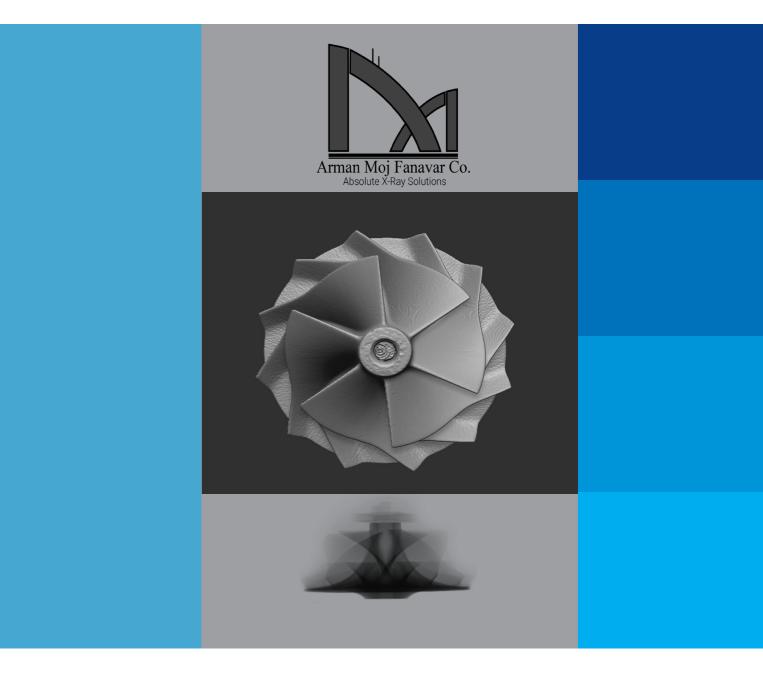


Arman Moj Fanavar is a distinguished company at the forefront of industrial X-ray technology, offering a wide range of cuttingedge solutions, from radiography and PCB inspection to CT scanning equipment. With a commitment to quality and a team of experienced experts, they empower diverse industries to achieve excellence in quality control, defect detection, and precise analysis.





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> "Experience Unparalleled Precision and Quality Assurance with Arman Moj Fanavar's State-of-the-Art X-ray Technology Solutions."

Arman Moj Fanavar offers comprehensive and absolute X-ray solutions in the realm of advanced technology, serving as a cornerstone for precision quality control across diverse industries.



The digital x-ray radiography system model P101 represents a cutting-edge advancement in quality control technology, boasting a maximum voltage of 120 kV and spatial resolution of 80 micrometers. This state-of-the-art system is tailor-made for the comprehensive quality control of PCBs (Printed Circuit Boards) and electronic components, offering a non-destructive testing (NDT) solution.

Key Features and Benefits:

Precision

With its maximum high voltage of 120kV and spatial resolution of 80 micrometers, the X-ray radiography system model P101 provides unparalleled precision and detail in imaging. This level of clarity is sufficient for the fast detection of defects in electronic components, plastic and aluminum parts.

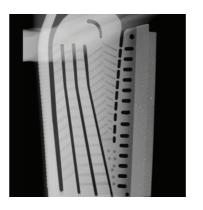


Digital Imaging system:

As a digital system, the P101 operates with remarkable speed, facilitating swift and efficient quality control processes. Its digital capabilities enable rapid data acquisition and analysis, minimizing downtime and enhancing overall productivity.

Automatic Mode:

The automatic mode, combined with a spacious sample table, empowers users to perform batch scanning of multiple electronic components and PCBs in a matter of seconds. This feature streamlines the inspection process, making it ideal for high-volume manufacturing environments.



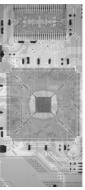
Aluminium and Plastic

The P101 model is wellsuited for X-ray radiography of both aluminum and plastic components, making it a versatile choice for inspecting and ensuring product quality and integrity.

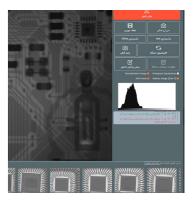
Printed Circuit Board

integrity in various industries.

