OLYMPUS®

Your Vision, Our Future

Acquisition and Analysis Software

FocusPC

FocusPC

NEW

- Convenient interface
- Powerful acquisition features
- Flexible analysis
- Customizable layouts

FocusPC

Powerful, Flexible, and Convenient

Olympus offers a complete advanced phased array integration solution that meets the requirements of your most demanding inspections. The solution includes the FOCUS PX, a powerful and scalable acquisition unit; FocusPC, a powerful data acquisition and analysis software program; and two software development kits (SDK), FocusControl and FocusData, to customize your software interface based on your application, and control FocusPC for a fully automated inspection solution.

Instrument

FOCUS PX

Software

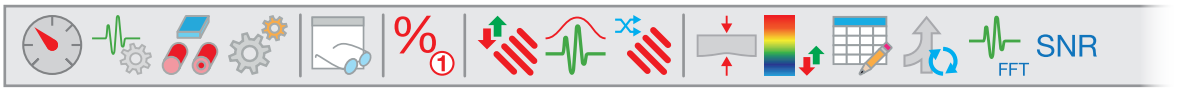
FocusPC, FocusControl, and FocusData

Convenient Interface

FocusPC is designed to give easy access to the most commonly used features, improving user experience and efficiency.

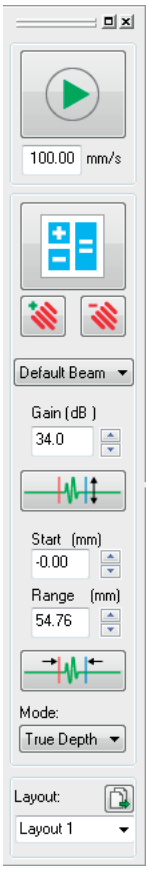
Toolbar

Quick access to the design, calibration, inspection and analysis features.



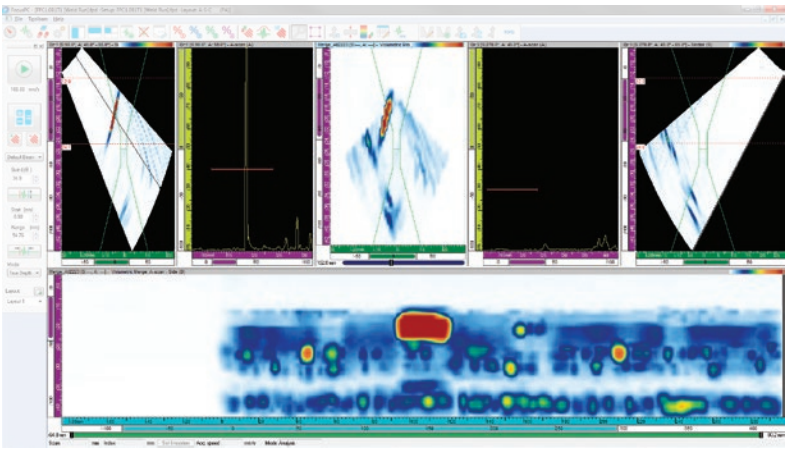
Dashboard

Convenient group and inspection sequence management.



Optimized setup, acquisition, and analysis layouts

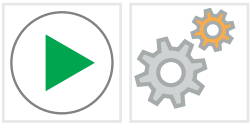
Freely subdivide and reorganize the different views.



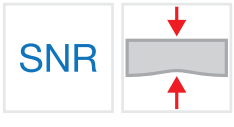
Powerful Tools

Design:
PA, UT, and TOFD acoustic configurations.

Calibration:
Beam delay, sensitivity and TCG calibration.



