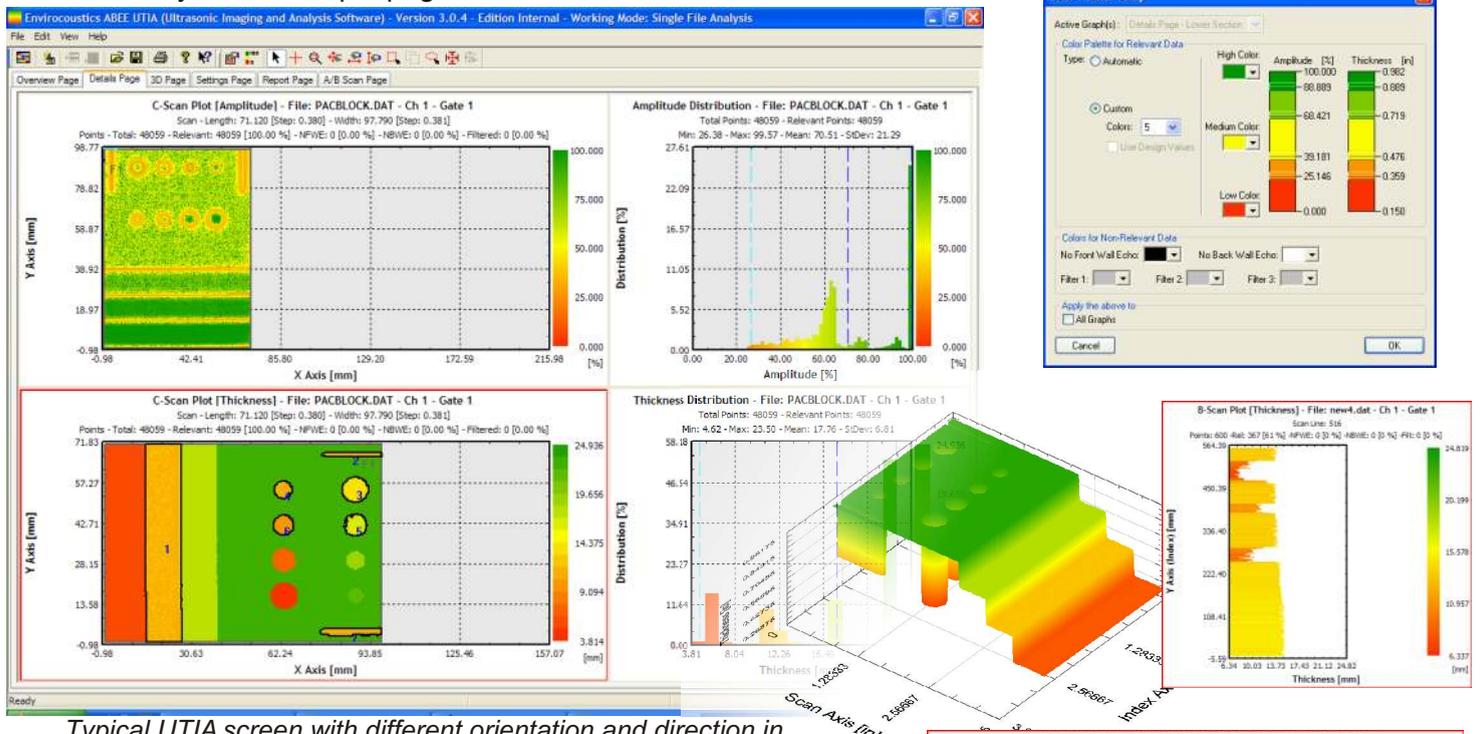


Envirocoustics presents UTIA, Ultrasonic Imaging and Analysis Software. Designed for the Windows platform UTIA is easy to use and all analysis is just a few clicks away. UTIA provides the user with a complete set of tools for post-processing, viewing and exporting ultrasonic C-Scan data. These tools allow for easy viewing, statistics, composite C-Scan images, 3D C-Scan images, Clustering, image/data export to any Windows application and most importantly save your entire work (analysis, user input, data, RFs) in a single file (UTIA document).

A/B/C-Scan View Functions

- * Obtain color coded C-Scan images of thickness or amplitude for any gate and channel with advanced C-Scan viewing capabilities (stretching, zooming, segment overviews, comparisons)
- * View 3D C-Scan images with full rotation and zooming capabilities.
- * Adjust C-Scan orientation and scan direction to get actual scan presentation
- * Get B-Scans with cursor for any zoom/stretching/single/composite C-Scan and Min/Max/Ave B-Scan lines.
- * Use mouse trace to get corresponding A-Scans.
- * Mouse trace for exact values at each point on the scan including Global and Local coordinate reporting.
- * Use automatic or custom (user defined) color palette. Set colors according to design values.
- * Perform analysis on multiple pages for detailed view of the data.



Typical UTIA screen with different orientation and direction in the two C-Scan images, including Clustering (see black lines and numbers), 3D C-Scan image and color palette dialog showing custom color adjustment via sliders, B-Scan image and Composite C-Scan image showing selection extending over 3 different scans (blue line).

Statistics and Data Manipulation

- * Get statistics (min, max, average, standard deviation) for the entire scan
- * Make inter-gate computations for advanced analysis (provides through paint capability and gates comparison).
- * Calculate missing data point values using existing data where front or back wall echoes are lost.
- * Get statistics for a selection of the data (mouse select on the C-Scan the area of interest).
- * Perform Clustering and any C-Scan for comparison of results. Find indications/defects, get cluster statistics and distributions.
- * Re-compute thickness with new velocity.
- * Set data boundaries, filter data and remove uniform coating thickness.
- * Get data distribution graph with statistics including design values indicators, min, max indicators etc.

Ultrasonic Imaging and Analysis Software

Composite C-Scans

- * Multiple scans can be arranged to produce a composite area C-Scan.
- * Files are arranged via a simple dialog. Entire composite area rotations.
- * A composite area C-Scan allows all the functions available to any single C-Scan (view, statistics, selections etc).
- * Add and view plates in a composite C-Scan to get an exact representation of the scanned area.
- * Get overall statistics or perform analysis per scan or per plate.



Complex composite C-Scan images with custom palettes and plates view.

Filters dialog and statistics page view.

A-Scan view and new gate(s) setup for C-Scan data extraction. Alternative measurements methods can be used.

Reporting Results / Data Export

- * A report page with dedicated reporting tools are available. Complete reports can be drafted in minutes with C-Scans tables, defect information tables, Statistics tables and many more.
- * Save ALL analysis to a single file (UTIA Document, UDO), including user input (filters, selections, palettes etc), data, RFs, Composite scan etc. Reload to achieve the "as saved" status of work.
- * Copy C-Scan images (single or composite), B-Scans and A-Scans to any Windows application.

General Information

- * UTIA supports NDT Automation ULTRAWIN C-Scan data files version 2.52 to 2.86.

UTIA Editions:

Standard Edition:

Contains all functions shown/described except those mentioned for the Professional Edition below.

Professional Edition:

Contains all functions of the Standard Edition and the additional features mentioned below.

- * Inter-gate calculations.
- * A-Scan replay and view with new gate(s) setup and thickness / amplitude C-Scan extraction from A-Scans.
- * B-Scan display, * Calculate Missing Values, * Advanced overlapping strategies for composite C-Scans.

Enterprise Edition:

Contains all functions of the Standard and Professional Editions and the additional features mentioned below.

- * Clustering, * Edge Detection, Signal-to-noise Ratio.

Auto C-Scan - Distribution table with reporting tools

