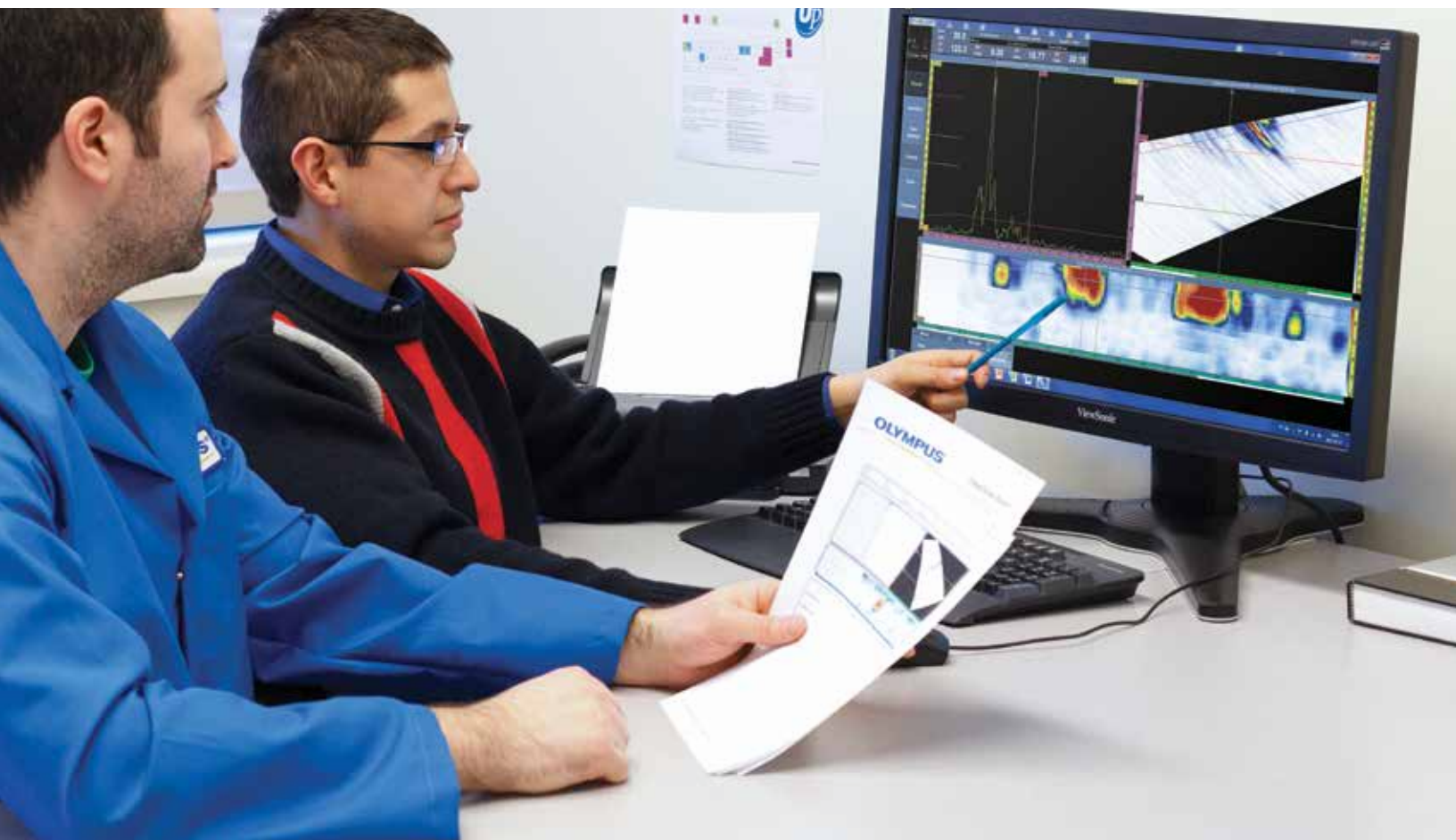![OLYMPUS®]
Your Vision, Our Future

Inspection Sequence
## From Scan Plan to Reporting

- Export configuration to OmniScan instruments
- Focal Law Calculator
- 3-D views of parts, probes and wedges in NDT SetupBuilder
- Intuitive keyboard shortcuts
- Built-in report generator
- Same interface between OmniScan Instruments and OmniPC

