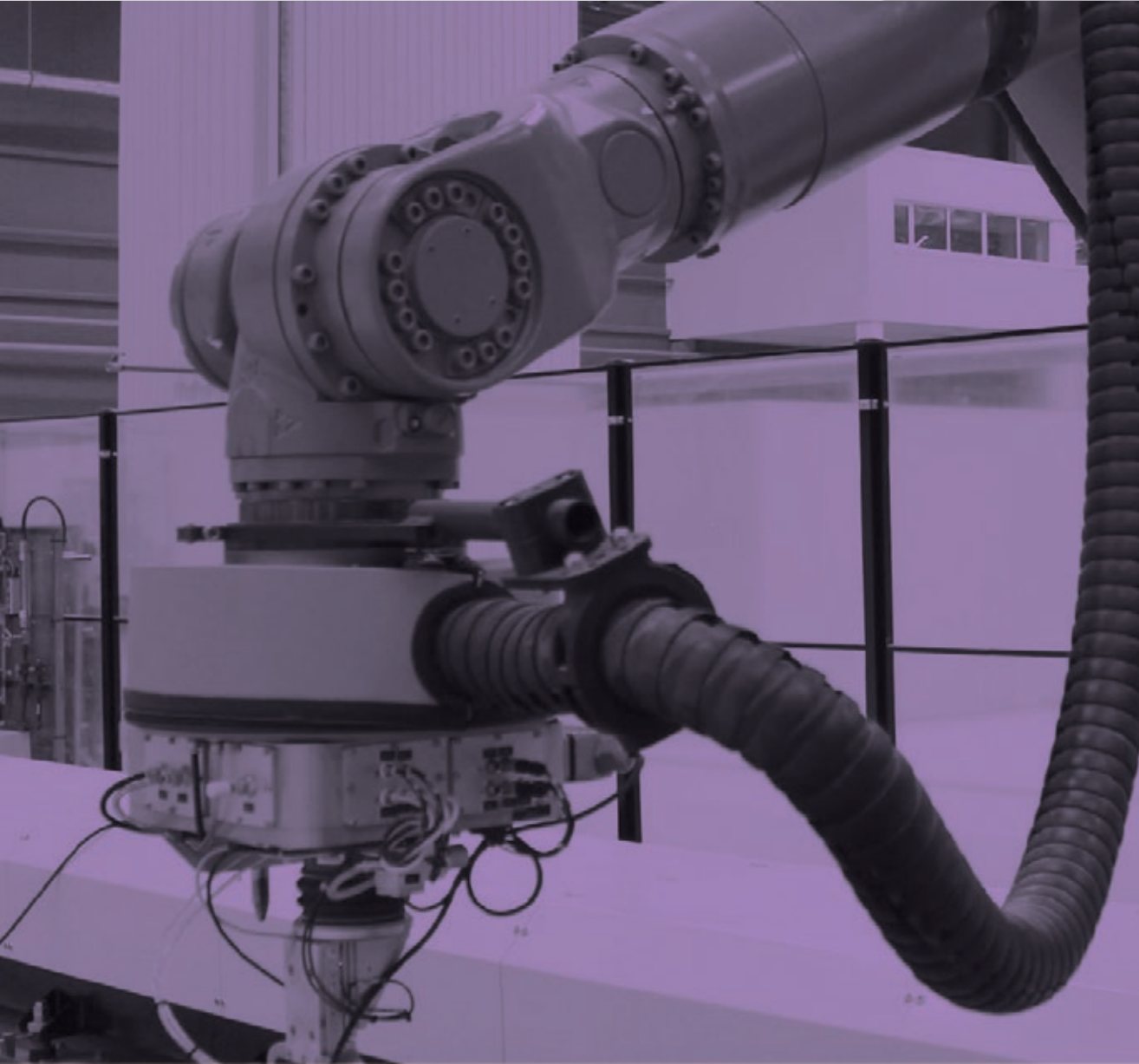


Ready for the future,
caring for the customer



Ultrasonic Inspection
Technologies

TAURUS[®]

Robot Based Automatic
Inspection System

 **tecnatom**

www.tecnatom-ndt.com

CE

APPLICATION

TAURUS is an automatic system designed for the ultrasonic inspection of aeronautical components using water jet through-transmission and/or pulse-echo phased-array techniques. It is based on an industrial robot arm mounted on a linear track. The robot can perform Pulse Echo inspections with a range of end-effectors or TTU inspections with a yoke.

The system can assure coverage of the complete part including geometrical features such as surfaces with double curvature, edges, cut-outs, radii, T or Ω stringers. In addition, the system can be equipped with other advanced functionalities such as a defect marker or a teaching laser scanner. These inspection modules can be easily mounted on the machine using an automatic tool changer and its associated stand.

