

# OMNIA

## New multipurpose 160/225kV Industrial Radioscopic System



**BOSELLO HIGH TECHNOLOGY** is pleased to present the latest and innovative solution for Radioscopic inspection of medium/big size castings.

New concept, Flexible and suitable for different application thanks a new design of the unique Cross Over manipulator:

- 9 axes cross over manipulator for optimal inspection positions.
- Very compact X-Ray cabinet.
- Fast loading/unloading by rotating pallets mechanism.
- Fast positioning and analysis by ADR Faris System available.

**BOSELLO**  
HIGH TECHNOLOGY  
INDUSTRIAL X-RAY



## Compact cabinet and fast loading by innovative rotating pallets system

X-Ray shielded cabinet complies with Italian regulation (DPR 257/2001) and the strictest international regulations. The cabinet is completely self-contained, manufactured in steel with complete lead shielding.

The cabinet does not require any further shielding and can be located safely in any workplace area.

The cabinet is designed with a pneumatic sliding door for casting loading, a large maintenance side door and a lead/glass inspection window.

Safety light curtain or laser scanner on the loading area if machine is manually loaded.

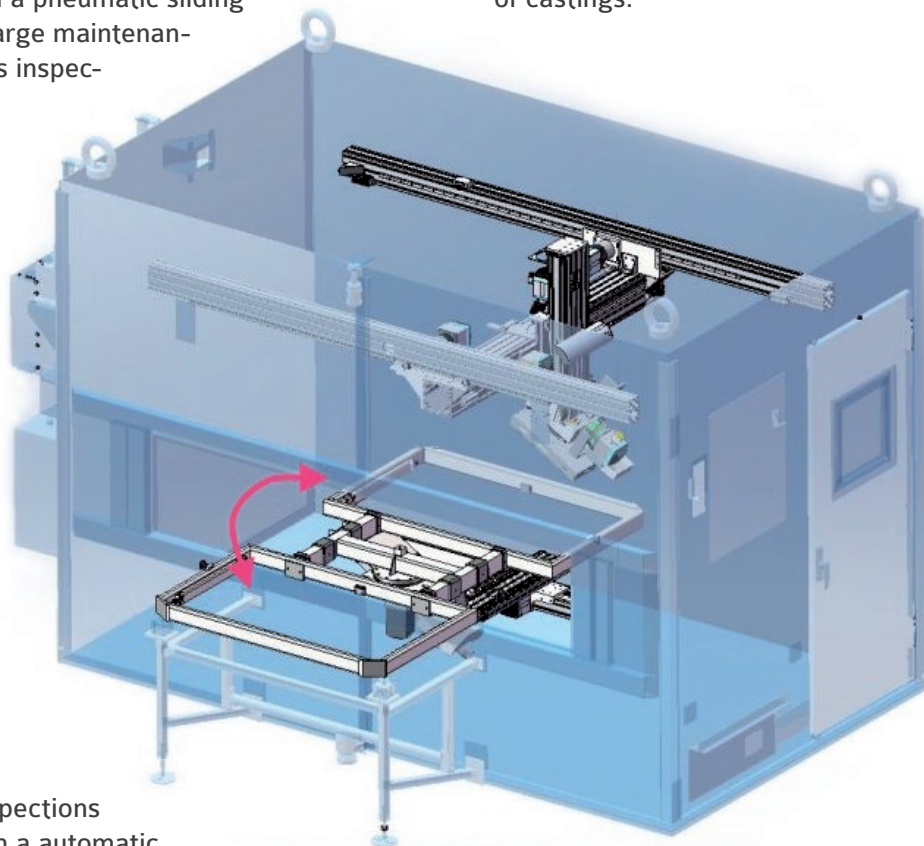
The castings move from outside the cabinet to inside inspection position by a rotating motorised mechanism with two pallets-holders placed at 180 degrees.

This configuration allows high speed part changing with a speed of approx. 5 seconds, reducing the overall cycle time considerably.

The **new OMNIA** allows for fast continuous cycle inspections and it is optimised to work in a automatic

production line interfaced with an external robot, adequate safety devices permit also manual loading/unloading operations.

The pallets can be removed and changed in a few minutes without using any tools, this makes the OMNIA very flexible to use with various type of castings.



