Magnifi®

eddyfi®

Advanced Eddy Current Data Acquisition and Analysis Software

Magnifi is the most comprehensive, stable, and reliable acquisition and analysis software for multi-technology surface and tube inspections.

Magnifi features a setup wizard that can have you up and running for your type of inspection and probe in just a few simple steps.

Data analysis has also never been faster or more precise with the help of automatic landmark detection and unique advanced sizing curves that can be displayed in terms of percentages (of loss or remaining), various units of measurement, and custom units of measurement calibrated by operators.

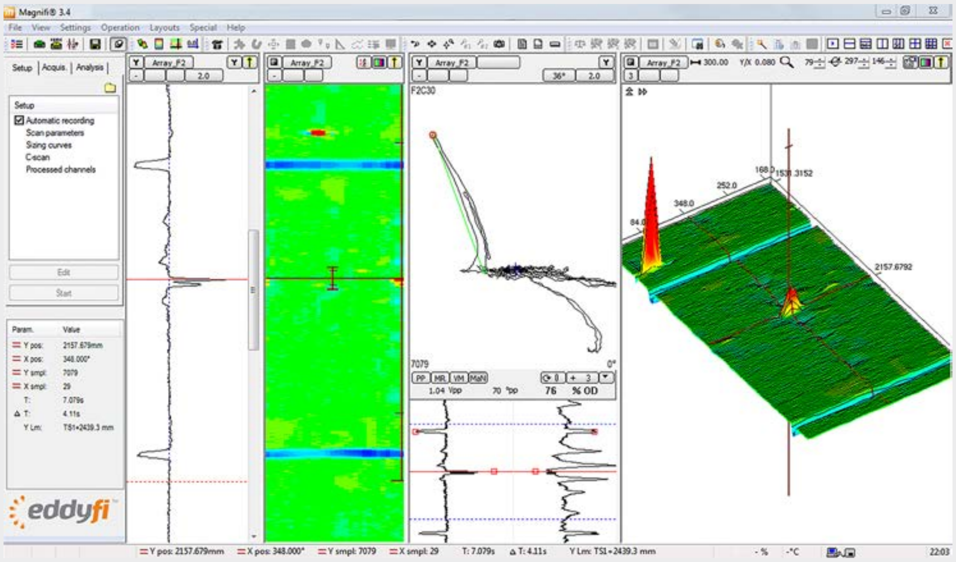
Magnifi also offers live IRIS A-scans and C-scans, as well as other typical views, and on-the-fly reporting based on the encoder, which means you do not have to stop scanning to report a defect.

Remote-field testing is made easier with ***Magnifi*** by way of the voltage plane. It is now very easy to identify changes in material properties, compensate for these changes, and track compensations through time, which make scan data much easier to analyze and reduce potential sizing errors.

Magnifi can drive the ***Ectane®***, the ***Ectane 2***, the TC7700, and the MS5800, as well as read most data files acquired with the MS5800 and TC instruments. It can also read most setup files created with ECVision, EddyView, and MultiView. That makes switching from older, less advanced acquisition and analysis software a breeze.

Key Features

- Improved color palettes
- Improved setup wizard
- Remote controls
- Advanced sizing curves
- Automatic and manual landmark detection
- RFT voltage plane
- Live IRIS A and C-scans
- Capable of driving TC7700™ and MS5800™
- Export inspection reports to TubePro, CARTO, and TSD
- Seamlessly integrated with the Ectane 2: new I/O settings, alarm configuration, rotating probe control, and saturation source



Param.	Value
Y pos:	2157.679mm
X pos:	348.000°
Y smpl:	7079
X smpl:	29
T:	7.079s
Δ T:	4.11s
Y Lm:	TS1+2439.3 mm

Y pos: 2157.679mm X pos: 348.000° Y smpl: 7079 X smpl: 29 T: 7.079s Δ T: 4.11s Y Lm: TS1+2439.3 mm -% -°C 22:03

Specifications

Setup

Setup wizard	Supports tube and surface applications with conventional and array probes.
Calibration	Easy to use calibration systems covering channels, C-scans, sizing curves, landmarks, and IRIS.
Probe database	Includes all standard tubing and surface array probes, and allows the creation of custom probes.
Material database	Used by the setup wizard to recommend inspection frequencies. You can add custom material and share it with other users.
Layout	Fully customizable layout with backup, restore, and import functionalities.
Data visualization	Strip charts, Lissajous, voltage plane, 2D and 3D C-scans, 2D and 3D polar scans, side, code, A-scan, and projection views.
IRIS real-time view	Easier setup with all views combined and in real time (A-scan, C-scan, and projection).