NDT SetupBuilder
Scan Plan Made Easy

NDT SetupBuilder design software is an integral part of the Olympus line of automated and semi-automated ultrasonic testing products. Nondestructive testing (NDT) personnel are able to reduce the time defining the appropriate inspection configuration for OmniScan flaw detectors. This step makes sure that the configuration is compliant with the inspection code, eliminating possible configuration errors.

- Focal law calculator
- Intuitive, simple, and affordable
- 3-D views of parts, wedges, and probes

- Intuitive keyboard shortcuts
- Import/export configuration to the OmniScan MX2 and SX
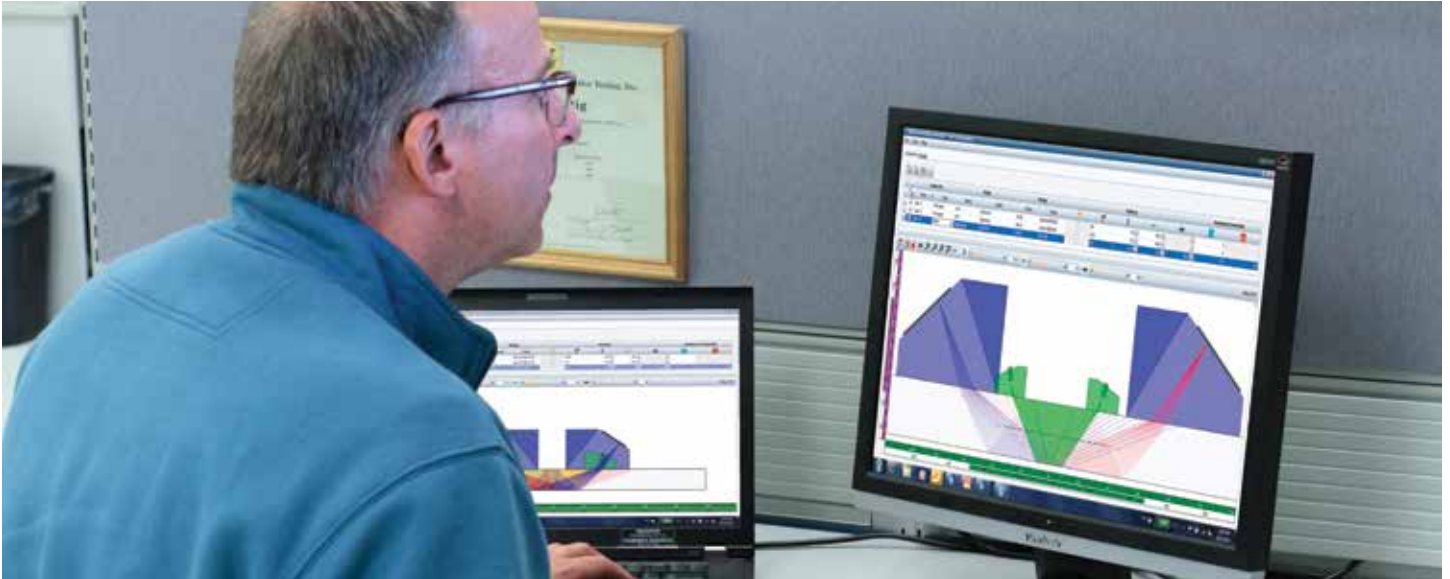
Design

Select your part geometry and define your weld, probe, wedge, and groups for your inspection directly on your computer for fast setup preparation.