Proven Advantages

- **Integrated**, a unified environment covering all process steps.
- **Multi-Technique**: PA, TTU and PE.
- **Flexible**, working with wide range of products geometries.
- **Productive**, high inspection speed and Phased Array technology.
- **Scalable**, to progressively increase its performance.

Tecnatom will adapt any machine to fulfill the customer's requirements.



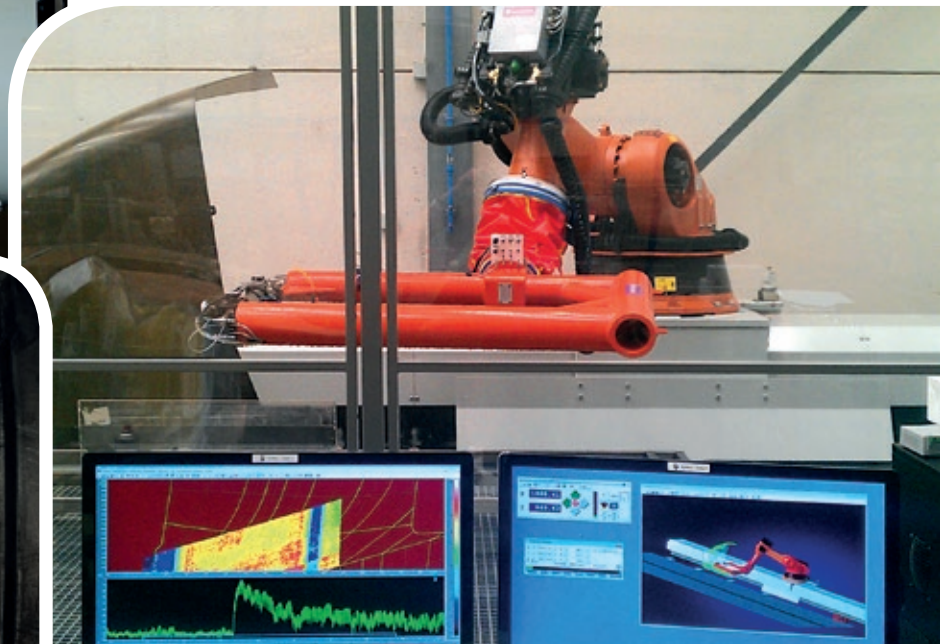
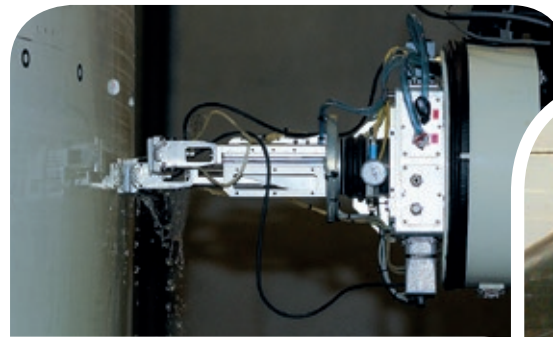
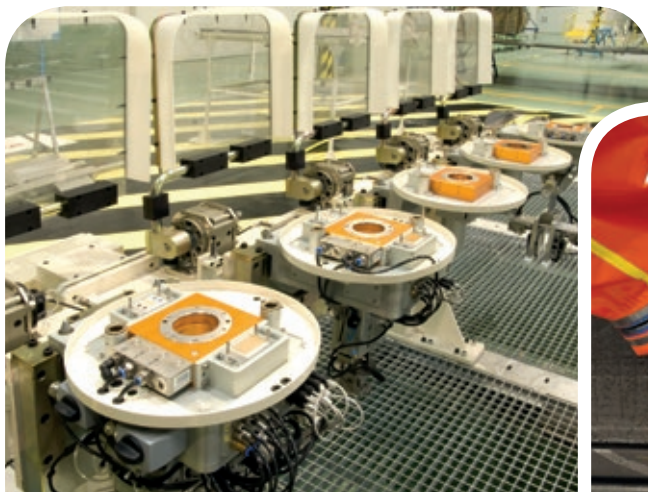
SCOPE

- Mechanical system with 7 axes, stroke of linear track and type of robot according to customer requirements
- Tecnatom-KUKA controller to manage all motorized axes
- Tecnatom's Phased-array and/or Conventional Ultrasonic Electronics and advanced software for acquisition, evaluation and machine control.
- Modules for inspection of a wide range of components and geometries.
- Gentry advanced software application for trajectories generation and geometry reconstruction.
- Simulation and post-processing software application.
- Computers for operation control, ultrasonic acquisition and evaluation
- Water circulation and treatment system
- Other accessories and services: documentation, installation, training,...