ABSOLUTE **X-RAY** SOLUTIONS



The P101 model, with its 120 kV maximum voltage and 80 micrometer spatial resolution, is an ideal choice for printed circuit board quality control, enabling precise defect detection and ensuring PCB



Software

The software's user interface is intuitively designed, making it accessible to both experienced professionals and those new to X-ray inspection. This ensures ease of operation and minimizes the learning curve for users.



The P101 model is customizable to accommodate the scanning of components as large as 1 meter by 1 meter, offering flexibility and adaptability to meet the specific needs of various applications and industries.



Technical Specifications:

Cabinet	P101/M120/T100100		
Width	2,200 mm		
Depth	2200 mm		
Height	2,400 mm		
Weight	1,950 kg		

X-Ray Source

Maximum voltage	120 kV
Maximum current	2000 µA
Maximum tube power	240 W
Minimum focal spot size	600 µm

X-Ray Detector

Active area	140 mm × 120 mm
Spatial resolution	6 lp/mm
Pixel Bit depth	12 bits

Scan specifications

Scan area	1000 mm × 1000 mm
Maximum sample weight	20 kg

Software

Radiation Safety

According to

IEC61010-2-091:2019

PCIsoft 1.0

Versatile Radiographic Inspection:

The P101 model is a versatile and specialized digital X-ray radiography system designed to meet the demanding requirements of various industries, offering high-resolution imaging capabilities and digital integration for precise and efficient inspection tasks. It excels in the inspection of a wide range of materials, including aluminum, plastic components, and electronic parts.

Customization and Compliance:

One of the standout features of the P101 model is its adaptability. It's possible to order this model with an X-ray generator of higher energy, extending up to 225 kV, and a sample table of various sizes, ensuring that it aligns perfectly with individual inspection needs. Furthermore, the P101 device adheres to the rigorous IEC61010-2-91:2019 radiation safety standards, ensuring that its radiation leakages are equivalent to background radiation, making it an exceptionally safe choice for radiographic inspections.

Conveyor-Type Option:

For those seeking in-line and fast X-ray inspection, the P101 model can be ordered with a conveyor-type configuration. This feature enables integration into production lines and processes, ensuring rapid and efficient inspections, which is particularly valuable for industries with high throughput requirements.

ABSOLUTE X-RAY Solutions

The P101 model, a cutting-edge digital X-ray radiography system, unveils the hidden intricacies of materials with its high-resolution imaging and adaptability making it an excellent selection in the world of non-destructive testing.



The P102 X-ray PCB-Inspection system is equipped with a microfocus X-ray source, providing precise and powerful imaging capabilities. With its impressive 5 degrees of freedom (tilt, sample-x, sample-y, source-z, and detector-z), dynamic zoom, and microfocus x-ray generator, it's an ideal choice for scanning a diverse range of components, including printed circuit boards, electronic components, ICs, and small plastic or aluminum parts. Additionally, it can efficiently scan large PCBs.

Key Features and Benefits:

Precision:

The P102 model boasts exceptional precision in X-ray imaging. With a microfocus X-ray source, it can capture highly detailed and accurate images of the components it inspects. This level of precision is crucial for identifying even the smallest defects or imperfections in a wide range of materials, making the P102 a reliable choice for quality control in various industries.

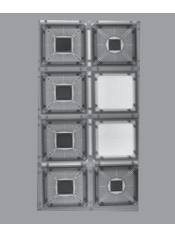


Digital Imaging system:

The P102 model features a highresolution digital dynamic detector, enabling real-time X-ray imaging with exceptional clarity and precision. This advanced system streamlines inspections, providing high-resolution, efficient, and accurate results crucial for quality control and defect detection .

Automatic Mode:

The P102 model offers dynamic zoom capabilities, allowing for flexible adjustment of image magnification during inspections. Additionally, it supports automatic scanning of large samples.



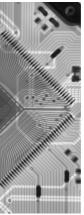
Die Geometry Comparison

the P102 model is well-suited for die geometry comparison, offering precise and detailed X-ray imaging capabilities that facilitate accurate assessments of component geometries and dimensions by allowing for detailed comparisons.

Larg PCBs Inspection

without compromising on speed.