Data Acquisition

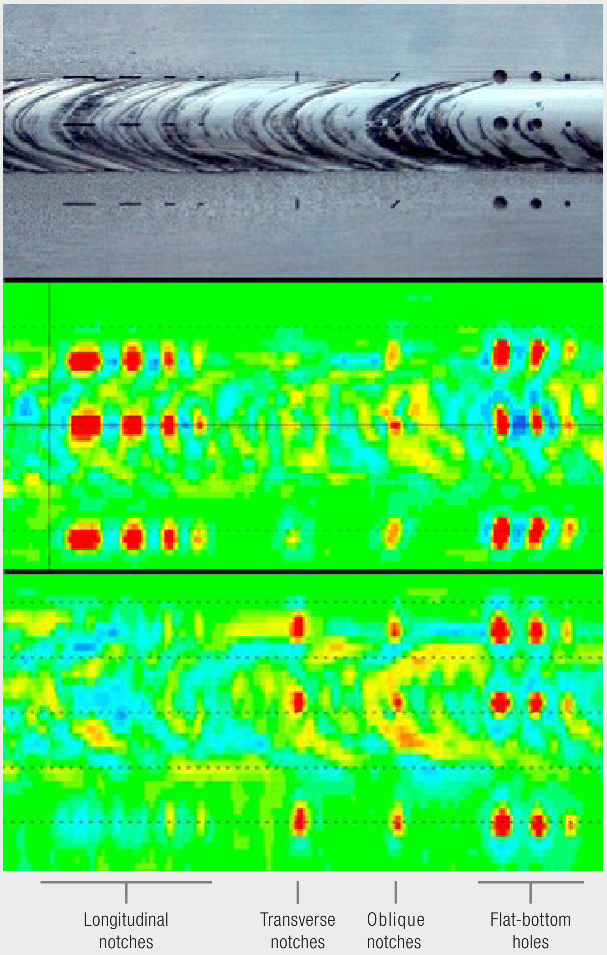
Supported instruments	*Ectane*, *Ectane 2*, TC7700, and MS5800 (excluding IRIS).
Supported scan types	Linear, rotating, raster, and polar scans with single-channel or array probes.
Inspection projects	Setup and data management by project and inspection.
Remote controls	Programmable digital input to perform software tasks such as balance, start/stop, clear screen, next file, etc.
Acquisition licenses	Supports data acquisition without a license key. Also supports various acquisition layouts (including C-scan displays).

Data Analysis

Measurement tools	Automatic or manual with various measurement modes for amplitude and phase (peak-to-peak, maximum rate, absolute, etc.).
Sizing curves	Unlimited number of curves that can be created for channels and C-scans. Support arbitrary units (mm, in., S/m, %IACS, etc.)
Channel and C-scan processing	Advanced processing capability including filters (HP, LP, median), scale, derivative, mixing, voltage plane (channel only), detect indication, detect landmark, etc.
Voltage plane	Advanced voltage plane display that allows nominal point management (normalization, saving, restore), monitoring normalization corrections, and rotating links with the differential channel.
Landmarks	Manual and automatic landmark detection based on a landmark table. Allows accurate positioning of defects.
Screen capture	Entire screen, window, or region.
Indication codes	Supports various types of codes (defect, feature, or no indication) with automatic comments added to the report, if necessary.
Reporting	Table with selectable column format. Double-click a defect code to reload analyzed data and export the results to TubePro, CARTO, TSD, or text file.
Color palette	Customizable with user-defined thresholds
C-scan subtraction cursors	Horizontal or vertical subtraction. Option to link the position to the main selector cursor.

Compatibility

ECVision, EddyView	Reads data acquired with TC7700 and MS5800.
MultiView	Reads most data acquired with MS5800, except IRIS.
Operating systems	Windows 7 32-bit and 64-bit editions



Example of weld inspection display

Ordering Information

Upgrade program available — inquire for details.

MAGNIFI-XX-YYY-ZZ

XX: Version number

YYY

FUL — Conventional and array with 2D and 3D C-scans

HXC — Conventional inspection and C-scan for IRIS

HXS — Conventional inspection (no C-scan)

ZZ (instruments act as license keys to perform acquisition)

HK: Hardware key

SK: Software key

2014-09-05