TOPAZ 3.7R21

TOPAZ is one of the most efficient and versatile non-destructive testing (NDT) instrument. Simply brilliant!

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November 9th, 2015

TOPAZ 3.7R21 Product Bulletin

Zetec has just released UV Touch 3.7R21. This product bulletin gives an overview of the features offered in this version and shows how to download and install the new software version.

Purpose of UltraVision Touch 3.7R21 for TOPAZ

UltraVision Touch 3.7R1 for TOPAZ is Zetec's latest upgrade for UltraVision Touch for TOPAZ software.

This software release includes several new features. Zetec's hardware and software development process is performed according to a quality system that is certified ISO 9001-2008.

With this certified software development process, Zetec guarantees that the changes between previous UltraVision Touch for TOPAZ (3.5R10, 3.6R2, 3.6R5 and 3.7R1) to UltraVision Touch 3.7R21 for TOPAZ have no consequences on the sensitivity and the accuracy of the signal amplitude and flight time outputs displayed, recorded or automatically processed by the software. This includes also additions of mathematical modules used for the positioning of indications or for geometric conditions adjustments.
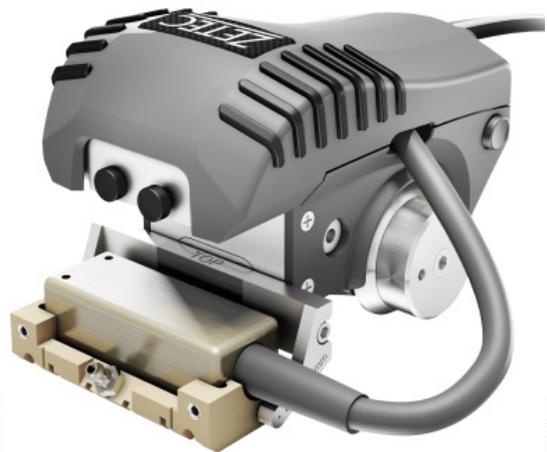
Corrosion
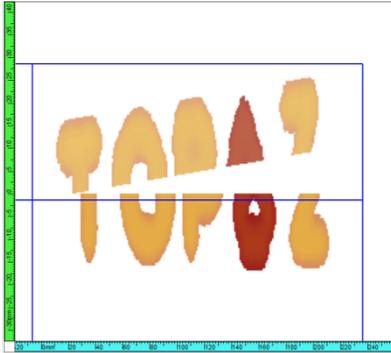
Support of NDT PaintBrush

NDT PaintBrush from Zetec is the latest evolution in the field of inspection solutions for wall-thickness measurement when inspecting for corrosion, abrasion or erosion.

NDT PaintBrush allows inspecting on plates, pipes or curved surfaces, without the limitation of complex mechanical structures. Magnetic or composites specific wheels allow using NDT PaintBrush on different surfaces.

UltraVision for TOPAZ 3.7R21 adds full NDT PaintBrush support. Get more information about NDT PaintBrush.

C-Scan Stitching

When inspecting a large surface, it can useful to separate the inspection job into smaller sections for an easier approach.

The new C-Scan Data Stitching feature allows merging different data files into one consolidated file, easily reconstructing the full inspection.

With Data Stitching function, it is easy to adjust the position of the data sections and to correct for angular misalignments during the scanning process.
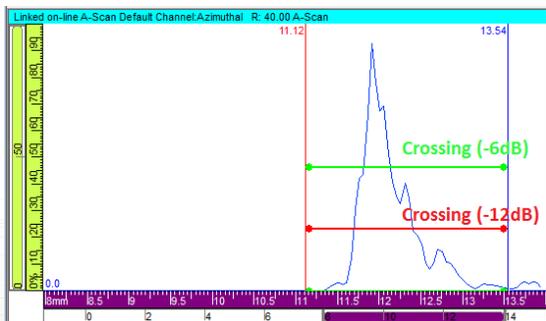
Probe position marker

Probe position marker is a live cursor that displays the probe's position in real time during inspection. This new feature simplifies the inspection process ensuring a reliable and constant visual feedback.