Export and Import

Once you have completed the definition of the inspection configuration in NDT SetupBuilder, you can export the parameters with just one click and import them into the OmniScan MX2 and SX flaw detectors.

OmniPC

Intuitive Analysis

OmniPC is a PC-based data analysis and reporting software that benefits from the same user interface, analysis and reporting features as the OmniScan.

- Data, reference, and measurement cursors for defect sizing
- Extensive readings database and predefined lists for trigonometry, flaw statistics on axes, volumetric position information, code-based acceptance criteria, corrosion mapping statistics, etc.

- Views are linked for interactive analysis and automatically updated when performing off-line gate repositioning.
- Optimized preconfigured layouts enable quick and simple flaw sizing of length, depth, and height.

Analyze and Report

Inspection data is transferred from the OmniScan to the OmniPC software on your computer for analysis and reporting. That leaves the OmniScan available to scan another part.

Inspect

Once the configuration is imported to the OmniScan MX2 and SX flaw detectors, adjust your parameters, and then calibrate. The OmniScan MX2 and SX flaw detectors are now fully functional.

Inspection Sequence
From Scan Plan to Analysis

NDT SetupBuilder

General Interface

The NDT SetupBuilder software interface is based on two grids: Probe Sets and Groups. The grids are designed to offer quick visualization of probes, wedges, positions, and beam parameters.


Additional interfaces are available for wedge and probe definition and parameter validation.

The wedge menu gives access to wedges available in the Olympus database, plus the details of the model characteristics including length, width, and height. Top, side and end views enable the user to visualize the selected wedge.

Similarly, the probe interface provides access to the available probes and their corresponding parameters in the Olympus database.

NDT supervisors can use PC-based NDT SetupBuilder software to define the inspection technique and set ultrasonic beam parameters for their inspections. Supervisors can define the inspection technique either remotely or on-site, without the need to access an OmniScan. More importantly, following the definition of the inspection technique, the configuration can be imported to the OmniScan MX2 and SX thereby reducing configuration time and manipulation errors prior to the inspection.

Compound Scan

Olympus' updated NDT SetupBuilder software now offers the capability to perform compound scan beams. This innovative inspection strategy consists of a mix between sectorial and linear beams and it offers many advantages such as:

- Higher probability of detection
- Inspection of thicker material
- Higher inspection speed
- Shorter setup and calibration time
- Faster data analysis

NEW

Compound scan
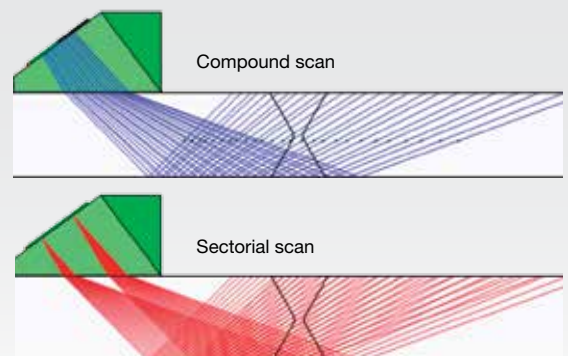
Sectorial scan

A single group compound scan offers similar coverage than two sectorial scans

Tooltips

Explanations, or tooltips, can be displayed by pointing the mouse over the interface elements, including tabs, toolbars, and dialog boxes. Tooltips include a clear image and a description of the associated function. The software is simple to use, even for inexperienced users.
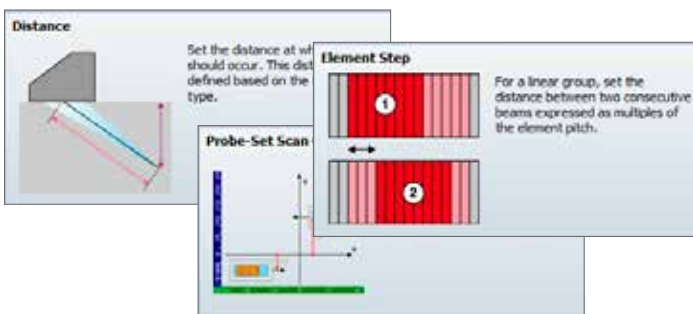
2-D and 3-D Visualization

