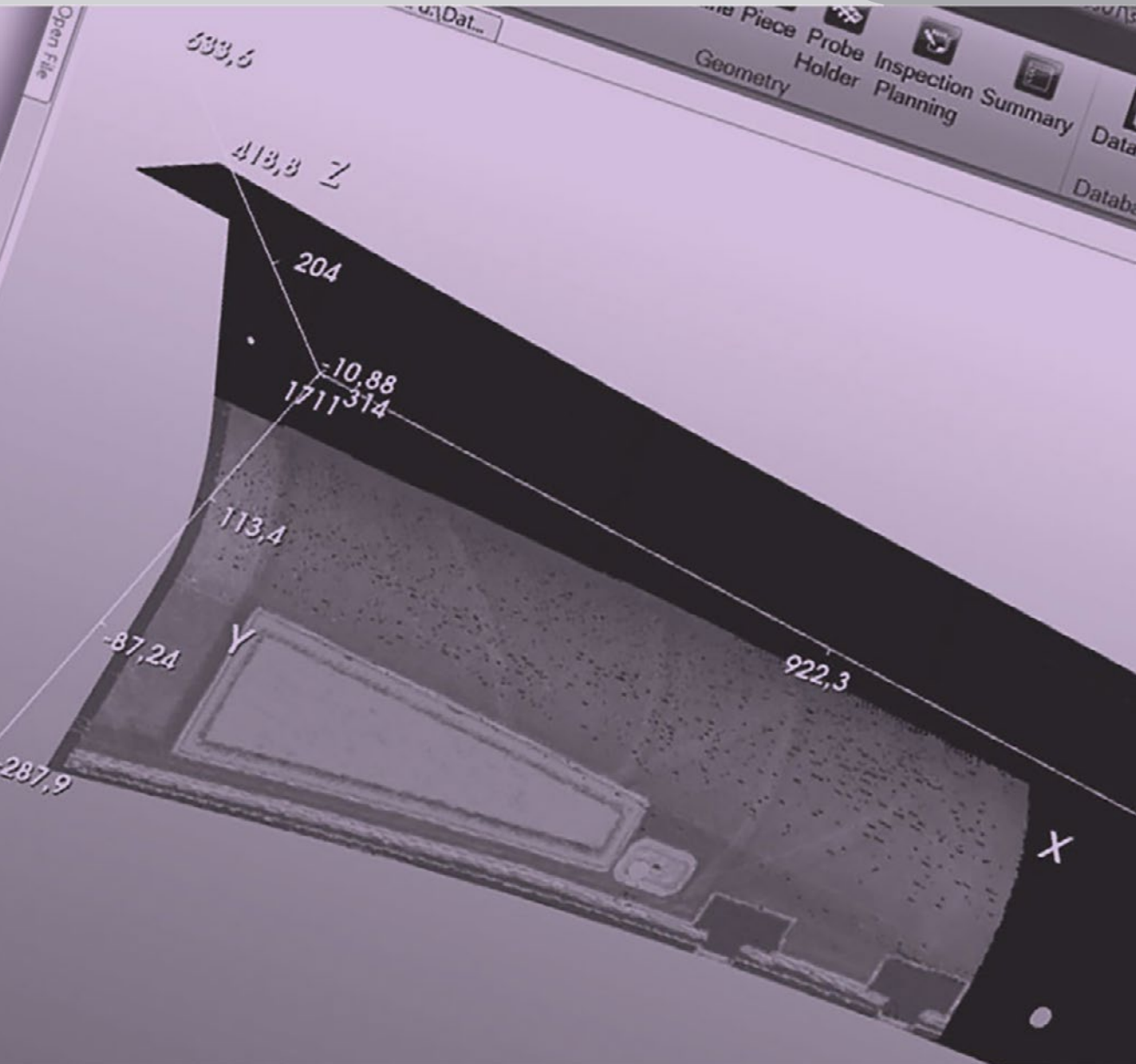


Ready for the future,
caring for the customer



InspectView[®]

