GILARDONI

IMAGING THE FUTURE SINCE 1947

MARCHIO STORICO

X-RAY SOLUTIONS

NON-DESTRUCTIVE TESTING (NDT)

THE COMPANY

Gilardoni is an advanced company based on innovation and Research & Development of X-ray sources and related applications.

Founded in 1947 on Como Lake (Italy) by the visionary Eng. Arturo Gilardoni, it is active in three sectors: Medical, Non-Destructive Testing and Security.

IMAGING THE FUTURE SINCE 1947

APPLICATIONS

AUTOMOTIVE
AEROSPACE
FOUNDRY
PIPING
WELDING
RUBBER, PLASTIC & CERAMIC
ELECTRONICS
RESEARCH
REVERSE ENGINEERING
DEFENCE
ADDITIVE MANUFACTURING

INDUSTRIAL X-RAYS

Since 1960, Gilardoni has been a point of reference in the development of technologies for Non-Destructive Testing (NDT), to support productivity and quality inside industrial processes.

TECHNOLOGY

NDT division designs X-Ray systems, offering real time inspections for efficient testing. The product range includes radioscopic cabinets with automatic defect recognition (ADR), portable units and accessories.

CUSTOMIZATION

Close collaboration with customers allows Gilardoni to deliver dedicated solutions, often evolving into true business partnerships.

OUR PRODUCT LINE FOR NDT

- X-ray and tomography system with automatic defect recognition.
- MHF Plus: High Frequency Portable X-ray Units
- Scan-X: in line solution for the inspection of a wide range of materials, shapes and sizes

SCAN ME

GILARDONI

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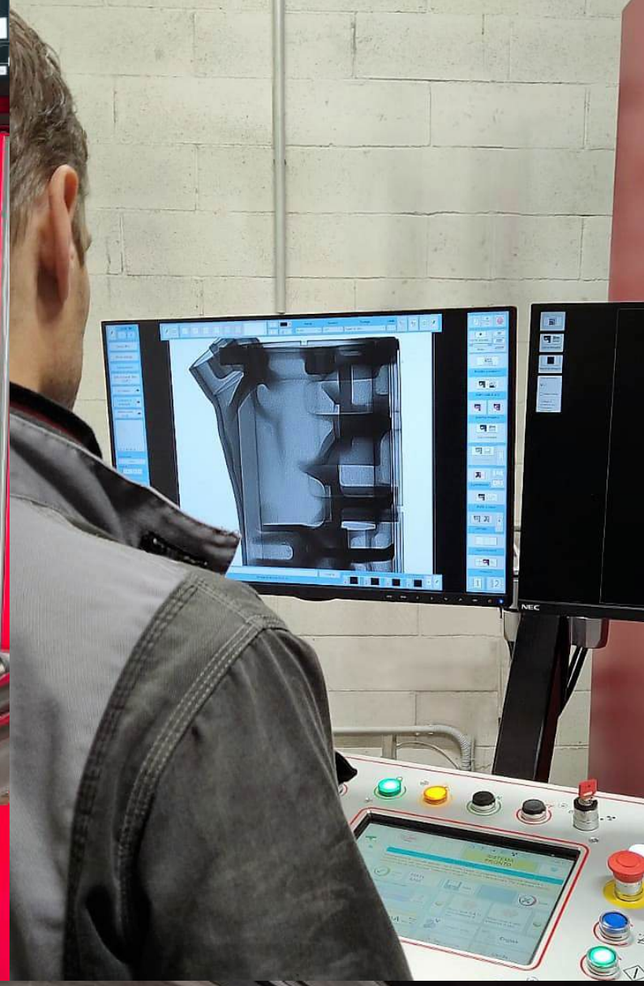


X-RAY & CT SYSTEMS

MODULAR

Modular design allows future upgrades
with new components and functions.

CT READY

No need of further adjustments. It is possible to update to tomography just adding a dedicated computer and software.