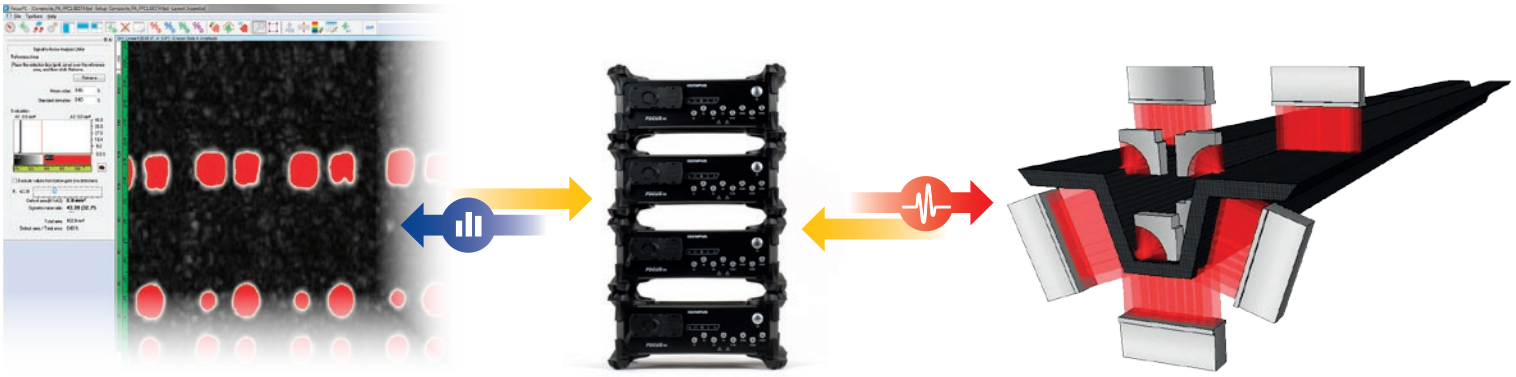
Inspection:
Part geometry and automation management.



Analysis:
Powerful features for optimized data analysis.

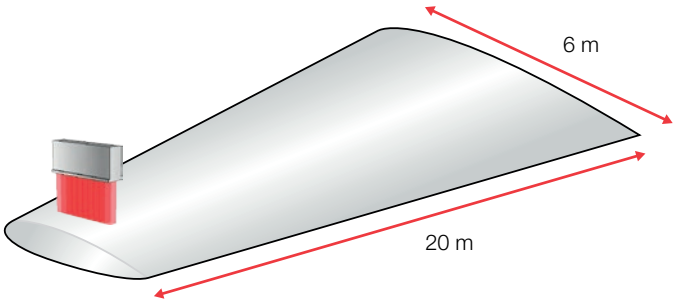
Aerospace and Defense Industry

The sustained growth of the aerospace and defense industry over the last decade has intensified the production demand on aircraft manufacturers and their suppliers. The requirement to inspect increasingly complex-shaped parts while minimizing cycle time puts pressure on manufacturers to improve their inspection process efficiency.



Unlimited Part Size Inspection

The continuous inspection feature allows the inspection of very large parts without having to interrupt the inspection sequence by enabling data files to be continuously produced throughout the inspection, resulting in a significant reduction of inspection time.