Software Suite for NDT

 **tecnaatom**
www.tecnaatom-ndt.com



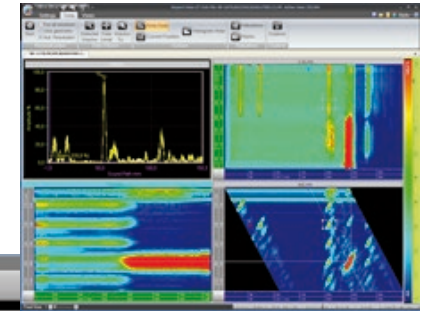
InspectView Software Suite for NDT

InspectView A software suite for the whole NDT process

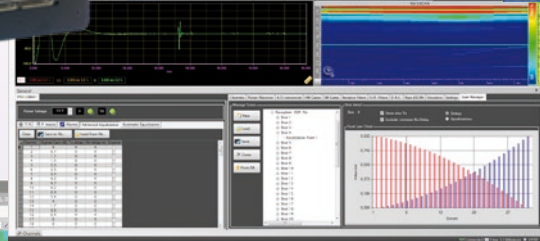
InspectView® is a software suite for the whole NDT inspection process: definition and planning, trajectory calculation, machine control, calibration, acquisition, evaluation, and report generation.



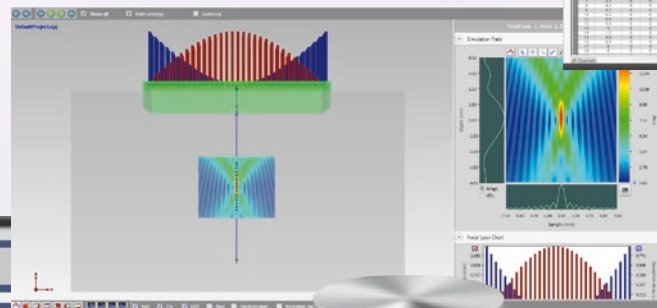
MACHINE CONTROL:
SIROCO-MULTI



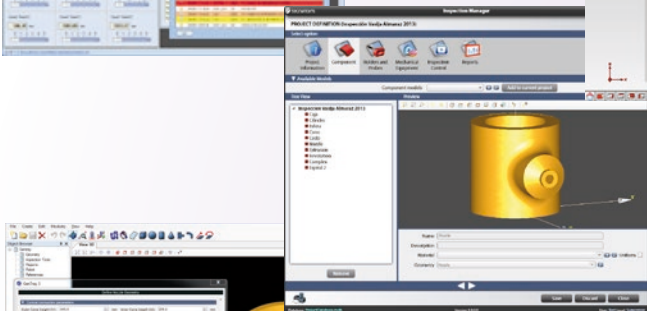
ANALYSIS:
InspectView-EVA



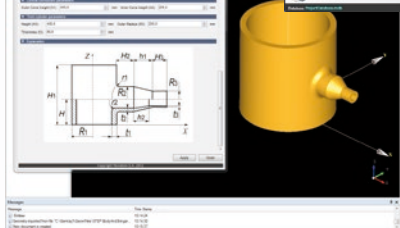
CALIBRATION &
ACQUISITION:
InspectView-ACQ