RELIABLE

High reliability thanks to a robust structure, up to date X-ray sources, and quality production testing.

EASY SAMPLE HANDLING

Brushless motors with multiturn absolute encoders enable immediate operation without reset procedures.

STAND ALONE SYSTEM

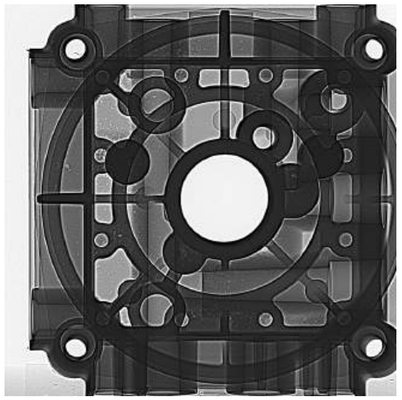
All in one solution.

SHIELDING

Lead shielding from 225 to 450 kV.

STANDARD CONFIGURATION	XE-S	XE-L	XE-XL	XE-XXL	XE-L HE
Voltage (kV)	150-160-225	150-160-225	150-160-225	150-160-225	150-320-450
Shielding (kV)	225	225	225	225	320/450
Dimensions (mm) W L H	2.100/2.900 2.020 2.050	1.800 2.500 2.300	2.650 2.800 2.600	2.950 3.200 3.225	2.310 2.810 2.650
Weight cabinet (kg)	2.200	3.900	6.500	9.500	12.000/18.000
Max object dimensions (mm)	Ø 420×600	Ø 700×1.200	Ø 1.000×1.500	Ø 1.200×2.000	Ø 700×1.200
Max object weight (kg)	20	120	120	120	500
Max penetration	Up to 30 mm Fe and 160 mm Al	Up to 30 mm Fe and 160 mm Al	Up to 30 mm Fe and 160 mm Al	Up to 30 mm Fe and 160 mm Al	Up to 60 mm Fe and 230 mm Al

SCAN ME

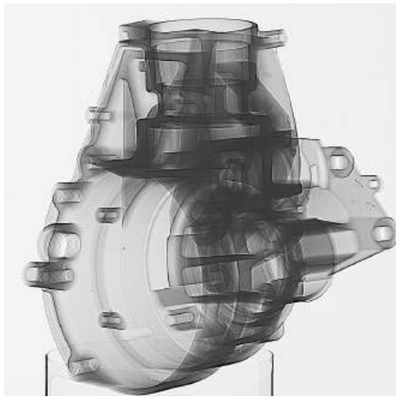


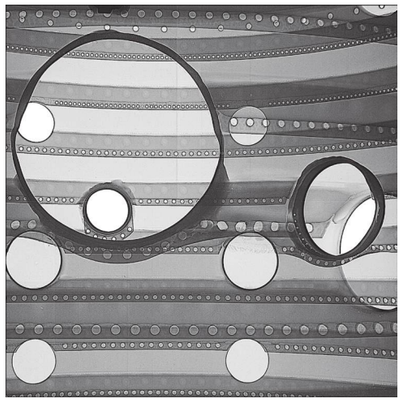
HIGH IMAGE QUALITY

Achieved using a digital panel (sensor) for image acquisition. This is paired with sophisticated processing software and proprietary filters.

FILTERS

Image processing with filters allows viewing of data not visible on monitors and not perceived by the human eye. This allows automatic enhancement of the information contained in the digital image obtained.





EASY TO USE

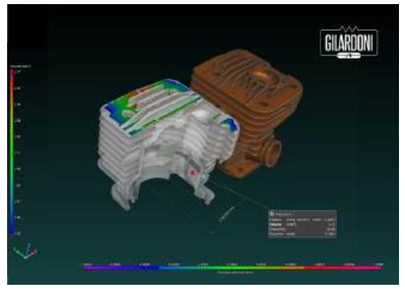
Software designed to be simple and intuitive. The analog joysticks allow control of the manual speed of each axis, enabling the operator to perform precise positioning or fast movements as needed.

