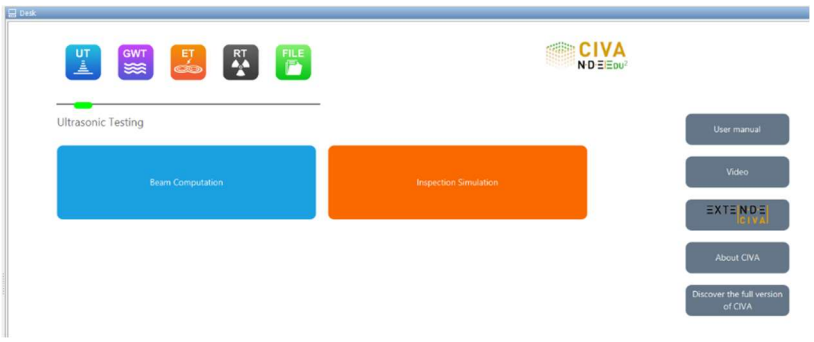
CIVA Education: Exploring NDT Physics through Interactive Simulation

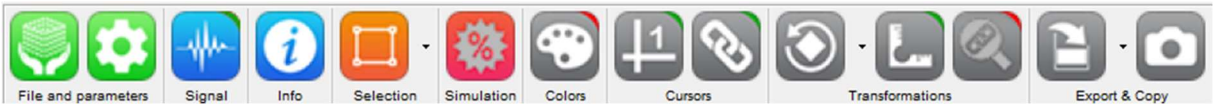
"CIVA Education", a streamlined version of the NDT simulation software **"CIVA"**, is the **ultimate tool to help you teach the "physics behind NDT"** to your students and trainees efficiently, interactively, and at a low cost.

This new update **CIVA Edu²** features a more user-friendly interface for navigating various modules, modelling various applications, and analyzing simulation results. It introduces a new **Guided Waves Testing** module with dispersion curve calculations, along with enhanced features in the current UT, ET, and RT modules.

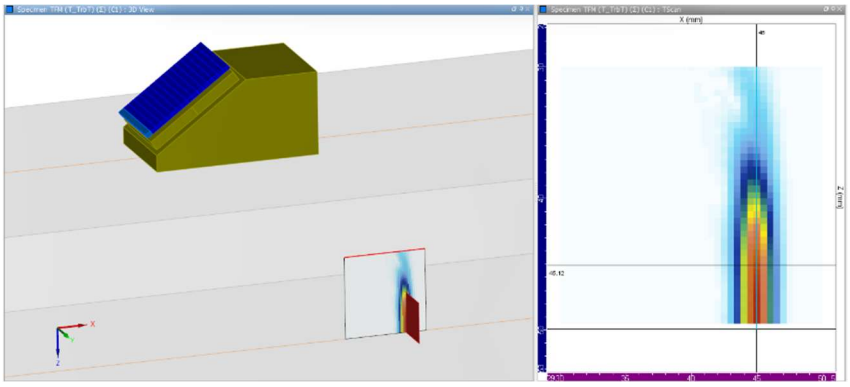
A more user-friendly interface:



A « DESK » is now available, providing clear and easy access to various modules and tools through a set of colored tiles. It also includes access to the file manager and some CIVA videos. Within the modelling interface and for all the modules, a new toolbar has been added to provide easy access to analysis tools.



CIVA Edu UT now supports simulation of the advanced TFM technique with FMC acquisition.



Additionally, **contact probes with circular crystals** and contact probes without wedges are now available. The A-Scan can be rectified, and more beam reflections can be considered in the field calculation tool. **Ray tracing** has been significantly optimized to visualize the **zone coverage**