FOCAL LAW CALCULATION:
FocalSim



PLANNING:
Inspection Manager



TRAJECTORY
GENERATION: GenTray



SHARED DATABASE

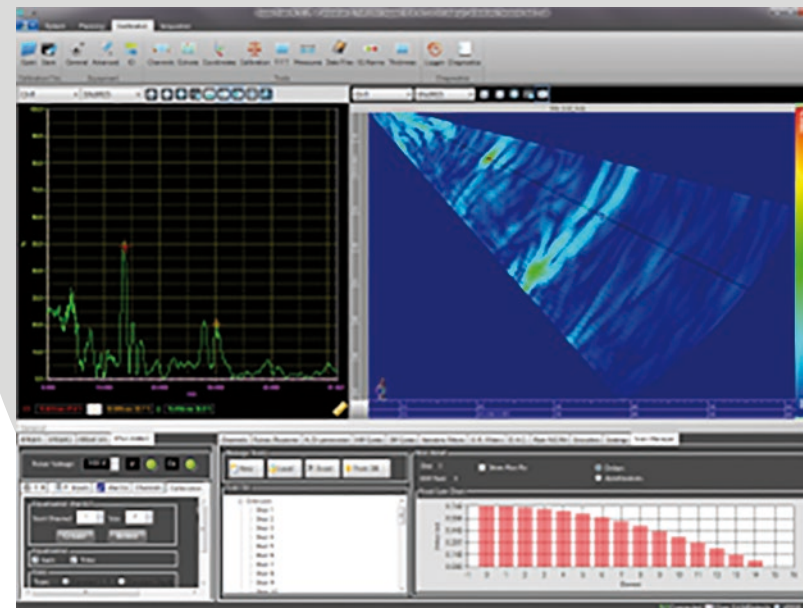
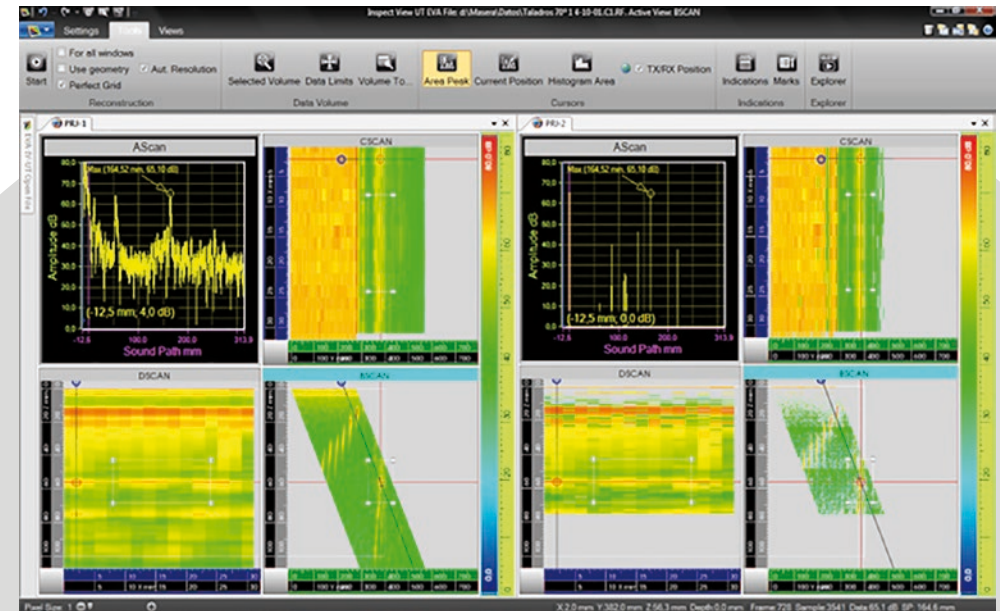