The RayTracing view displays a graphically rendered illustration of the part, probes, wedges, and groups in 2-D or 3-D. Display options include side, top, and end view in 2-D. Interactive parameter configuration controls and probe element information are also available.
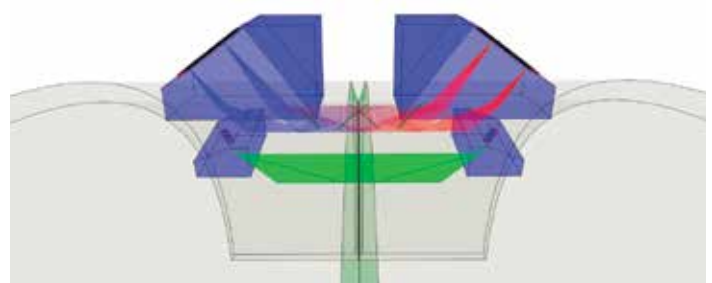
More Than Just a Ray Tracing Tool

Export/Import Your Configuration and Group Description

All configurations supported by the OmniScan and created in NDT SetupBuilder can be exported as an .ondt setup file. NDT SetupBuilder software can also be used as a focal law calculator. Groups not supported by the OmniScan can be exported as .law files.

Export your configurations on a USB key or an SD card and import them into your OmniScan. Once imported, there is no need to go through the inspection configuration menus. Just calibrate, and the unit is fully functional.


OmniPC

Analysis

With OmniPC, the OmniScan unit can now be used strictly for scanning while analysis is performed simultaneously on a personal computer. This software can also be used in conjunction with extra-large screens for increased visibility, and with keyboard shortcuts for faster operations.

OmniPC software benefits from the same user interface as the OmniScan software. No need to learn new software for the analysis of your OmniScan data files.
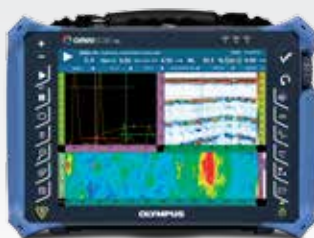

Export C-Scan

OmniPC adds a new feature for corrosion applications. You can export the complete C-Scan values to a *.txt file for further analysis. The values can be visualized in the Notepad, Excel, Matlab or any other software in which you wish to do your analysis.
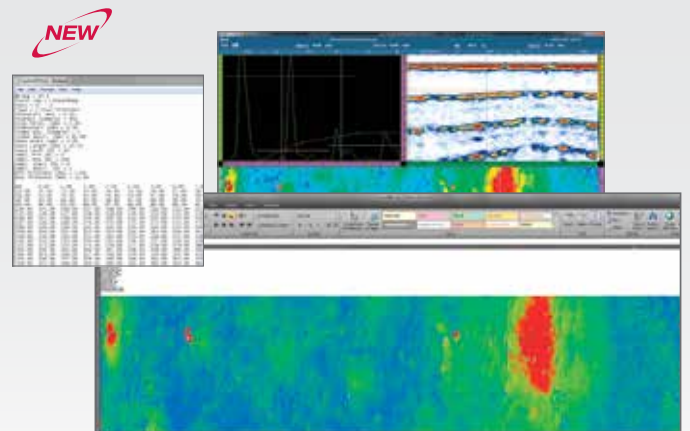
Perform your acquisition on any OmniScan instrument.

Export as a .txt file and perform analysis on the software of your choice.