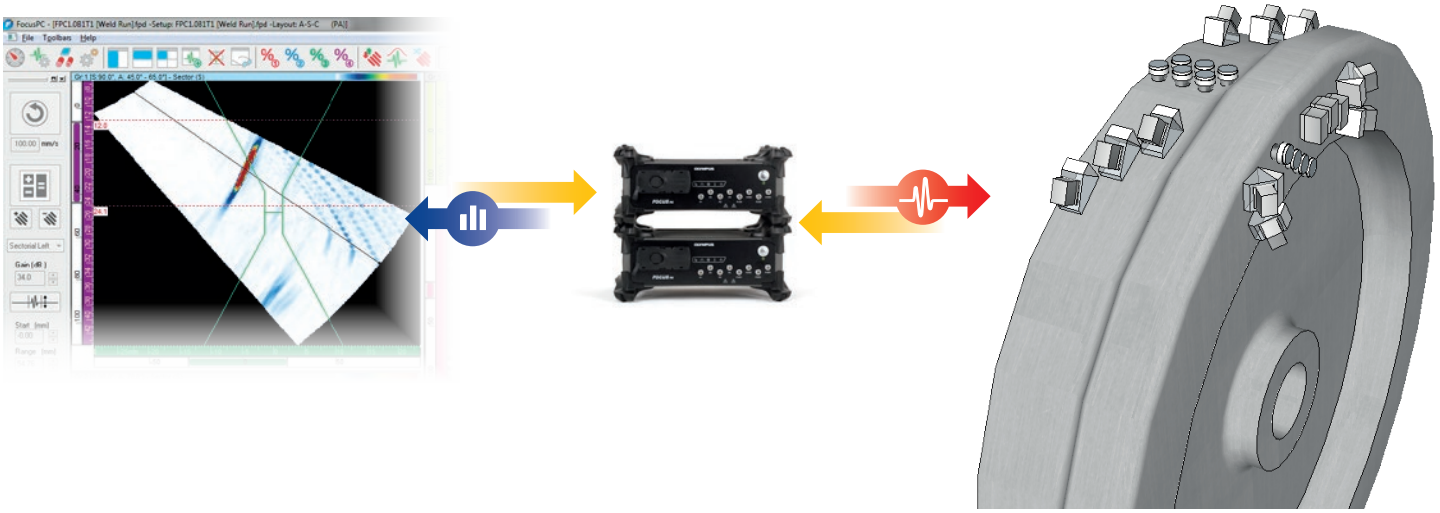


Scalability

Up to four FOCUS PX can be controlled via a single Focus PC application, offering a single software interface for advanced multiprobe configurations.

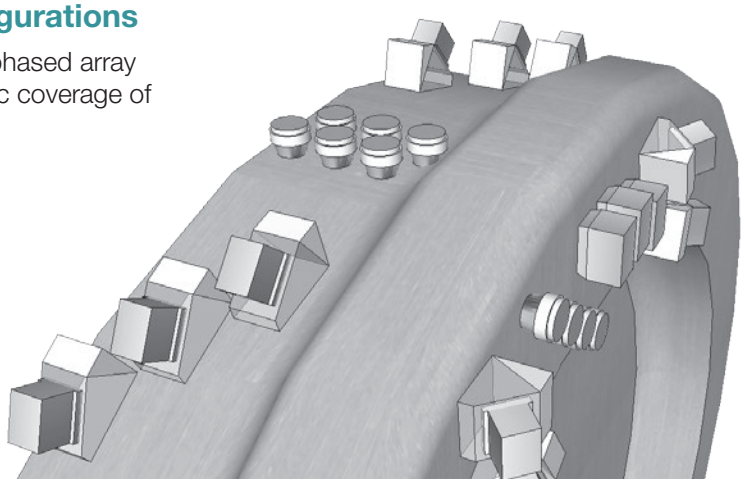
Transportation

Stringent quality control requirements are imposed in the transportation industry on railway component manufacturers and operating companies. Train wheels and axles must be inspected at the end of the production process and regularly during their life cycle to ensure train safety and integrity.



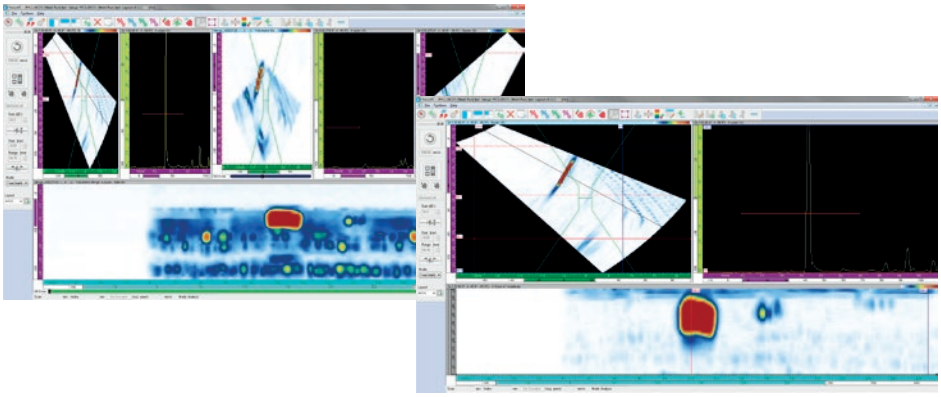
Advanced Phased Array and Ultrasonic Configurations

Use inspection configurations that rely on a combination of phased array and conventional UT to ensure full code-compliant volumetric coverage of the area of interest.