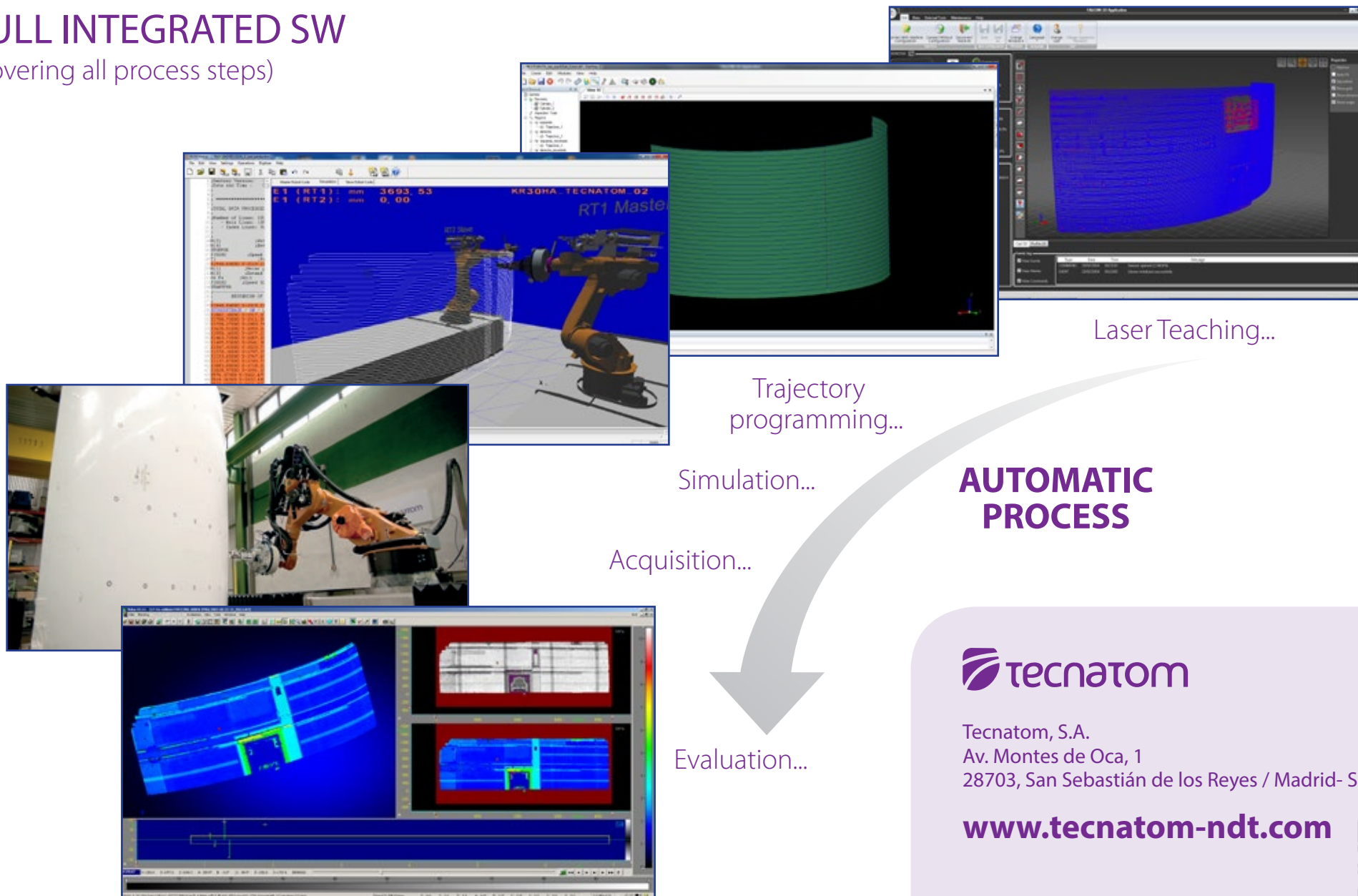
OPTIONS

- Extension of number of phased-array channels
- Specific inspection modules for complex geometries (radii, Omega or T-shaped stringers, etc..)
- Additional axes (such as turning table)
- Laser scanner for part teaching and trajectory correction
- Defect marking tool
- Yoke for Through-Transmission Inspection
- Automatic tool changer and stand
- Technical assistance during machine start-up
- Machine certification
- Easy upgrade to TAURUS TWIN (Dual Robot Inspection System)

Automatic Tool Changer



FULL INTEGRATED SW (Covering all process steps)



AUTOMATIC PROCESS



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