**INSPECTION
PROCESS**

InspectView

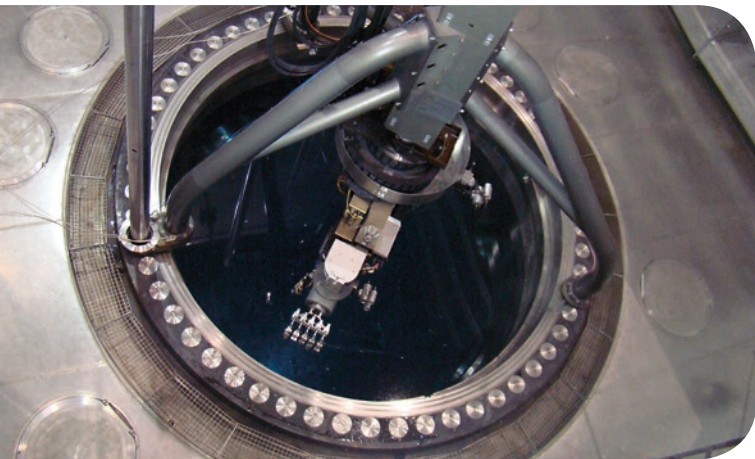
MAIN FEATURES

- Unified operation: All applications share information and allow for a seamless process flow. Planning, machine control, trajectory calculation, calibration, acquisition, evaluation, reports, ...
- Integrated machine control. Launch acquisition and machine movement with a single click.
- Customizable Word, PDF automatic report generation.
- Automatic step-by-step execution of inspection plans with multiple phases.
- Focal law calculation for array probes. Multiple geometries, probe designs and inspection techniques.
- Simultaneous synchronized evaluation of several files.
- Specialized evaluation tools: TOFD (Time-Of-Flight-Diffraction), FFT.
- Export to graphics format (TIFF, PNG) or to other evaluation software (ULTIS).
- Full integration with trajectory generation software for advanced features such as retest, go-to-point, or defect marking.



APPLICATIONS & CUSTOMISATION

The underlying software architecture of INSPECTVIEW is designed for customisation. Tools and visual displays can be easily adapted for specific applications. Here are some references and examples:



POWER GENERATION (NUCLEAR & OTHERS)

- Inspection of vessel components
- TOFD: Time-of-flight diffraction
- SICOM-UT: Inspection of nuclear fuel rods
- CRONOS: Inspection of fuel control rods



AEROSPACE & INDUSTRY

- Quality control of component manufacturing
- Transmission & Pulse-echo techniques, including air-coupled UT and Laser Ultrasonic
- Specific tools for aeronautic evaluation
- SICOR: Inspection of revolution components



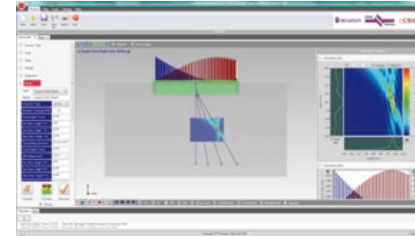
MODULES



INSPECTION MANAGER

Planning

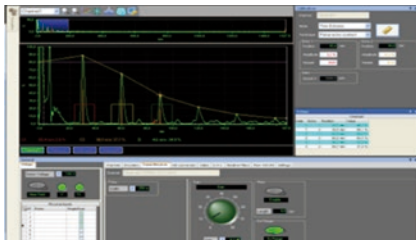
- Definition of inspection plan
- Inspection control: start, stop, pause
- Integration with machine control & trajectory planning
- User management
- Report generation



FOCALSIM

Focal law calculator

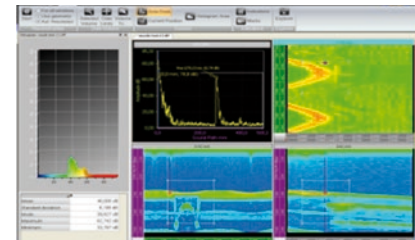
- Calculation of focal laws for phased array systems
- Simulation of acoustic field
- Scenario definition
- Techniques: Pulse-echo, tandem, pitch-catch
- Dynamic depth focusing



INSPECTVIEW-ACQ

Calibration and acquisition

- Connection with UT acquisition hardware
- Full integration with SONIA product range
- Calibration and configuration of ultrasonic parameters
- Acquisition and storage of data files