Inspection Sequence
From Analysis to Reporting

SetupBuilder

From the SetupBuilder, an HTML report of your inspection setup can be generated and opened using a web browser. The inspection configuration generated in the NDT SetupBuilder software has the same format as the OmniScan reports. The report contains all the probe sets and groups of the inspection configuration previously defined in the workspace.
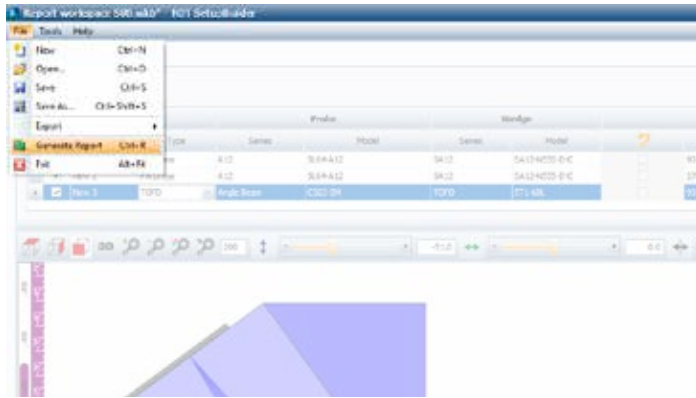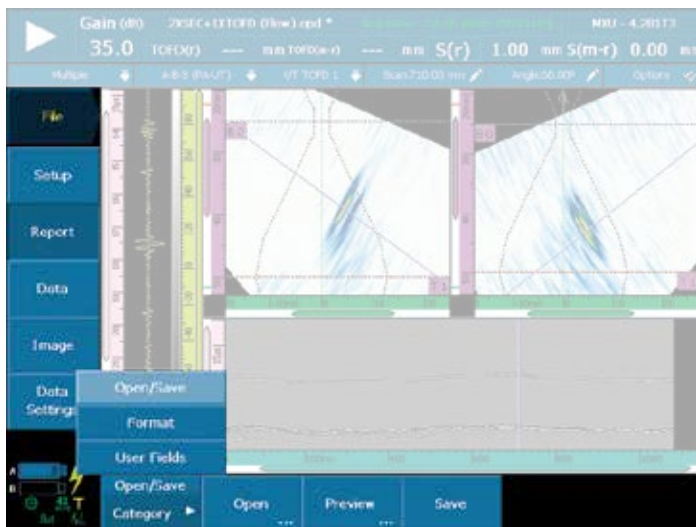

Reporting on NDT SetupBuilder is only a few clicks away.
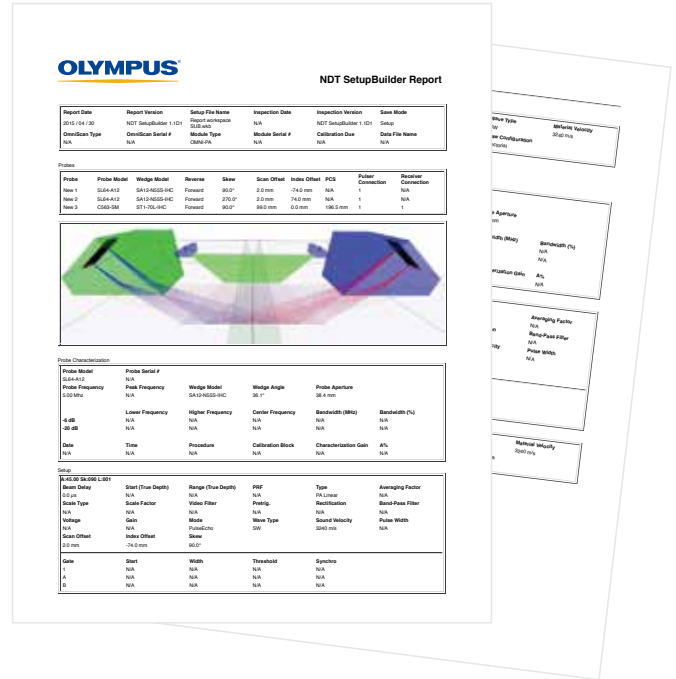
OmniScan and OmniPC

The OmniScan MX2 and SX, and OmniPC can be used to generate reports with an indication table listing of up to eight readings, such as amplitude, position, and size of the defects. The report can be customized with additional readings and comments specific to each indication, and can be saved as an HTML document. RayTracing tools allow the indication positions to be represented on the weld profile. High-resolution images can be inserted along with all relevant inspection parameters.