ABSOLUTE **X-RAY** SOLUTIONS



The P102's ability to scan large PCBs measuring up to 30cm by 50cm greatly improves inspection efficiency. Large PCBs often contain numerous components and complex circuitry, and the system's efficiency ensures a thorough examination



Dynamic Zoom

The system's dynamic zoom and high-resolution imaging guarantee complete coverage of the entire large PCB. It can capture fine details, ensuring that no defects or imperfections go unnoticed.

The P102 model is a versatile X-ray PCB-Inspection system, ideal for precise and efficient inspection of various components, including large PCBs, with high-resolution imaging capabilities and dynamic detector technology.



Technical Specifications:

Cabinet	P102/M80/T5030	P102/M90/T4030	P102/M130/T5030
Width	1,860 mm	1,860 mm	1,860 mm
Depth	1,860 mm	1,860 mm	1,860 mm
Height	2,000 mm	2,000 mm	2,000 mm
Weight	1,500 kg	1,800 kg	2,100 kg

X-Ray Source

V				
Maximum voltage	80 kV	90 kV	130 kV	
Maximum current	700 µA	180 µA	500 µA	
Maximum tube power	56 W	8 W	65 W	
Minimum focal spot size	30 µm	<7 µm	<7 µm	

X-Ray Detector

Active area	140 mm × 120 mm
Spatial resolution	4 lp/mm
Pixel Bit depth	12 bits

Scan specifications

Scan area	300 mm × 500 mm	300 mm × 400 mm	300 mm × 500 mm
Tilt angle	± 30°	No tilt	± 30°
Maximum sample weight	5 kg	5 kg	10 kg

PCIsoft 1.0

Software

PCIsoft 1.0

Radiation Safety

According to

IEC61010-2-091:2019

PCIsoft 1.0

The P102 model offers three distinct variants:

Type One: This model is equipped with an 80 kV X-ray generator, 700 microamperes, and a 30-micrometer focal spot size, making it well-suited for inspecting large PCBs, conducting die geometry and IC comparisons, and examining electrical components.

Type Two: Featuring a 90 kV X-ray generator, 180 microamperes, and a 7-micrometer focal spot size, Type Two encompasses all applications of Type One and is additionally suitable for inspecting wire bonding in ICs.

Type Three: The Type Three model, equipped with a 130 kV X-ray generator, 500 microamperes, and a 7-micrometer focal spot size, stands as the most versatile of the three, covering a wider array of applications, including the inspection of larger electronic components.

These models are tailored to meet specific inspection needs, offering industries the flexibility to select the variant that best aligns with their requirements, be it for general PCB inspections or specialized applications like wire bonding and the examination of larger components.

ABSOLUTE X-RAY Solutions

The P102 model comes in three variants, each tailored to specific inspection needs: Type One for large PCBs and component examinations, Type Two, which adds wire bonding inspection to its capabilities, and the versatile Type Three, capable of even larger electronic component inspections.

P103/P104



The P103 model is a compact iteration of the P101 model, offering a smaller footprint while maintaining its precision and versatility. It is specifically designed for inspecting small electrical and mechanical components.

Similarly, the P104 model is a condensed version of the P102 model, providing efficient inspection capabilities within a smaller frame. It excels in scanning PCBs measuring up to 24cm by 24cm.

Key Features and Benefits:

• Compact and Efficient:

The P103 and P104 models are designed to provide efficient X-ray inspections within a smaller framework. These compact systems are ideal for organizations with limited space, such as small laboratories or modest production lines. Their smaller size does not compromise their ability to deliver fast and precise inspections.



• Sample Table:

Both models feature a sample table with dimensions of 24cm by 24cm. This table size is well-matched to the compact nature of the P103 and P104 models, making them suitable for handling smaller components and materials.

Versatility:

While the P103 model is optimized for inspecting small electrical and mechanical components, the P104 model excels in scanning PCBs with dimensions of up to 24cm by 24cm. This versatility caters to the specific needs of different industries and applications.

Speed and Efficiency:

These models are known for their remarkable speed and efficiency in conducting X-ray inspections. This efficiency is particularly valuable for small labs and production lines where streamlined processes are essential.

• Sample Table Freedom:

Both models feature a sample table with two degrees of freedom, offering x-sample and y-sample displacement. This allows for precise positioning and alignment of components and materials during inspections, contributing to the accuracy of the results.