The agility of NDT PaintBrush combined with real time data visualization optimizes and simplifies the inspection process.

New Gates detection features

Floating Gates

Floating gates feature allows changing gate level based on the last cycle echo amplitude.
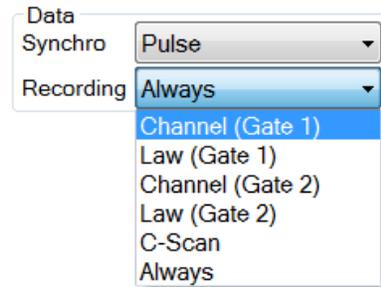
This feature can compensate for signal response variations due to an uneven reflection surface (mainly because of corrosion).

Conditional A-Scan recording

New conditional A-Scan recording options have been added.

It is now possible to only record the data when a selected gate is crossed. Within these data, it is possible to record only the Focal laws for which the signal has crossed the gate or the complete channel.

A new way to optimize your inspection!

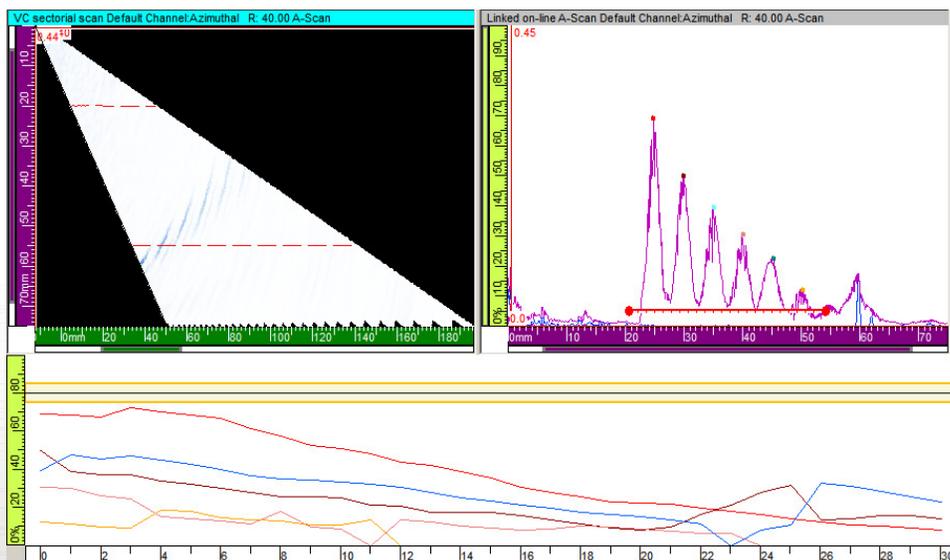## Pitch and Catch probe improved path correction

A new axis for the USound dimension is available when using a Pitch/Catch probe configuration (separated emission and reception elements on the same probe). This *True Depth P/C* axis has the same color than the existing True depth axis and includes a small *P/C* tag to provide visual confirmation of the current axis type change.

The new USound axis is selected when:

- Probe configuration is Pitch/Catch;
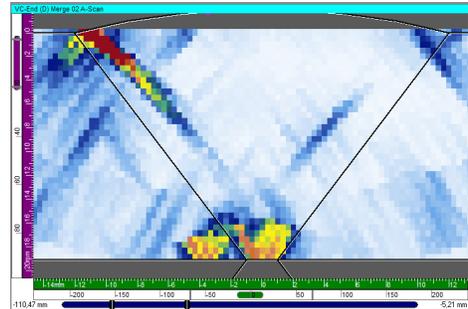- Sweep angle is Linear.