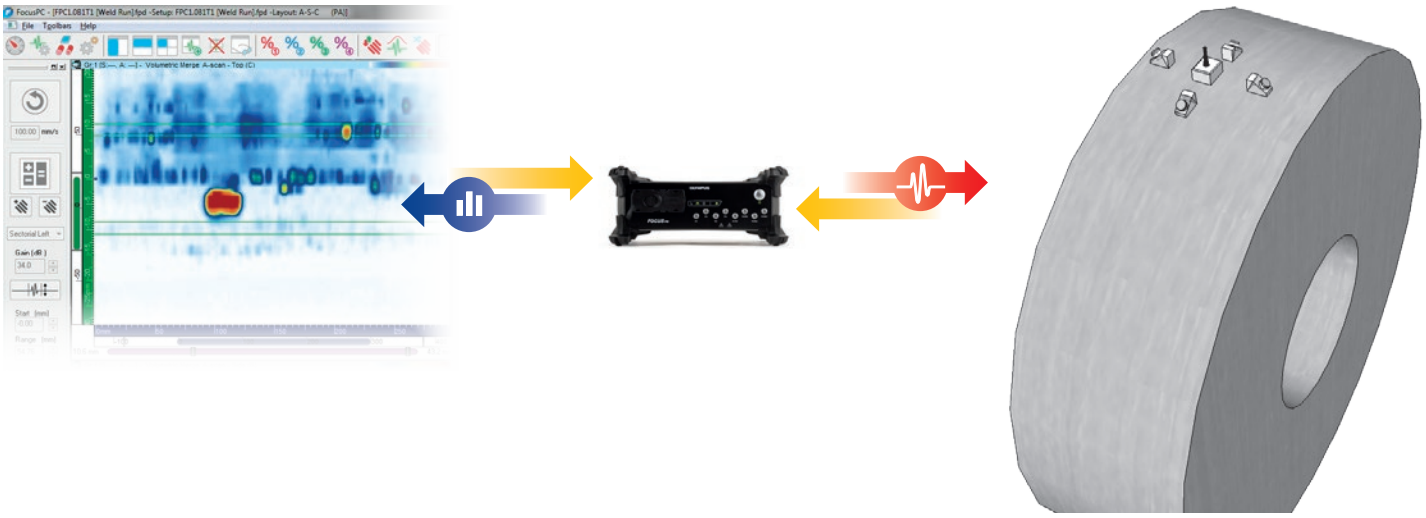
Customizable Layouts

FocusPC has fully customizable displays that can be adapted to better serve specific application requirements. Each view also has multiple customizable options, optimizing user experience and operator efficiency.



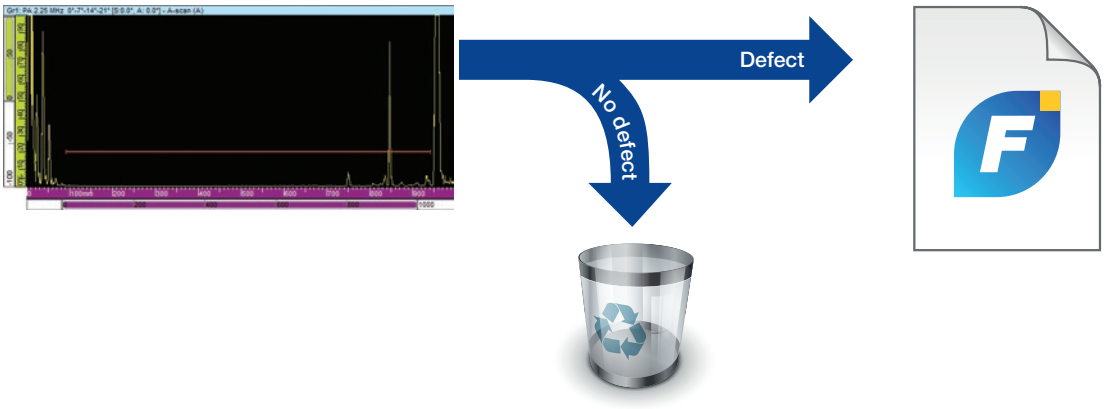
Metal Manufacturing and Fabrication

Manufacturers in the foundry industry are required to provide high quality parts for a wide range of applications. They need to have access to high performance inspection solutions that can perform stringent inspections while minimizing cycle time in order to optimize production rates.