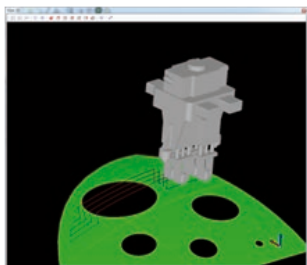


INSPECTVIEW-EVA

Analysis & Evaluation

- Reconstruction of ultrasonic data files
- Multiple files can be analysed simultaneously in a synchronized way
- Specialized tools (TOFD, FFT)
- Measurement tools for defect detection

FULLY INTEGRATED WITH CONTROL AND TRAJECTORY TOOLS



GENTRAY

Trajectory generation

- Import geometry from CAD file
- Automatic generation of inspection lines
- Visual 3D evaluation of designed trajectories
- Generation of machine trajectory files in several controller languages



SIROCO-MULTI

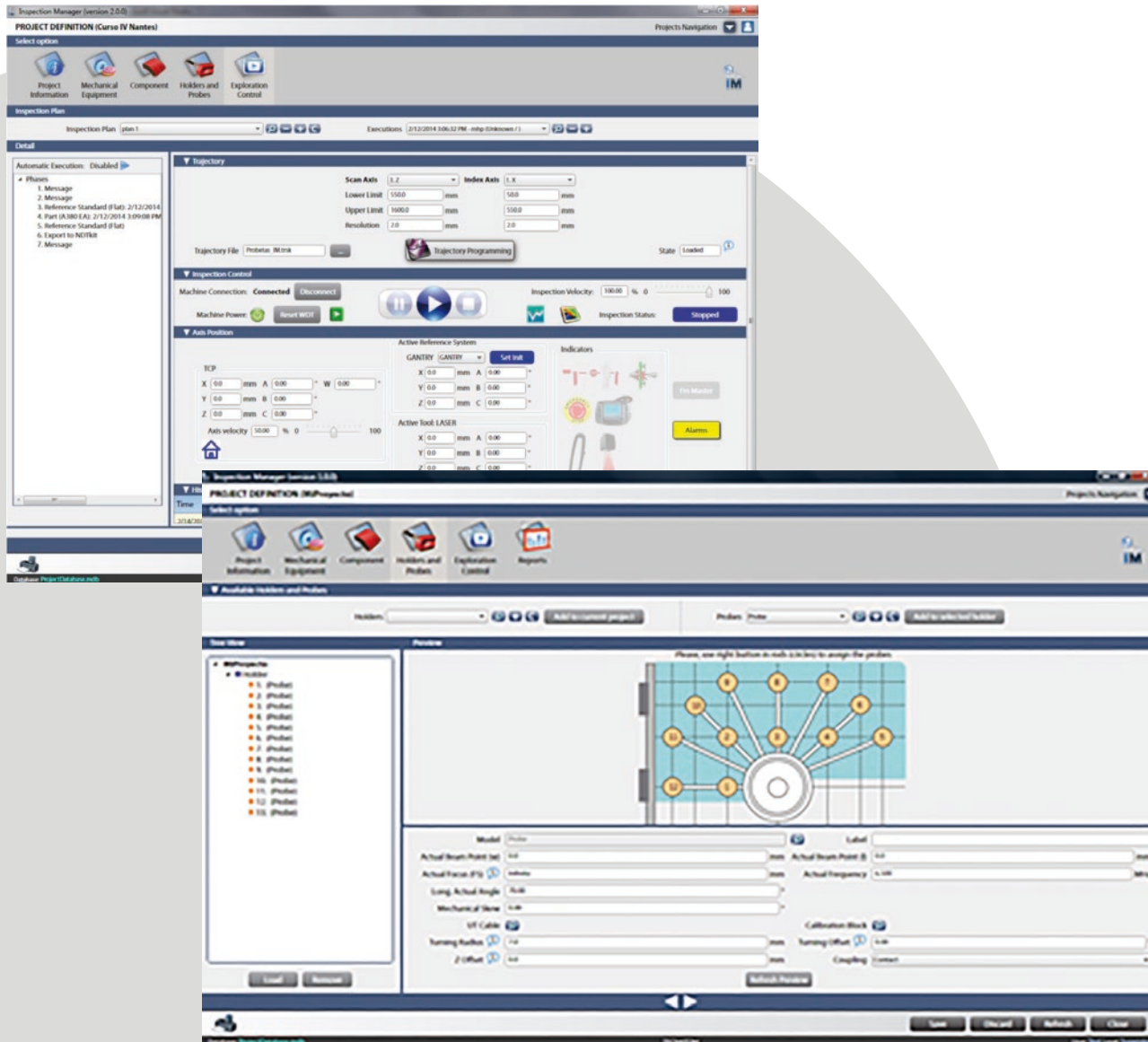
Machine control

- Integration of multiple machine controllers: watertank, robot, etc.
- Remote management of all elements making up the inspection cell

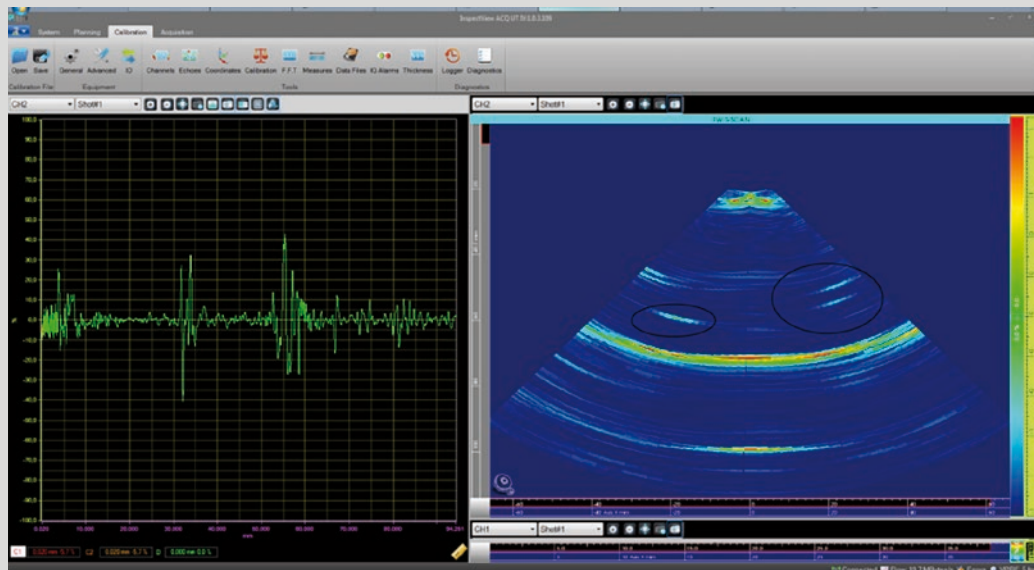
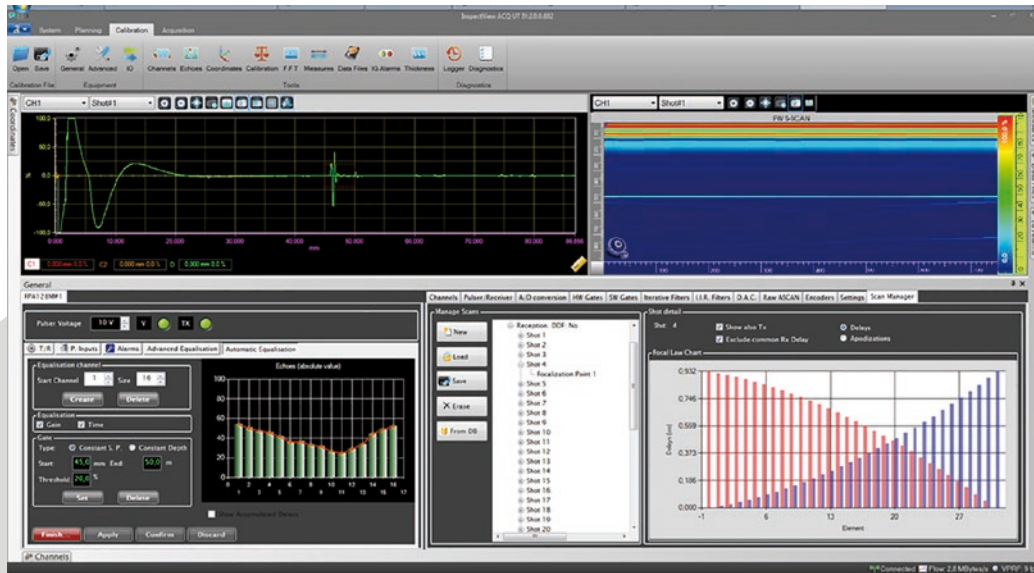
Inspection Manager