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• Quality Control:

The compact yet powerful nature of the P103 and P104 models makes them valuable tools for industries that require high standards of quality control. Their efficient inspection capabilities help ensure that products and components meet stringent quality and safety standards.

In summary, the P103 and P104 models are compact and efficient X-ray inspection systems designed for small labs and production lines. They offer versatility, speed, and precise positioning capabilities, making them valuable assets for industries with compact spaces and a need for efficient quality control and defect detection.

The P103 and P104 models, like elegant virtuosos in the world of compact X-ray inspection, harmonize precision, efficiency, and versatility, bringing an orchestration of quality control to small labs and modest production lines.

P103/P104



Technical Specifications:

Cabinet	P103/M120/T2424	P104/M80/T2424
Width	900 mm	900 mm
Depth	800 mm	800 mm
Height	1,100 mm	1,100 mm
Weight	~400 kg	~600 kg

X-Ray Source

V			
Maximum voltage	120 kV	80 kV	
Maximum current	2000 µA	700 μΑ	
Maximum tube power	240 W	56 W	
Minimum focal spot size	600 µm	30 µm	

X-Ray Detector

Active area	140 mm × 120 mm
Spatial resolution	6 lp/mm
Pixel Bit depth	12 bits

Scan specifications

Scan area	240 mm × 240 mm	240 mm × 240 mm
Maximum sample weight	5 kg	5 kg
Minimum detectability	~30 µm	~80 µm

PCIsoft 1.0

Software

PCIsoft 1.0 PCIsoft 1.0

Radiation Safety

According to

IEC61010-2-091:2019

P103 Model:

Electrical Components Inspection: P103 is ideal for inspecting small electrical components, ensuring their quality and reliability. Mechanical Parts Examination: It is well-suited for examining intricate mechanical parts, guaranteeing their precision and performance. Consumer Electronics: P103 is valuable for the inspection of small electronic components found in consumer electronics, such as smartphones and tablets. Medical Devices: It can be used to inspect small components within medical devices, verifying their quality and safety.

P104 Model:

PCB Inspection: P104 excels in scanning printed circuit boards (PCBs) of various sizes, ensuring their integrity and reliability. **Electronics Manufacturing:** It is valuable for guality control in the production of electronic components, including semiconductors and connectors. Automotive Industry: P104 can be used for inspecting PCBs and small electronic components in the automotive sector, contributing to vehicle safety and reliability. Aerospace Industry: It aids in the examination of small parts and components used in the aerospace industry, ensuring

compliance with stringent safety standards.

Both models cater to industries with specific needs for compact and efficient X-ray inspection, making them valuable tools for quality control and defect detection across a wide range of applications.applications like wire bonding and the examination of larger components.

ABSOLUTE **X-RAY** SOLUTIONS

In the symphony of X-ray inspection, the P103 and P104 models emerge as instruments, crafting meticulous melodies of precision and efficiency to resonate within the intimate settings of small laboratories and compact production lines.

CT110/CT111/CT112



Arman Moj Fanavar offers a range of advanced Industrial CT (Computed Tomography) scanners that are designed for non-destructive inspection and analysis of complex components and materials. Industrial CT scanning is a powerful technology that allows for the three-dimensional visualization of the internal structures of objects with exceptional detail.

Key Features and Benefits:

High-Resolution Imaging:

The CT scanners provide high-resolution 3D images, allowing for indepth analysis of a wide range of materials and components.

• Quality Control:

The CT scans are invaluable for quality control, ensuring that components and materials meet the most stringent standards for safety and performance.

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CTech-C110

• Non-Destructive Testing:

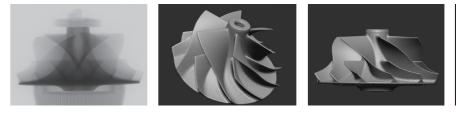
Industrial CT scanning is a nondestructive testing method, which means it can inspect the internal structure of objects without causing any damage.

Diverse Applications:

scanners find applications These including in various industries, aerospace, automotive, electronics, and manufacturing. They are suitable for inspecting complex parts, assemblies, and materials.