CUTTING EDGE SOFTWARE

Management software can be easily programmed with a touch screen. Image processing software included on dedicated monitor.

ADDITIONAL COMPONENTS AND FUNCTIONS

can be added to the standard configuration.

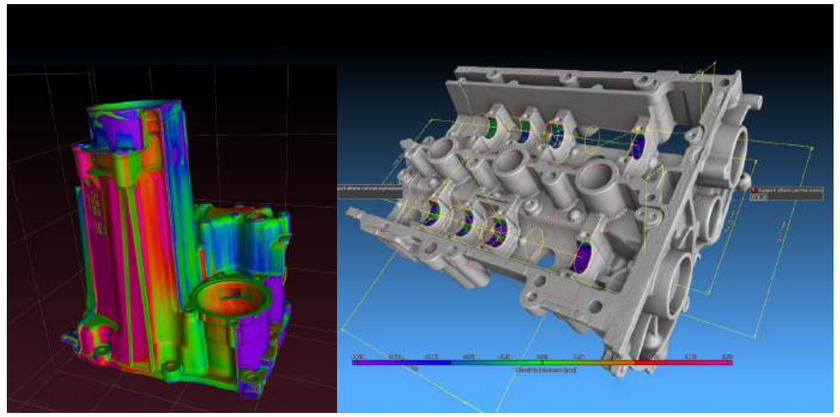


TOMOGRAPHY

VG Studio software, the most advanced 3D reconstruction and tomographic analysis software available on the market, can be installed upon request.

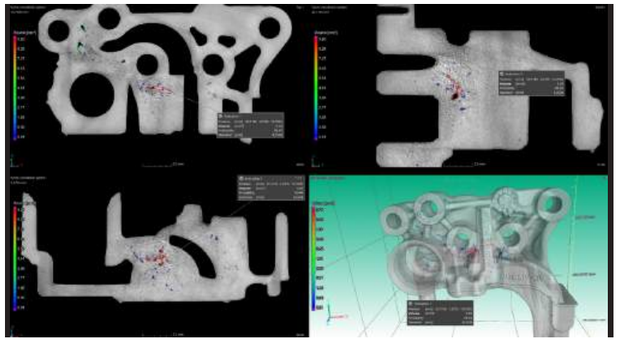
Depending on requirements, packages including different modules are available:

- Porosity/inclusions analysis
- Wall thickness analysis
- Coordinate measurement
- Actual/nominal comparison

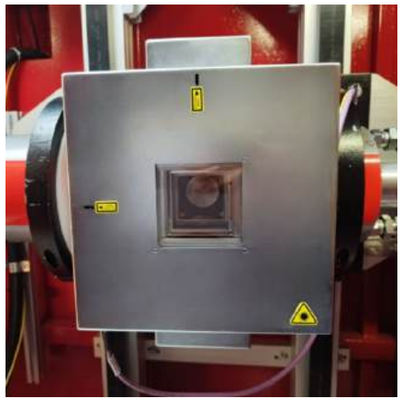


QUICK SCAN

The Quick Scan function produces an initial three-dimensional image in just 20 seconds (using specific sensor models).



ACCESSORIES



COLLIMATOR

A collimator unit equipped with two independently motorized pairs of tungsten blades is installed in front of the X-ray tube to precisely control the X-ray beam spread.

Key benefits include:

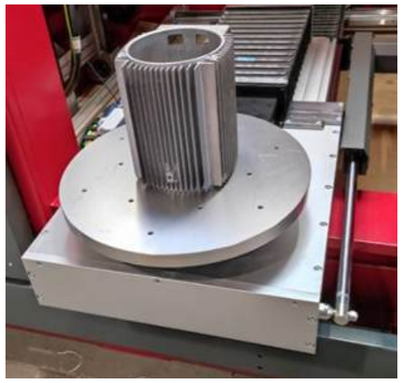
- Precise beam collimation at the welding area, enhancing penetration capability while reducing exposure time.
- Preserving the integrity of the Flat Panel over time by reducing the area exposed to high power X-rays with a possibility to shift the panel to avoid potentially damaged sectors, if needed, during inspection.
- Reduce the possibility of blooming effects on the acquired image.