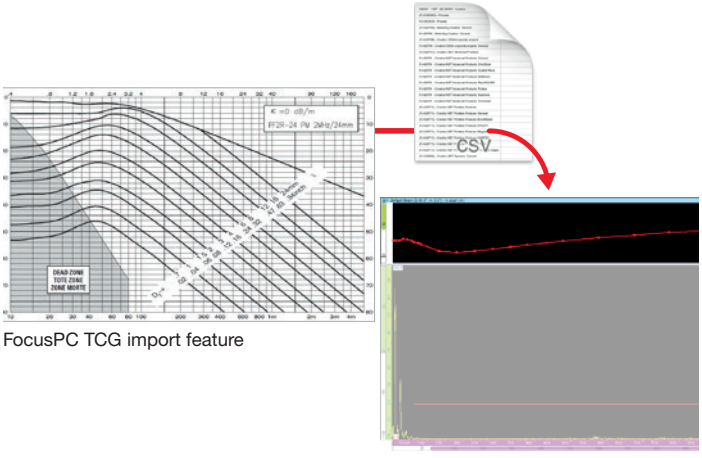
Conditional A-Scan Recording

FocusPC allows the A-scan data to be only recorded in areas where defects are identified, making data files smaller and allowing larger areas to be covered in a single inspection.



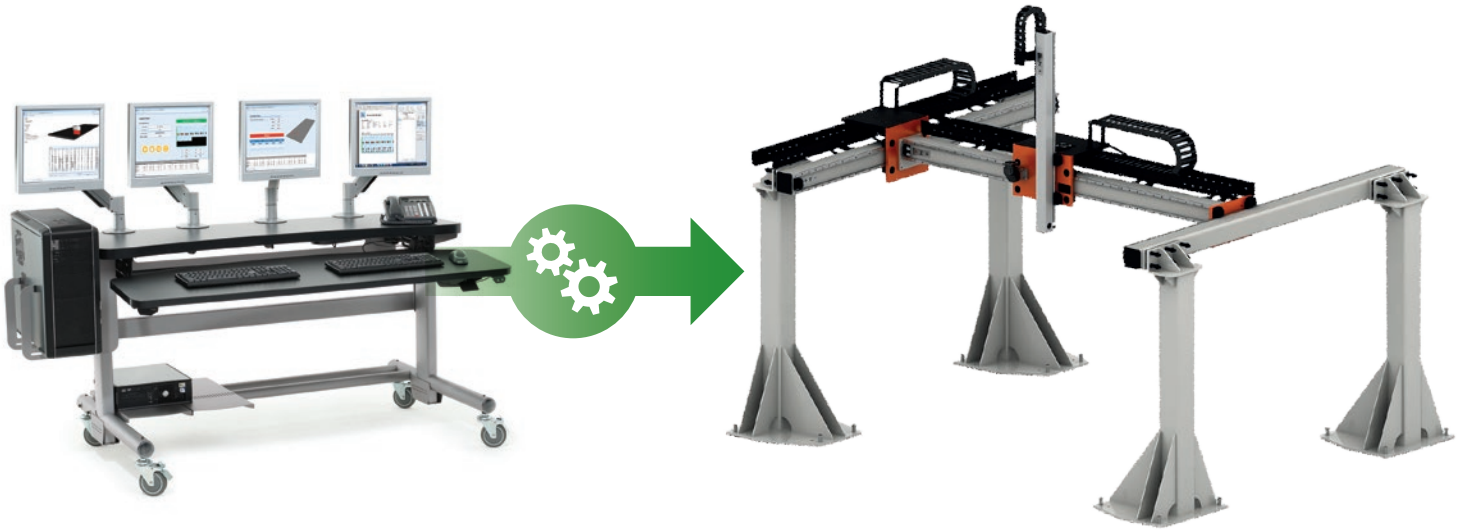
DGS-based TCG import

FocusPC can be used to import custom-built TCG curves, allowing the creation of DGS-compliant defect amplification and defect sizing.