Reporting on the OmniScan instrument or OmniPC is only a few clicks away.
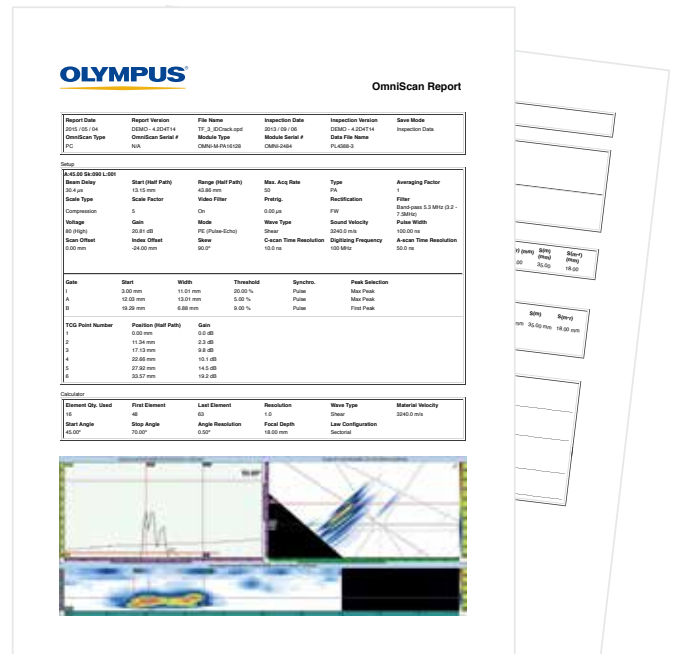
Specifications

S NDT SetupBuilder Features

- Export setup configuration to the OmniScan MX2 and SX
- Export .law files
- Configurable acquisition unit
- Support plate, pipe and bar geometry
- Support PA linear, TOFD, UT and dual matrix
- Support sectorial, linear, single beam, and compound type
- Custom weld template
- Custom probe and wedge creation
- Scan plan report
- RayTracing
- Top, side, end, and 3-D views
- Beam formation and near field information
- Element deactivation
- Support true depth and half path focalization type
- Metric and US customary units

O OmniPC Features

Interface

- Same Interface as the OmniScan Software
- Full screen mode
- Available A-scan visual references (sizing curve, TCG, ref amplitude, grid)
- Volumetric linked view
- Predefined weld-overlay display
- End View with merged signal
- Multigroup combined display
- Ability to zoom in/out

Ease of Use

- Available online help
- Intuitive contextual menus
- Keyboard and mouse shortcuts to boost the productivity level
- Predefined lists of readings based on common applications
- 8 selectable readings simultaneously displayed

Analysis

- Lateral-wave (LW) synchronization
- TOFD calibrations
- Gate adjustment and synchronization (by group/context)
- Export C-Scans to .txt files
- Ability to display and edit indication tables
- Built-in report generator (customizable)
- Ability to include an image of each indication in the report
- Software attenuation gain

Minimum Computer Requirements

	NDT SetupBuilder	OmniPC
Memory	2 GB	
Hard Drive	100 MB	200 MB
Display Adaptor	1280 x 1024 or display adaptor and monitor resolution	
Operating System	Windows 7 (32 or 64 bits) or Windows 8 (32 or 64 bits)	
Accessories	A keyboard and a pointing device, USB port for the security hardware key, optional SD card reader	

Ordering Information

Part Number	Item Number	Description
OMNIPC-A	U8775269	OmniScan PC Toolkit. Includes OmniPC analysis software and NDT SetupBuilder design software.

www.olympus-ims.com

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