## X-Ray Handling/Cross Over twin manipulator

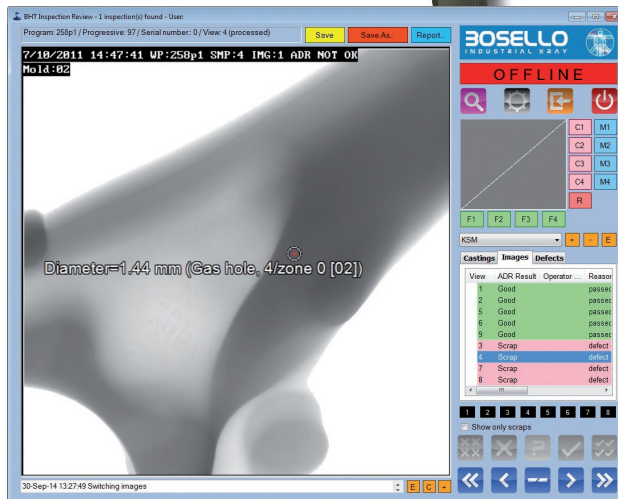
The inspection positions are obtained by the movement of the complete X-Ray system without any C-arm or other mechanical connection between the X-ray source and the sensor.

Coordination and alignment is controlled by software and allows, thanks 2 high precision Cartesians manipulators to achieve any possible desired positions, including double tilting and zooming.

Axes are controlled by brushless motors with absolute encoders on board. This equipment does not require any homing setting of axes.

## BHT Inspection Review

Available on request allows reviewing images from remote by operator or supervisor. Is also possible to confirm or change the results of ADR processing. Many functions of storage in different formats and enhances available. It can work on line monitoring in real time the inspection cycle or offline reviewing images stored by query functions. The unit, simply connected to the network via Ethernet can control up to 8 units even if located in different plants.

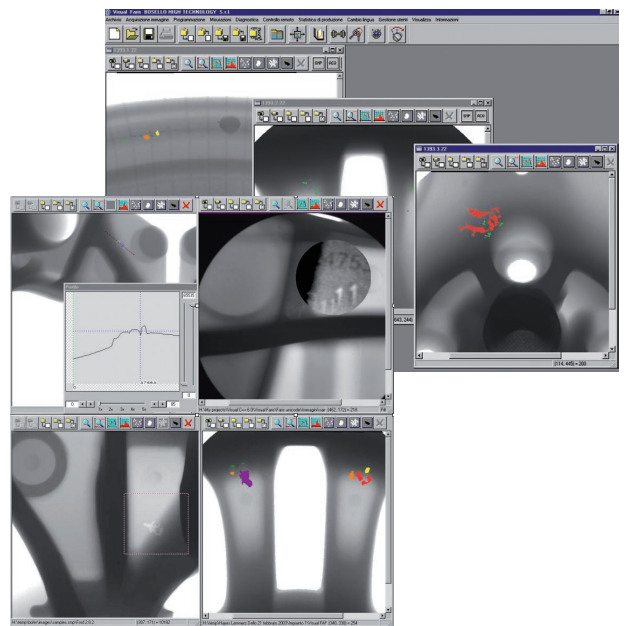


## FARIS SYSTEM (ADR)

Fully Automatic Radioscopic Inspection System

**Visual Faris** features the state of the art of imaging technology on automatic defects recognition for industrial X-ray applications.

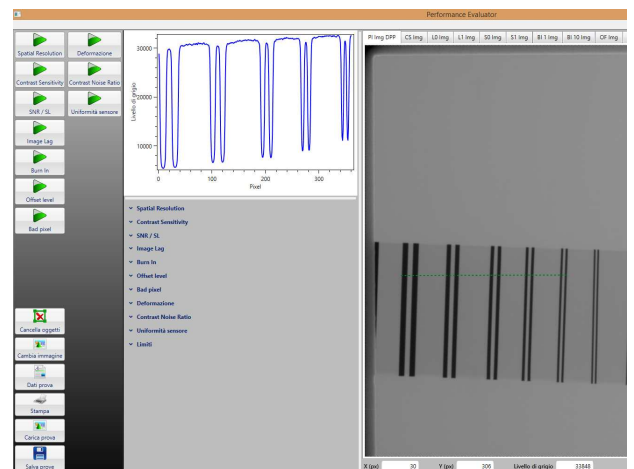
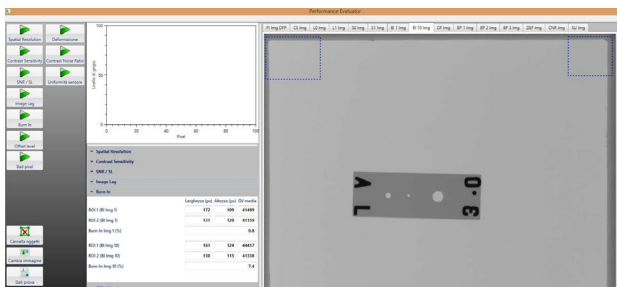
This innovative artificial vision system consists of an image processing unit (PC) and proprietary image processing software developed by Bosello HT. It provides reliable and effective diagnostic tools for all applications that require quality controls on light and heavy alloy castings.



## DDA evaluator software available for Aerospace applications.

The software allows the execution of many and different tests, in particular there are all the required tests described in the following normative:

- Standard PR 5250
- Standard ASTM E2737



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