X-WIDE VIEW

Enlarges the field of view up to 18" with 9" sensor or up to 34" with 17" sensor. This allows to have a very wide reconstructed volume in CT during inspection of big parts.

RADIOTRANSPARENT INSPECTION FIXTURE

Customized inspection fixture for a stable positioning of the samples to be inspected.



EXTERNAL LOADING PLATE

External turntable designed to simplify loading and unloading operations. Ideal for handling large and heavy parts outside the cabinet using cranes, robots, or manipulators. Dedicated inspection fixtures ensure stable and accurate positioning of the samples during inspection.

HIGH FREQUENCY PORTABLE X RAY UNITS

MHF PLUS LINE

Control unit built with state-of-the-art components and a functional menu; short and light monoblock to ensure easy transport.

	MHF Plus 300D	MHF Plus 300PO
Dimensions (with handles)	L 999mm x diam. 295mm	L 1010 x diam. 295mm*
Dimensions (without handles)	L 926mm x diam. 257mm	L 936 diam. 257mm*
Weight	32kg	30kg
Tube voltage	50kV | 300kV	
Tube current	1mA | 6mA	
Maximum power output	900W	600W
Focal spot (EN12543)	3mm	5,5x0,5mm
Inherent filtration	0,8mm Be	0,4mm Fe/Ni/Co + 2mm Al
Emission angle	40° x 60°	38°x360°
Scattering radiation	< 10mSv/h	
Duty Cycle	100% a 40°C	
Cooling	Air	
Protection rate	IP65	
Transport and storage temperature	-20°C | +70°C	
Operating temperature	-20° | +50°	