• Precise Analysis:

With the ability to generate detailed 3D reconstructions, these scanners allow for precise analysis of the internal structures of objects, helping identify defects and anomalies.

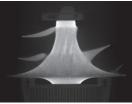


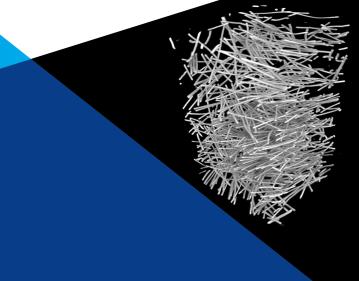
Industrial CT scanning is a versatile and powerful tool that enables industries to perform detailed inspections, defect detection, and accurate analysis of components, ensuring the highest standards of quality and safety. Arman Moj Fanavar's Industrial CT scanners are at the forefront of this technology, catering to diverse industries and delivering exceptional imaging and analysis capabilities.

ABSOLUTE **X-RAY** SOLUTIONS

Customization:

Arman Moj Fanavar offers customizable CT scanning solutions to meet the specific needs of different industries and applications.





In the realm of non-destructive testing, Arman Moj Fanavar's Industrial CT Scanners stand as the bespoke artists, crafting customized designs that unfurl the secrets held within complex materials and components, revealing beauty and precision in every scan.

CT110/CT111/CT112



Technical Specifications:

Cabinet	CT110/U130	CT111/U80	CT112/U225
Width	1,800 mm	1,100 mm	2,500 mm
Depth	1,300 mm	1,000 mm	1,800 mm
Height	2,100 mm	1,100 mm	2,400 mm
Weight	~2,000 kg	~600 kg	~5,000 kg

X-Ray Source

Maximum voltage	130 kV	80 kV	225 kV
Maximum current	500 µA	700 µA	4,000 µA
Maximum tube power	65 W	56 W	50 W/200 W
Minimum focal spot size	<7 µm	30 µm	50 μm/ 200 μm

X-Ray Detector

Active area	140 mm × 120 mm
Spatial resolution	4 lp/mm
Pixel Bit depth	12 bits

Scan specifications

Scan area	200 mm × 200 mm	50 mm × 50 mm	400 mm × 400 mm
Maximum sample weight	40 kg	5 kg	100 kg
Tilt angle	± 50°	no tilt	± 50°

ACTsoft 1.0

Software

ACTsoft 1.0 ACTsoft 1.0

Radiation Safety

According to

IEC61010-2-091:2019

CT110 - Microfocus 130 kV X-ray Generator:

The CT110 model is equipped with a microfocus X-ray generator with 130 kV, making it suitable for inspecting small aluminum parts and plastic components.

Its capabilities extend to catering to the needs of the university research and R&D sectors within the industry. This model excels in providing high-resolution imaging for precise analysis.

CT111 - Mesofocus 80 kV X-ray Generator:

The CT111 model features a mesofocus X-ray generator with 80 kV, making it ideal for inspecting very small industrial components.

This model is well-suited for deployment in small labs, where space is limited, and efficient inspections of small components are required.

CT112 - Powerful 225 kV X-ray Generator:

The CT112 model is powered by a robust X-ray generator with 225 kV, enabling it to inspect large industrial aluminum parts, gas turbine blades, and components used in the automotive industry. Its high energy output and capabilities make it suitable for applications where detailed imaging of larger and denser materials is essential.

These three types of Industrial CT Scanners cover a spectrum of applications, from small and precise inspections to larger and more complex industrial components, catering to the diverse needs of industries and research sectors.

ABSOLUTE X-RAY Solutions

Arman Moj Fanavar offers customized versions of CT scanners tailored to the unique needs of customers, ensuring that the technology seamlessly integrates with their specific applications and requirements.

CL110



Arman Moj Fanavar's CL110 Laminography System is a sophisticated and advanced solution designed for non-destructive testing and analysis. Laminography is a specialized X-ray imaging technique used to examine the internal structure of flat and layered objects, such as composite materials, laminates, and multilayered components.