PLANNING

- Definition of inspection parameters: all information needed is stored in projects.
- Definition of the elements involved in the inspection (machine, part, probes, acquisition systems and machine control, etc ...).
- Control of inspection (start/stop/pause).
- Management of the database that contains all the information.
- Coordination among all the applications in the suite, for the exchange of information, alarms and actions.
- Execution of an inspection project or a set of consecutive projects in automated way.
- Generation of customizable reports.
- Administration of users and privileges.

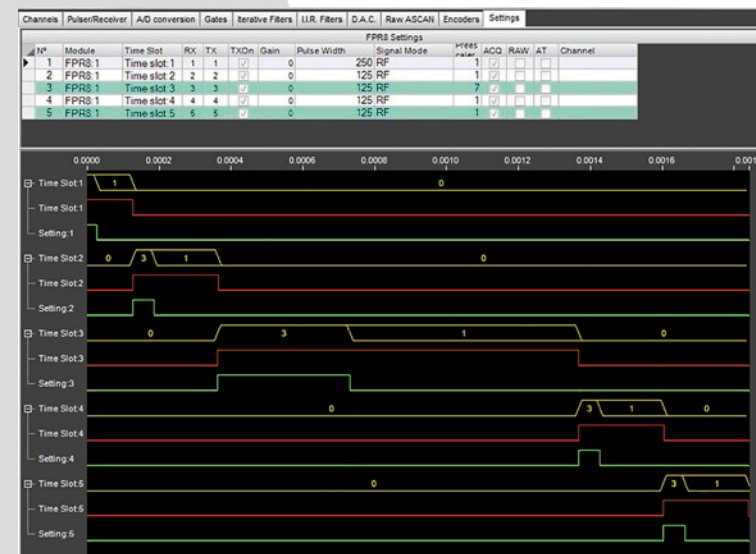


InspectView - ACQ



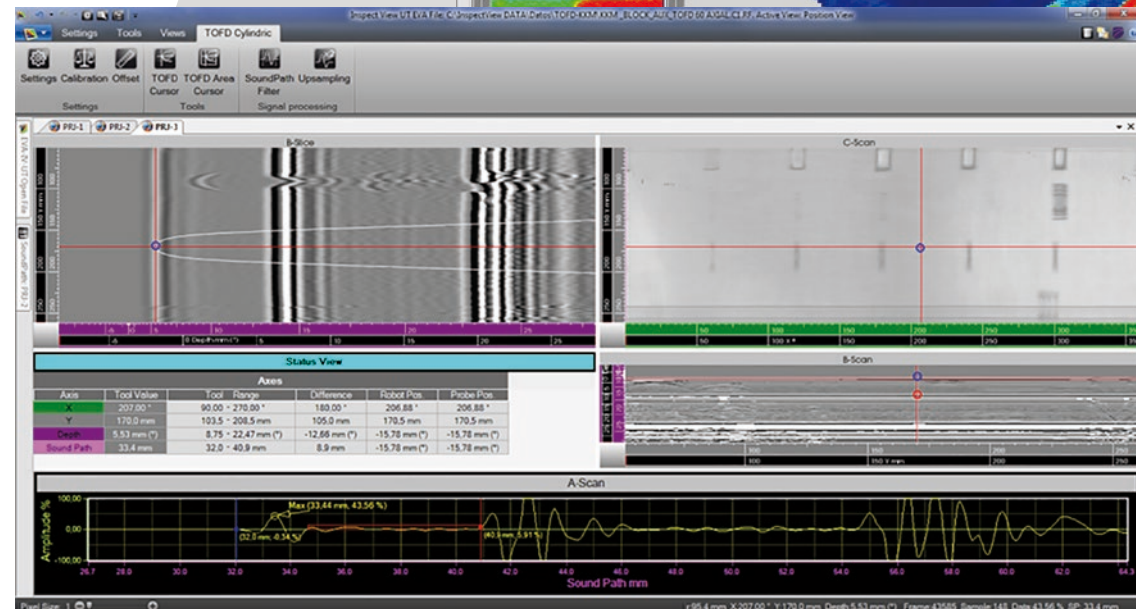
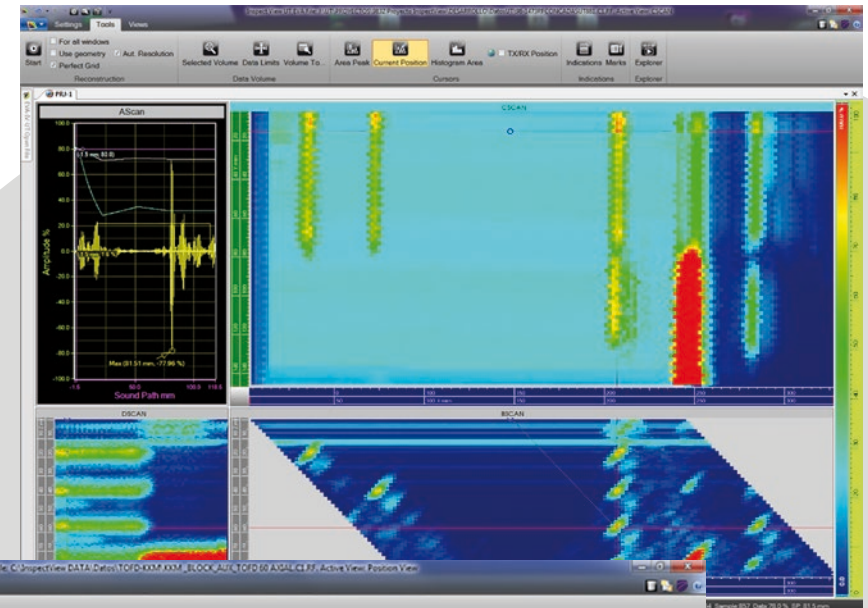
CALIBRATION & ACQUISITION

- Connection to the data acquisition hardware.
- Configuration of the user interface adapts to the electronic equipment.
- Creation and management of ultrasonic channels.
- Ultrasonic calibration and configuration parameters of the inspection, depending on the probes and reference standards.
- Set up of the data files to be generated.
- Control and configuration of the encoder interface for reading the machine position.
- Acquisition and storage of data files obtained during the inspection according to the calibration set.



ANALYSIS & EVALUATION

- Load acquired ultrasonic data acquired in an inspection project, or from a data file directly selected by the user.
- Multiple files opened at the same time with synchronized cursors.
- Reconstruction of data in 2D (B-scan, C-scan, D-scan), and in 3D (volumetric rendering).
- Special data views (TOFD, scroll, histograms, FFT...).
- Different type of cursors, synchronized in all views and files.
- Tools for measurement, annotations and marks, with data base storage.
- Images and screens can be stored in database and attached to reports.
- Software architecture designed to easily add new features.
- Special operations such as Go-to-point, retest, defect marking.





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