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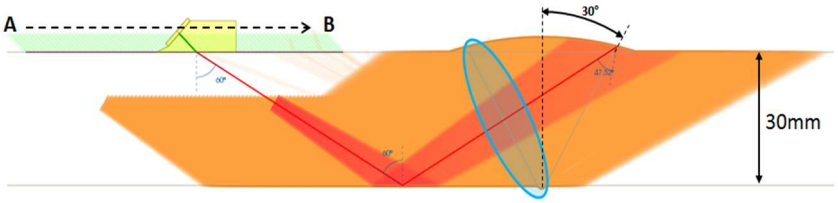
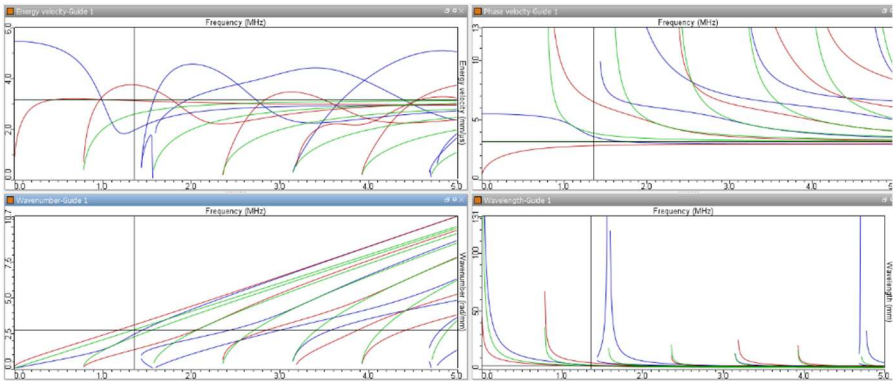
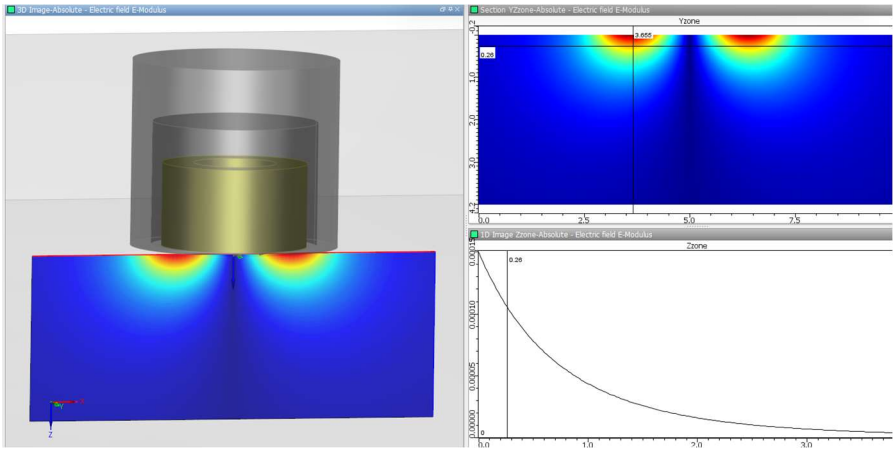
for the entire scan plan including the near field distance, field divergence, and angles of various skips.



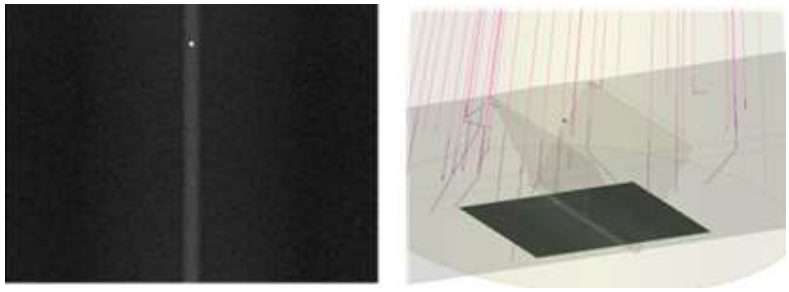
A new **GWT** module is available, allowing you to compute dispersion curves in planar and cylindrical structures. You can display properties of Lamb Waves, SH modes, and Longitudinal and Torsional modes for a specified frequency range.



CIVA Edu ET now allows the definition of **C-shape ferrite** pots. Different notch lengths can be simulated, and hole flaw depth is easier to define. A **groove** can also be simulated in tubes. The **Probe Response** tool has been upgraded to a separate **module** which enables impedance diagrams to be saved and the ability to superimpose flaw response and lift-off signals in the same graph.



CIVA Edu RT now simulates first order **scattering radiation** in addition to direct radiation. This enhancement helps clarify how scattering impacts image quality, such as **reducing contrast** and **increasing noise**.



CIVA Education is now available in additional languages: Chinese, German and Spanish alongside French and English. For more information, visit our website www.extende.com.