MAIN APPLICATIONS

- WELDING
- PIPING
- AUTOMOTIVE
- AEROSPACE
- NAVAL
- ART
- CONSUMABLES
- RESEARCH

PERFORMANCE

MODEL 300 PANORAMIC
Penetration up to 75 mm – Fe

MODEL 300 DIRECTIONAL
Penetration up to 80 mm – Fe

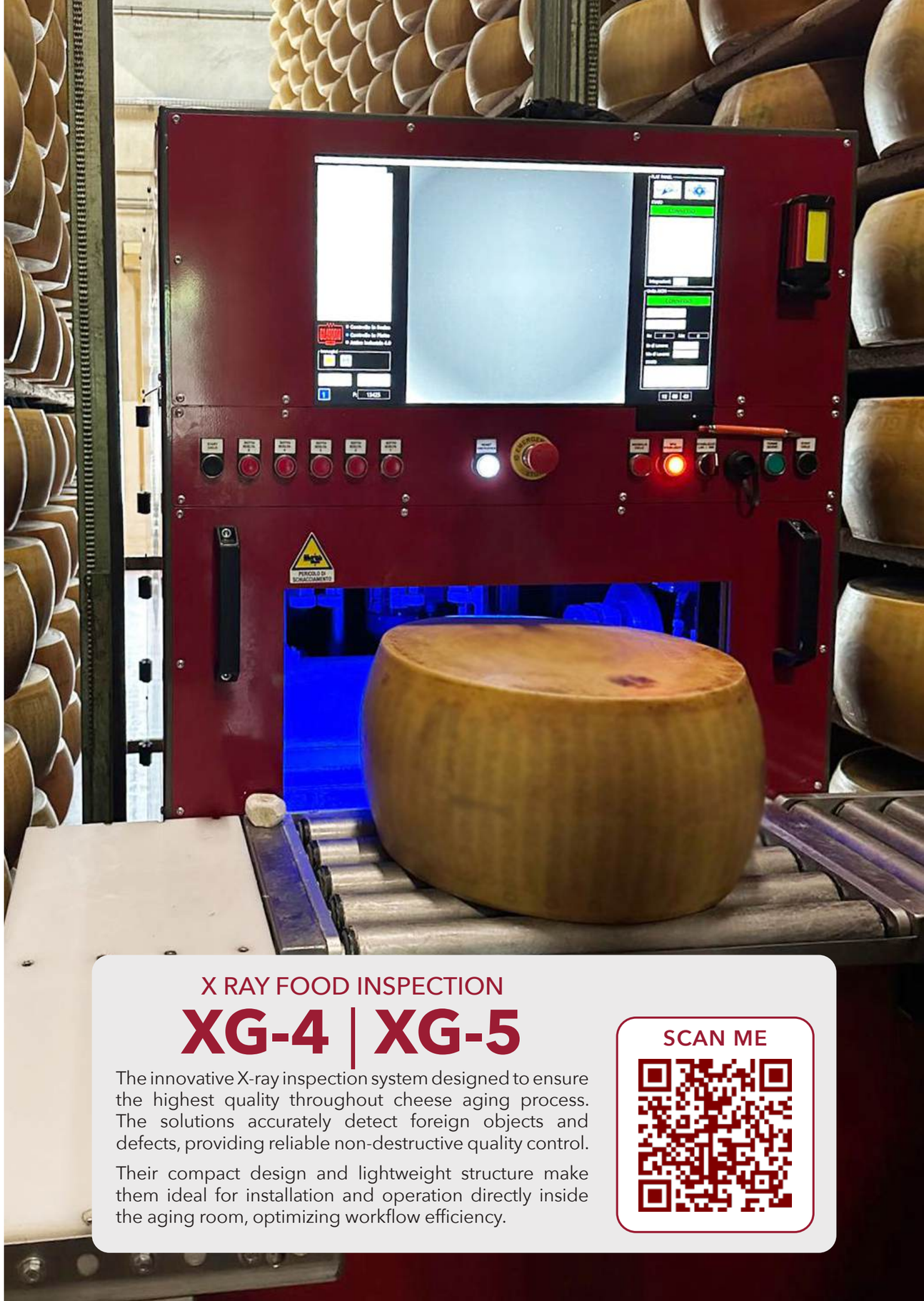
X RAY SYSTEMS FOR IN LINE CONTROLS

SCAN X

QUICK INSPECTION, IDEAL FOR IN-LINE CHECKS

TYPICAL APPLICATIONS

- Identification of product anomalies
- Food inspection to verify defects or the presence of foreign bodies (polluting materials such as metals, glass, stones, etc.)
- Container filling verification (e.g., a box of chocolates)
- Verification of correct positioning of parts
- NDT (Non-Destructive Testing) of light alloy products



X RAY FOOD INSPECTION

XG-4 | XG-5

The innovative X-ray inspection system designed to ensure the highest quality throughout cheese aging process. The solutions accurately detect foreign objects and defects, providing reliable non-destructive quality control.

Their compact design and lightweight structure make them ideal for installation and operation directly inside the aging room, optimizing workflow efficiency.

SCAN ME

Cod. 64860729 - Rev. 00 - XII-25

WHY CHOOSE GILARDONI?

EXPERIENCE AND KNOW HOW

Over 70 years of experience in the X-ray sector. Thousands of X-ray systems installed worldwide.

HIGH QUALITY MATERIALS

Research and development of innovative technical solutions ensuring high performance, low maintenance and long term reliability over time.

INVESTMENT LONGEVITY

Reliability, experience and the opportunity to have our highly specialized technicians perform preventive maintenance insure the durability of Gilardoni systems.

RESEARCH LABORATORIES RECOGNIZED "HIGHLY QUALIFIED"
WITH DECREE D.M. 9.10.1985 - L. 46/82 ART.4 - COMPANY CERTIFIED ISO 9001 ISO 13485

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