TCG Auto Calibration

TCG Auto calibration allows creating multiple TCG points in one single scan, using one detection gate with the appropriate start and range to cover all reflectors.
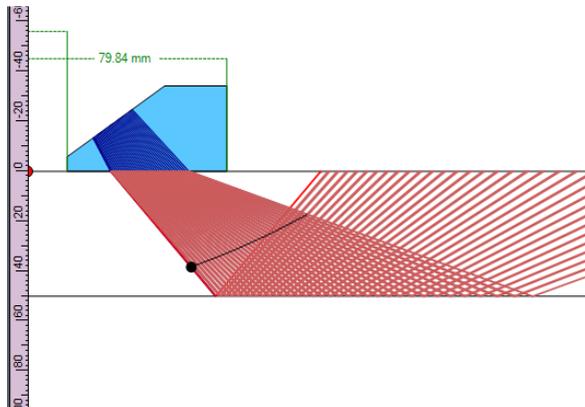
New data analysis features

Interpolation for Volumetric Merge

Volumetric Merge function adds the use of sectorial interpolation, filling empty spaces of the merged views for an improved data presentation.

Advanced Calculator Features
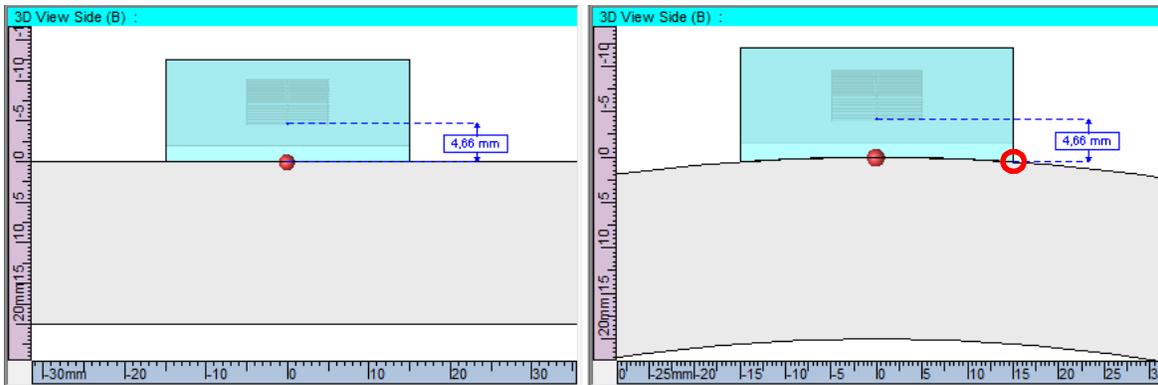
Compound Scanning

UltraVision 3.7R21 now allows creating a Compound Scanning configuration (combination of sectorial and linear scans).

Compound Scanning results in a sweep that has better coverage than traditional Sectorial or Linear scanning.

New Wedge Definition Mode

UltraVision has now two different wedge definition modes available.

Legacy Mode allows defining the height of the first element on the wedge by using the back left corner of the wedge as the reference (as it was always done with UltraVision).

In **Default** the height of the first element on the wedge is defined using the front middle of the wedge as reference.

For plate examination, there's no difference between the two modes, it will only affect the height of the first element in the case of a pipe examination.

Downloading and installing UltraVision Touch 3.7R21 for TOPAZ

To upgrade TOPAZ software to the new 3.7R21 version, please download install file from our website: http://www.zetec.com/products/ultrasound/software-ut/ultravision-touch/ultravision-touch-download/

To install the downloaded version on your TOPAZ:

1. Save the file and unzip it on a USB drive;
2. Connect the USB drive to your TOPAZ
3. Go to **TOOLS > SYSTEM** and click on **System Update**
4. In the dialog, you should already see the TOPAZ 3.7R21 installer from your USB drive, but if not, click on the arrow at the top-right corner of the dialog until you see your USB and select the TOPAZ 3.7R21 installer;
5. Click on **Install**