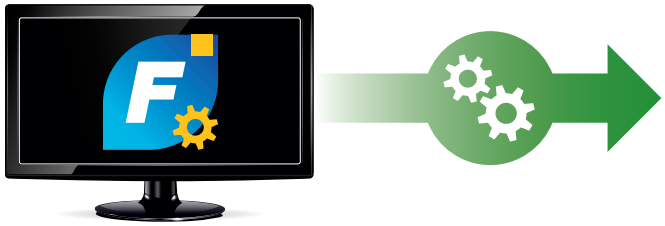
FocusPC TCG import feature

System Automation
FocusControl Software Development Kit



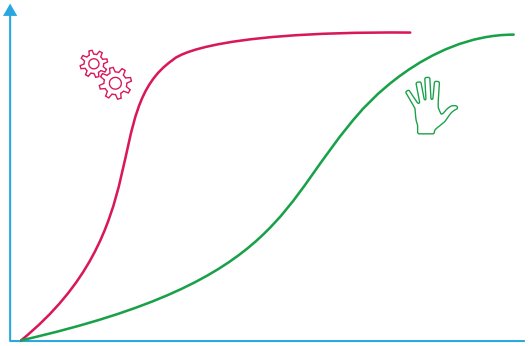
Reduced Inspection Time

FocusControl can be used to develop custom software to control and fully automate the inspection sequence, optimizing cycle time and improving overall system efficiency.



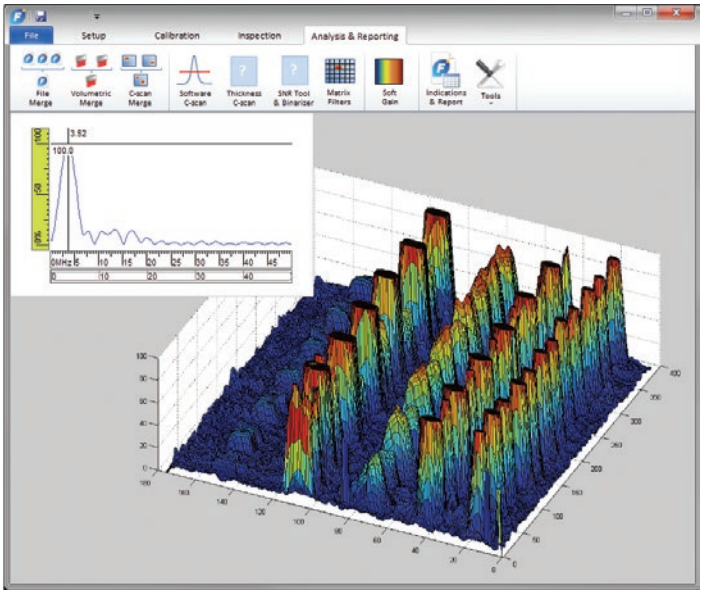
Improved POD

Fully automate the inspection sequence with FocusControl, improving the probability of detection (POD) by diminishing the occurrence of human errors.



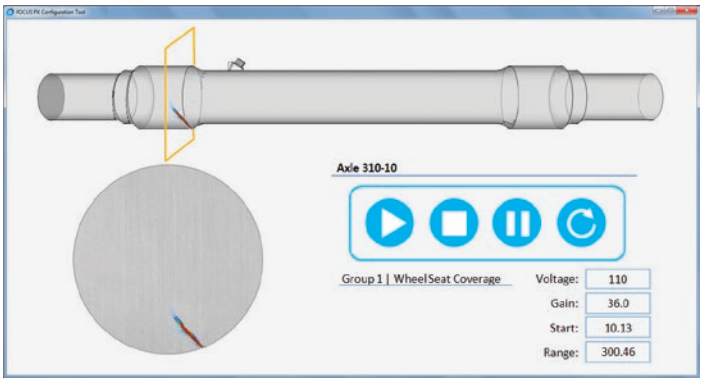
Comparison of POD between manual (left) and automated inspection sequence (right)

