

# RUSSELL

Technologies-India

## FERROSCOPE 308

RFT/ECT Instrument and Software



Carbon Steel,  
**and** non-ferrous  
Heat Exchanger  
Tube inspection



I-PIT Pipeline and  
pipe spool inspection  
tools



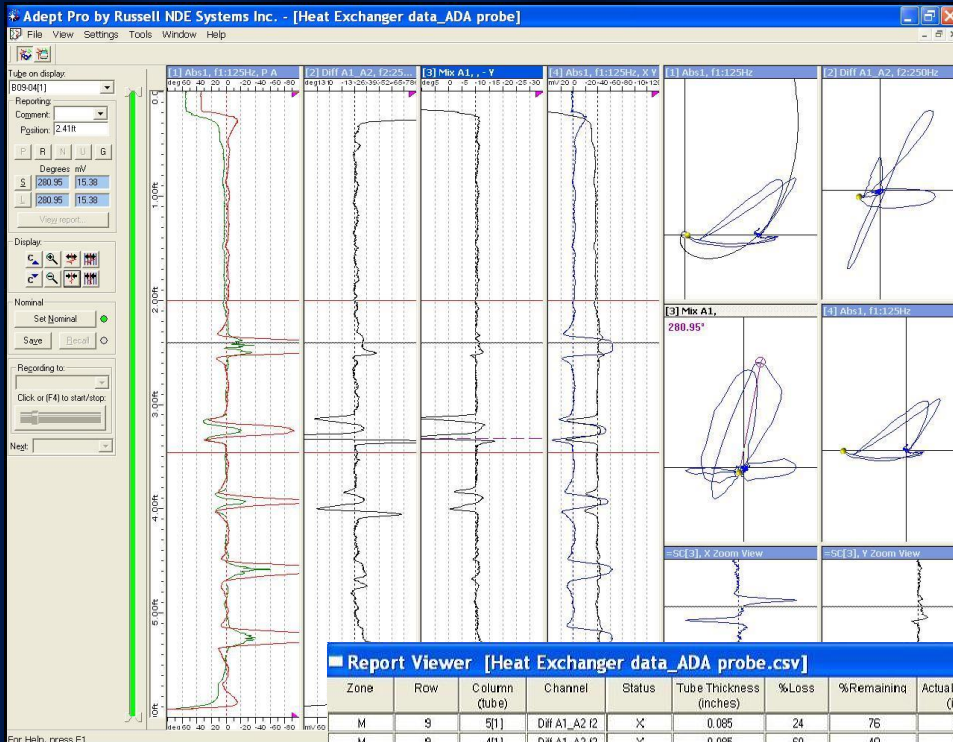
E-PIT (External Pipe Integrity Tool)  
For Pipeline or Boiler Tubes



**FERROSCOPE: THE MOST VERSATILE RFT  
INSTRUMENT ON THE MARKET: *BAR NONE!***

## FERROSCOPE 308 RFT/ECT SPECIFICATIONS

<b>Frequencies:</b>	Eight (8) frequencies from 10Hz to 12 MHz
<b>Channels:</b>	4, 8, 12 or 16 channels of RFT data 4, 8, 16 or 32 channels of ECT data
<b>Sample Rate:</b>	Up to 2000 samples/second
<b>Power:</b>	85 to 264 VAC at 47 to 440 Hz or 120 to 250 VDC
<b>Temperature range:</b>	-20C to +50C
<b>Certifications:</b>	CSA, CE, FCC, (Canada, USA, Europe)
<b>Coil Drive (Ferroscope 308 ECT):</b>	Coil Bridge drive voltage can be set independently for each frequency, up to a total of 350 mA peak and a maximum of 20 Volts peak-to-peak. Coils are protected from over-voltage.
<b>Frequency Drive type:</b>	Simultaneous or time-slot injection types
<b>Computer Interface:</b>	USB 7.2 Mbps
<b>Coil Types available:</b>	Impedance; pitch-catch; near field and far field; absolute; differential, bobbin; pancake; array; TT™(Through Transmission), magnetic saturation; partial saturation, internal, external, T-4™, I-PIT™; E-PIT™; and solid state sensors
<b>Output Impedance:</b>	50 Ohms
<b>Strip Chart Displays:</b>	Four (4) strip charts with zoom views of each chart
<b>Voltage Plane Displays:</b>	Four (4) voltage planes (XY, Lisajous or Polar Plot type, with thickness reference curve)
<b>Zoom options:</b>	Zoom vertically using hot keys or mouse Zoom horizontally on multichannel data Rotate through multichannel data (one data channel is highlighted at a time with its data viewed also in the Voltage Plane)
<b>Colour Map</b>	Pipe View or Global view available on multichannel instruments
<b>Gates:</b>	Gated area is mouse adjustable on Strip Charts Gated area signals appear on Voltage Plane Gated area can be scrolled through data with mouse
<b>Calibration:</b>	Calibrate on known flaws in ASME or ASNT reference tube by framing the signal with the gate and selecting the defect type and depth from a pull-down menu. Automatic generation of Cal Curves in EasyLog™ Import and export of Cal set-up files.
<b>Distance Measurement:</b>	Interpolated distance or encoder input
<b>Data options:</b>	Display Phase, Log Amplitude, Magnitude, X or Y. Absolute, differential, MIX, C-FLTR™ or Q-Coil™
<b>Internal Probe types:</b>	Absolute, differential, array, spot coil, T-4™, Saturn™, I-PIT™, Dual exciter, Dual detector, TT™ and more.
<b>External Probe Types:</b>	E-PIT™, VertiScan™, TT™, Bracelet and more.
<b>Software:</b>	Adept-Pro™, Adept-Pro MC™; EasyLog™; EasyLog MC™
<b>Data Analysis:</b>	Semi automatic after calibration of RFT and XY data
<b>Reporting:</b>	Built-in report generator. CSV file output
<b>Mapping:</b>	Interface to several tube sheet mapping programs such as TubePro, TSD and Triax software. Import and Export of tube lists
<b>Trending:</b>	Compare up to five separate data files on-screen simultaneously



Built-in report generator creates a .csv file (Excel® compatible) Within Adept-Pro™ software.

All parameters of the test are captured for the report.

Data can be compared for trending either on-screen or within the spreadsheet.

Report Viewer [Heat Exchanger data\_ADA probe.csv]

Zone	Row	Column (tube)	Channel	Status	Tube Thickness (inches)	%Loss	%Remaining	Actual Remaining (inches)	Position (seconds)	SiL	Deegree	mV/ Circ. Ext.	Flaw Index	Comment
M	9	5[1]	D#f A1_A2 I2	X	0.085	24	76	0.065	4.24	S	117	137.58 mV	1057	Fitting
M	9	4[1]	D#f A1_A2 I2	X	0.085	60	40	0.034	2.94	S	96	463.60 mV	726	Groove
M	9	4[1]	D#f A1_A2 I2	X	0.085	33	67	0.067	3.51	S	112	330.96 mV	885	Condensate goo
M	9	4[1]	D#f A1_A2 I2	X	0.085	20	80	0.068	4.15	S	119	121.81 mV	1024	Near support
M	9	4[1]	D#f A1_A2 I2	X	0.085	60	40	0.034	2.93	S	96	650.92 mV	723	
M	9	4[1]	D#f A1_A2 I2	X	0.085	40	60	0.051	3.53	S	107	247.41 mV	870	

Multi-channel strip charts with Colour Map image “Pipeview” (shown) or “Global View”.

Voltage Planes display the data from within the gated area, on the blue highlighted channel

After calibration the click of one button makes an entry in the built-in Report Generator.

