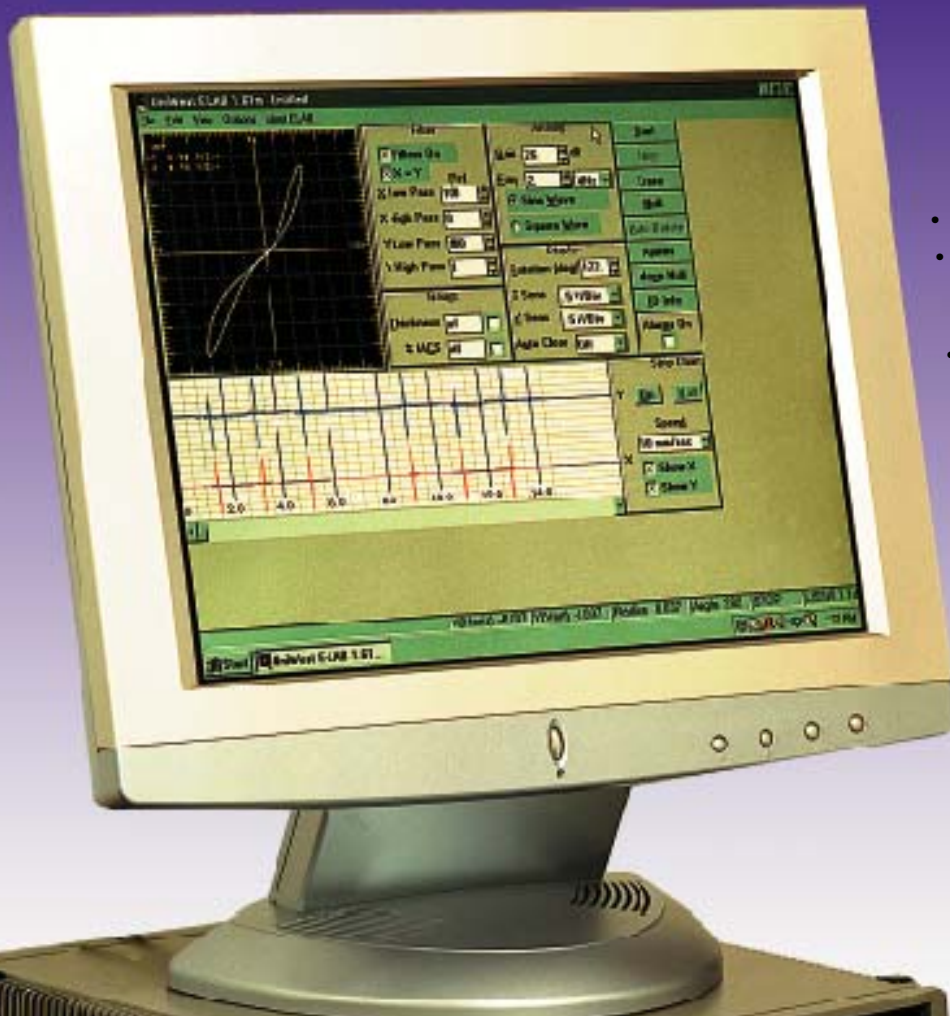# Use Your Desktop Computer For Eddy Current Testing!

Easy To Install
E-Lab Software

• Frequency Range: 100 Hz to 10 MHz
• High Speed Flaw Detection when used with Automated Inspection System
• Digital Strip Chart Recording of X&Y Signal Responses
• Adapts to fit most Eddy Current Probes
• Digital Thickness Measurement of Conductive & Non-Conductive Coatings
• Digital Thickness Measurement of Non-Ferrous Metals
• Digital Readout of Conductivity
• Direct Readout of Phase & Amplitude

UniWest

Technical Specifications

Hardware

Frequency Synthesizer
• 100 Hz to 10 MHz direct digital synthesis

Gain
• 0 to 100 dB in 0.5 dB steps

Filtering
• Variable band pass, low pass and high pass filtering in the X and Y axis

Probe Drive
• 7.85 V P–P with an output impedance of 10 Ohm, 200 mA drive, slew rate 2000 V/µS

Probe Configuration
• Absolute, differential, reflection and differential reflection

Analog Outputs
• 15 bit X & Y digital to analog conversion ±12 Volt output with 610 micro Volt steps

Sensitivity
• 80 Volt/Ohm sensitivity

Power Requirements
• 120 Volt AC, 12 Volt battery

Software

Filtering
• Variable band pass, low pass and high pass filtering selectable from 0 to 3200 Hz

Rotation
• Continuously variable 0-360 degrees

Electronic null
• Under 2 seconds

Automatic Lift-Off Adjust
• Automatically nulls and adjusts lift-off

Strip Chart Recorder
• Display of simulated strip chart recorder showing X & Y data

Auto clear
• 0-10 seconds auto clear adjustable in 1 second steps

Data Presentation
• X-Y rectangular coordinates
• R-θ (polar coordinates)

Alarm
• Box, circle (computer buzzer will be activated for alarm conditions.)

Test Setup Storage
• Storage of up to 200 complete setups of the instrument settings

Data Storage
• 30 minutes or more depending upon interval, memory and configuration

Screen Storage
• 10 complete screen storage with overlay capability

X–Y Sensitivity Volt/Division
• 0, .2, .5, 1, 2 & 5

Conductivity
• In % IACS

Thickness
• Both conductive and nonconductive coatings

Computer Requirements
• 486 DX, 66 MHz or greater
• 16 MB Ram
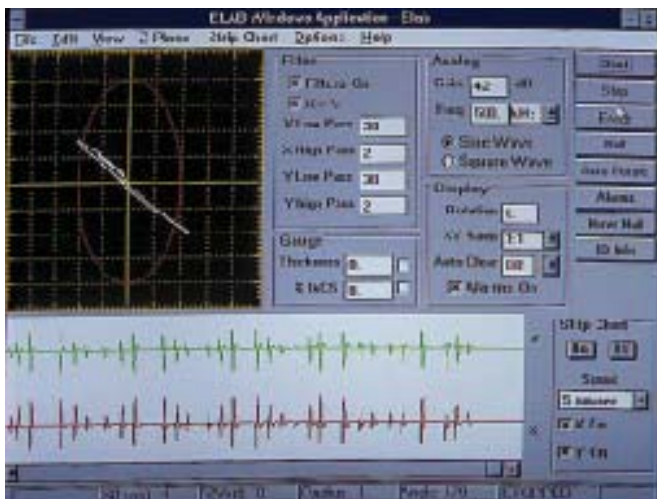• 200 MB Hard Drive
• Local bus video
• Windows
• ECP parallel port

Accessories
• Probes
• Bolt Hole Scanners
• ETC-2000 Eddy Current Scanner System

The display on the US-450 is shown with the circle alarm that sounds an alarm when data criteria is outside its boundary.

The US-450 was designed to save customers money by using their own Windows based software. Computers can then be used as an eddy current instrument as well as for normal day to day activities.