Custom Data Analysis
FocusData Software Development Kit



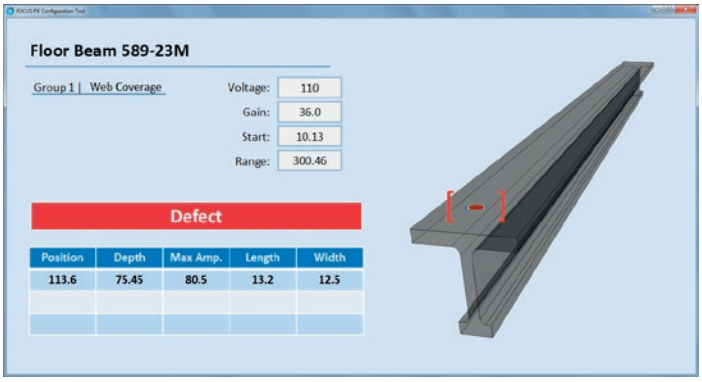
Application Dedicated Data Presentation

FocusData can be used to build customized interfaces that allow data presentation to be based on the actual specimen geometry, making the user experience more intuitive and defect identification more efficient.



Automatic Data Analysis

Set automatic defect identification patterns, making the analysis process more efficient by automatically sorting the inspection data to identify and size defects.



FocusPC Specifications and Ordering Information

FocusPC Feature

Design
- Conventional UT probes management
- TOFD probes management
- 1-D Linear and 2-D Matrix probes management
- Dual Linear Array probes management
- High number of focal laws (up to 1024)

Calibration
- Beam delay calibration
- Sensitivity calibration
- TCG calibration

Inspection
- Multipod management (up to 4 FOCUS PX)
- High data throughput (up to 60 MB/s)
- Continuous inspection
- Conditional A-scan
- Inspection sequence control through Digital Inputs

Standard Analysis
- Metric and US customary units
- Multigroup combined display
- Ability to zoom in/out of the display
- Predefined weld-overlay display
- Selectable information groups (readings)
- Off-line gate adjustment
- Off-line software C-scans
- Ability to display and edit indication tables
- Ability to add/delete entries in indication tables
- Built-in report generator
- Ability to modify/create color palettes
- Ability to view TOFD groups
- Phased array and TOFD combined display
- Off-line TOFD calibrations
- Off-line lateral-wave (LW) synchronization
- Export data to text file
- Data file merge

Advanced Analysis
- Volumetric merge tool (automatic or manual)
- Software gain adjustment
- Layout creation
- Ability to save custom layouts
- Ability to display rebounds (skips)
- Ability to display polar view
- Zone tool for statistical measurements
- Ability to open multiple files simultaneously
- C-scan merge tool
- Off-line TOFD lateral wave (LW) removal
- Off-line Scan/Index/Sound axis calibration
- Signal-to-noise ratio (SNR) analysis tool
- FFT calculation

Build your System… Your Way

Get inspection systems that are customized to match your inspection requirements.

FocusData Software Development Kit

The FocusData SDK gives direct access to the inspection data (A-scan, C-scan and Thickness) and most important acquisition parameters. This data can be imported in external application-dedicated software and used for customized data processing and display.

FocusControl Software Development Kit

The FocusControl SDK allows external software to locally or remotely control FocusPC, allowing the development of application-dedicated user interfaces that can automatically control the inspection workflow and improve operator efficiency.

OPTIONS AND ACCESSORIES

Part number	Description
FPC-10-F	FocusPC 1.0 inspection and analysis software
FPC-10-A	FocusPC 1.0 analysis software
FDATA	FocusData SDK
FCONTROL	FocusControl SDK
FPC-INTEG	FocusPC 1.0 Full, FocusControl, FocusData and on site training and support (special pricing)

OLYMPUS SCIENTIFIC SOLUTIONS AMERICAS CORP. is certified to ISO 9001, ISO 14001, and OHSAS 18001.

*All specifications are subject to change without notice.

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