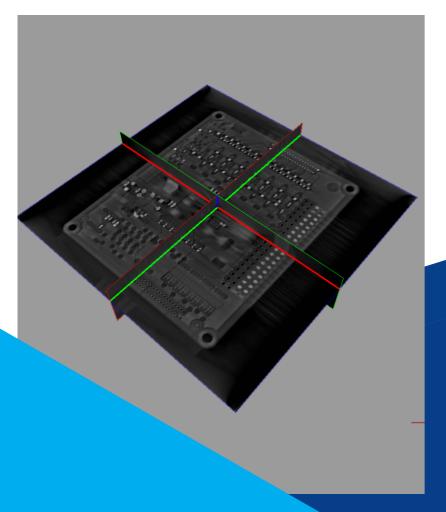
Key Features and Benefits:

• High-Quality Imaging:

The CL110 model is equipped with high-resolution X-ray imaging capabilities, providing detailed insights into the internal layers of flat objects.

• Layered Material Inspection:

This system is tailored for inspecting the internal structure of layered materials, ensuring the integrity and quality of composite materials and laminates.



• Versatile Applications:

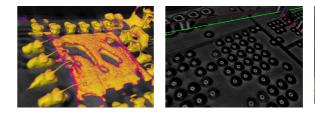
CL110 is suitable for various industries, including aerospace, manufacturing, and materials science, where the quality and integrity of layered materials are critical.

Precise Analysis:

The system allows for precise analysis of the internal layers, facilitating the detection of defects, delaminations, and irregularities within the structure.

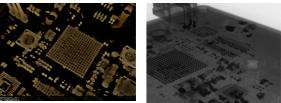
Customization:

Arman Moj Fanavar offers customization options for the CL110 Laminography System to meet the specific needs and applications of different industries.



The CL110 Laminography System is an invaluable tool for industries where layered materials play a significant role. Its high-resolution imaging and precise analysis capabilities help ensure the quality and reliability of composite materials and laminated components. This system is designed to meet the stringent standards of industries that rely on the integrity of layered materials for their products and applications.

ABSOLUTE X-RAY SOLUTIONS



The CL110 Laminography System from Arman Moj Fanavar is a masterful performer in the world of non-destructive testing, using its high-resolution imaging to reveal the layered secrets of planar objects, setting a new standard for precision and innovation in quality control.

CL110



Technical Specifications:

Cabinet	CL110/U130/U130/T5050/R3030	
Width	2,100 mm	
Depth	1,800 mm	
Height	2,100 mm	
Weight	~2,500 kg	

X-Ray Source

Maximum voltage	130 kV
Maximum current	500 μΑ
Maximum tube power	65 W
Minimum focal spot size	<7 µm

X-Ray Detector

Active area	140 mm × 120 mm
Spatial resolution	4 lp/mm
Pixel Bit depth	12 bits

Scan specifications

Inspection scan area	500 mm × 500 mm
Laminography area	300 mm × 300 mm
Maximum sample weight	5 kg
Rotation	\checkmark

Software

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Radiation Safety

According to

IEC61010-2-091:2019

The CL110 Laminography System by Arman Moj Fanavar finds application in various industries and scenarios where the inspection and analysis of layered or planar objects are essential. Some key applications include:

Aerospace Industry: In the aerospace sector, the CL110 system is used to inspect composite materials and laminated components within aircraft structures, ensuring their integrity and safety.

Manufacturing: Manufacturers utilize the CL110 for quality control of multilayered components, such as those found in automotive parts, ensuring they meet stringent industry standards.

Materials Science: Researchers and scientists employ the CL110 for in-depth analysis of material properties, including layered materials used in advanced research and development.

Non-Destructive Testing (NDT): The system is crucial in non-destructive testing scenarios where the internal layers of objects, such as planar components, need to be examined without causing damage.

Art and Cultural Heritage: In the art world, the CL110 can be used to analyze the layers within paintings, manuscripts, and artifacts, aiding in restoration and preservation efforts.

Education and Research: Educational institutions and research facilities benefit from the CL110 for teaching and research in the field of materials science, as well as for studying layered objects.

ABSOLUTE X-RAY Solutions

The CL110 Laminography System is a versatile tool that ensures the quality, safety, and preservation of layered or planar objects across a range of industries, contributing to the advancement of research and the reliability of critical components.

