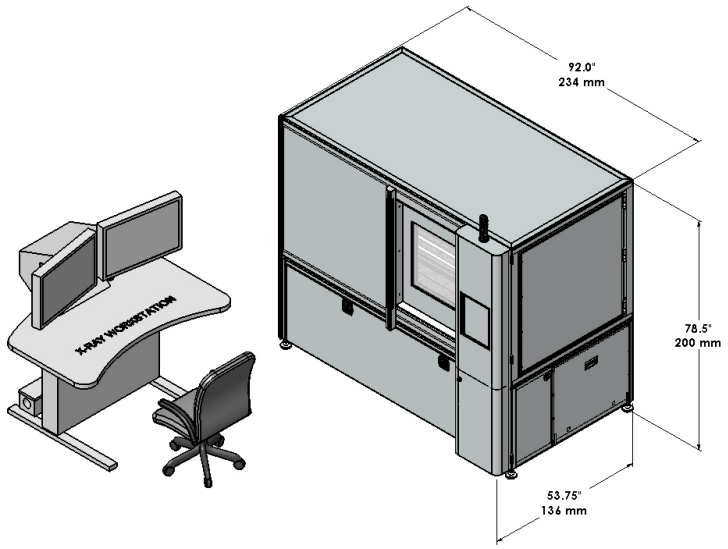
System fits through standard double door. No need for a costly remodel. Dimensions do not include ergo desk, generator, or microfocus controller.

Width	234 cm [92 in]
Depth	137 cm [54 in]
Height	198 cm [78 in]
Weight	3810 kg [8400 lbs]
Temperature Control	Precision Air Conditioning System Accurate to ±1 °C

All cabinets are steel/lead/steel construction that meet or exceed 21 CFR 1020.40 and EN 61010-2-091 2012.

MARKETS

Aerospace	Food
Automotive	Manufacturing
Casting	Medical Devices
Dental	Military & Defense
Electronics	Plastics



ImagiX X25 X50 CXMM 50 X5000 X6000 X7000

A Full Range of Systems

North Star Imaging offers a full range of systems to meet your digital radiography, computed tomography, and metrology needs. All our systems are modular, giving customers the flexibility to select the best combination of features for their application. In addition to the **CXMM 50**, we sell:

- The **ImagiX** is a compact, affordable system and great for research and development laboratories. The generous scanning envelop in a small desktop footprint handles parts up to 12.7 cm [6 in] in diameter.
- The compact, yet powerful **X25** offers submicron resolution while still fitting through a 92 cm [35.2 in] wide door and providing flexibility for high resolution measurements.
- Offering an excellent balance of power and space sensitivity, the **X50** can handle products up to 30.5 cm [12 in] in diameter and more using **vorteX** and **mosaiX**.
- Boasting a large scanning envelope of 81 cm [32 in] x 140 cm [55 in] and excellent ergonomics for loading large objects, the **X5000** is the most versatile system offered.
- Featuring a programmable c-arm manipulator for automated and repeatable inspection sequences, the **X6000** is designed for castings and large heavy products.
- As the largest standard system, the **X7000** includes a large tube to detector distance and scanning envelop. An option for independent horizontal travel of the tube and detector allow for inspection capabilities of an elongated object.

Do you need scanning now?

Our Inspection Services team can scan virtually anything, large or small, quickly, accurately, and with easy to use software to get you the data that you need. Highly trained staff at each of our global locations are ready to consult on what type of scanning is best for your needs. Inspection services are offered on an hourly or per project basis.

Training

North Star Imaging offers technical training programs for Level I, II, and III technician certification in accordance with the American Society for Non-destructive Testing (ASNT), NAS 410, and other industry standards for certification in radiography methods. Contact us for information about courses offered at your facility or our headquarters near Minneapolis, MN.

Maintenance

X-ray systems need regular maintenance to ensure that the X-ray set remains free from contamination. Purchasing a preventative maintenance agreement will prevent costly downtime due to unnecessary failures, extend the life of your system, maximize equipment performance, and minimize maintenance costs.

Contact us for a consultation and quote for your project:

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