MAGNIFI® 5.4R7 RELEASE NOTES

Release date: February 7th, 2025

Cloud-based Licensing System

Magnifi® 5.4R7 is now activated through a cloud-based licensing system.

For clients under a valid maintenance plan, access to version 5.4 is included. Simply type your current Magnifi key code in the *Manage License-> License code* field.

If you are not under a valid maintenance plan, please contact your Eddyfi Technologies sales representative.

New Features & Improvements

Magnifi now provides the option to activate licenses for secure workspace environments with no internet access, such as air-gapped systems.

Resolved Issues

Generic

- Tagging a file as NDD no longer starts the acquisition of the next planned file.
- Resolved display and calibration issues of MIX C-scans.
- Images are now displayed correctly in the .html report, even when the data file name contains special characters.
- The notification indicating a mismatch between the probe included in setup and the one from the probe database no longer appears with each data load.

Surface Applications

- Channel positions have been corrected for the ECA-SPYNE-C-202-250-086 probe to ensure proper alignment of indications in both axial and transverse C-scans.
- Resolved issues with the Spyne Wizard:
    - Acquisition rate no longer resets to 1 Hz.
    - Filter values are now applied correctly.
- Pipescan probe setups created with the MFL Wizard now correctly display the 'MFL Amplitude' field.
- Indication boxes are now correctly positioned in C-scans, even after adjusting the offset values.
- C-scan rulers are now displayed correctly after editing the setup using the Wizard.

Tubing Applications

- Resolved performance issues when analyzing ECT tubing data in batch with the AI detection tools.

Known Issues, Limitations, Restrictions

Generic

- Minor known issues with the new offline license feature:
  - A new license request cannot be created immediately after releasing the current one; Magnifi must be restarted first.
  - The 'Manage License' window may reopen after being closed.
  - The 'License Validation' window title may remain as 'License Validation Failure' after successfully activating an offline license.

Surface Applications

- Spyne in Clock mode: When creating a clock-based setup with all default Wizard parameters, data will not be visible during acquisition. The workaround is to set the scanning axis display scale to 'Full Scale'.

Artificial Intelligence Module

Technology: Eddy current testing (ECT) for tubing bobbin data

Version: 4.0

Performance

- >98% probability of detecting significant indications[1,2]
- >98% probability of detecting tubesheets and support plates properly[2]

[1]*Significant indications in the test database correspond to a vertical signal amplitude at 50% of the calibration hole signal or a vertical signal amplitude between 25% and 49% of the calibration hole signal combined with a depth of 40%.*

[2]*90% confidence level.*

Known Issues, Limitations, Restrictions

- Cannot detect more than 1,000 indications per tube.
- No detection under tubesheets.
- ECT-BBFS saturation, ECT-BBST flexible, DefHi, and ECT-BBAC air conditioning probes are not supported.
- Tubes with external fins, ID and/ OD mechanically enhanced tubes.
- Indications with lengths greater than 1,000 samples are not detected. For a typical sampling rate of 2 samples/mm, this represents a length of approximately 50cm (19.7in).

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Beyond current

Any signals on the AA-DIF_F2 channel that are shorter than 5 samples and have a vertical size (amplitude) less than 0.09 Volt will not be analyzed by the detection engine. The AA-DIF_F2 channel is set up for artificial intelligence detection and is calibrated at 1V and 40° for a 100% through-wall hole using peak-to-peak phase measurement.

Minimum System Requirements

- Processor: Core i5 (or equivalent).
- Operating systems:
  - Edition: Windows 10 version 1607 (Anniversary Update) or Windows 11
  - System type: 64-bit operating system
  - Note: The software is tested and optimized for most major language packs available on the Windows suite.
- Memory: 8 GB.
- Graphics card: GPU with DirectX 11 support.
- Disk space: 20 GB.
- Network: Built-in network card.
- Display:
  - Screen size: 13 in
  - Resolution: 1366 × 768 pixels
  - Display scale: 100% (Windows preferences setting).
- Administrator rights: User must have local administrator permissions on the computer to install and use Magnifi.

Recommended System Requirements

- Processor: Core i7 (or equivalent).
- Operating systems:
  - Edition: Windows 10 (latest version)
  - System type: 64-bit operating system
  - Note: The software is tested and optimized for most major language packs available on the Windows suite.
- Memory: 16 GB.
- Graphics card: Dedicated GPU with DirectX 11 support.
- Disk space: 100 GB.
- Network: Built-in network card.
- Display:
  - Screen size: 15 in
  - Resolution: 1920 x 1080 pixels
  - External monitor: 22in or larger, with a minimum resolution of 1920 × 1080 pixels (for extensive analysis purposes)
  - Display scale: 100% (Windows preferences setting).
- Administrator rights: User must have Administrator permissions on the computer to install and use Magnifi.

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Firmware

Included in this release of Magnifi are the following packages:

Ectane 3

- Version: 1.0R7

Ectane 2

- Version: 2.1R15

Ectane

- Version: 1.8R5.1 (same version as for Magnifi 3.5R15)