EddyView Family

Since 1985, employee-owned UniWest has engineered and manufactured eddy current (EC) testing solutions and instruments with unparalleled flaw detection capabilities for safety-critical and high-performance components in industries around the globe.

The EddyView line of portable EC instruments addresses the practical needs, as well as the financial realities, of the NDT industry. EddyView instruments serve to ensure the physical integrity and performance demands of critical components in industries ranging from service and maintenance providers, to original equipment manufacturers, to aerospace, energy and infrastructure development enterprises.

There are three levels of EddyView (Prime, Pro and Premium). Every model in the EddyView line is built on the same basic signal detection hardware platform and provides the same outstanding signal to- noise ratio.

Theory

When a coil of conductive wire is excited with an alternating electrical current an alternating magnetic field is produced. The magnetic field oscillates at the same frequency as the excitation source. When placed near a conductive material, currents opposed to the ones in the coil are induced in the material. These are referred to as eddy currents.

In the case of variations in the electrical conductivity and/or magnetic permeability causes a change in eddy current. Additionally, the presence of defects will precipitate a change in phase and amplitude that can be detected as a measurable change in the impedance. Eddy Current testing is generally used on conductive materials to detect surface defects.

EddyView Prime

Based on the same highly sensitive inspection technology and rugged hardware platform of the UniWest line of eddy current instruments, the Eddy View Prime is outfitted with a basic array of sensing, display and data storage features for precise flaw detection at a very attractive price. The EddyView Prime is the right choice for an all-purpose eddy current instrument designed for the inspector in the field. EddyView Prime features include:

- Single Frequency Capability
- X-Y Gain Spread
- Impedance plane, strip chart displays at the same time
- Removable SD card for program and test result storage
- Ethernet connectivity

Applications

Industry	Component	Application		
Aerospace	Airframe Engine Landing Gear & Accessories	Air Seals Aircraft Disks Aircraft Engines Aircraft Frame Aircraft Skin Aircraft Wheel Airframe APU (Auxiliary Power Unit) Bolt Holes Bores Broach Slots Combustion Chamber	Conductivity (lightning strikes) Fastener Holes Heat Damage Landing Gear Trunnion Material Thinning Paint Thickness Propeller Rocket Motors Tie Bolts Turbine Blades Web Wing Attachment Pins	
Manufacturing	Brake & Safety Related Engine Transmission Wheel	Bar Batch Analysis Bearing Races Billet Bolts Paper Mill Plastic Injection Molding Tubes	Pins Pipe Plate Rod Roller Bearings Silicon Wafer	Steel Strip Tube Valve Weld Wire
Medical Devices		PA Catheter Tube Pacemaker Cases		
Military	Armament Mortars Tanks	Gun Barrels Hi-Stress Components Safety Hardware		
Power Generation	Turbine & Generator	Blade Roots Blades Bolt Holes Bores Broach Slots Coating Thickness	Disks Generator Inspection Turbine Blades Welds Winding Slots	
Primary Metals	Bar Tube Wire & Plate	Bar Production Batch Analysis Billet Inclusion Detection Material Sorting Paper Mill Pipe Plastic Injection Tubes Plate Plate Production Porosity Testing	Rod Roller Bearing Si Wafer Inspection Steel Production Strip Tube Production Valve Weld Inspection Wire Production	
Research & Testing	Wide Range of Capability	Forensic Analysis Laboratory Research Materials Innovation Process Optimization		
Systems Integration	Integration into Robots, Scanners and Research, & Data Collection	Automated Aircraft Engine Manufacturing Systems Primary Metal		
Training	Basic Eddy Current Instruction	Level I Eddy Current Certification Level II Eddy Current Certification		
Transportation	Brake & Safety Related Engine Transmission Wheel	Bolt Holes Bolts Crankshafts Heat Treat Sort Hubs Pistons Rotors Tubing		

EddyView Family

EddyView Pro

The EddyView Pro is a dual-frequency instrument designed with split screen capability for high speed bolt hole scanning. It provides conductivity and non-metallic thickness measurement, and the ability to interface with peripheral devices and automated systems.

Designed to be used by the professional, the EddyView Pro includes all the features of the EddyView Prime, and additional features that allow for both standard eddy current inspection and complex inspections. The EddyView Pro features include capability for automated production testing. Ethernet, RS-232, alarm outputs and high rates of data acquisition adds to the flexibility of the instruments system integration capability. The EddyView Pro is the perfect fit for use in the field, the laboratory, or in production.

EddyView Pro features include:

- Dual Frequency with mixing
- Split-screen for both impedance plane and O-scope/sweep modes
- Digital conductivity measurement
- Non-conductive lift-off digital measurement
- Rotating scanner support for high speed bolt hole scanning
- USB flash drive support

EddyView Premium

For the most demanding eddy current testing applications, the EddyView Premium offers unmatched flaw detection and four frequency inspection capability. Designed for premium high end inspections, the Premium can be easily integrated into turnkey systems. Encoder support in addition to built-in strip chart recording capability allow for imaging software interface and ability to store permanent records. The Premium is the right choice for demanding special application inspections in production, but can also be used as a general purpose eddy current instrument for laboratory and in the field.

EddyView Premium features includes:

- Quad frequency capability
- Waterfall display for bolt hole imaging
- Encoder support
- Auto name capability
- Both HP and Epson printer support
- Special software packages for multiplexing capability (optional)

	PRIME	PRO	PREMIUM
Single Frequency Capabilities			
Alarm Mode			
Alarm LED			
Alarm Region (inside & outside)			
Alarm Types, Rectangular, Elliptical, Low and High			
Clear/Null Input			
Ethernet			
VGA Port			
Data Storage with SD Card			
SD Card For Data, Reports & Test Setup Storage			
Setup Storage			
Report Storage			
Frequency Range, 20Hz to 15MHz			
X/Y Sensitivity, .01, .02, .05, .1, .2, .5, 1, 2 & 5V			
Gain Control, Variable			
X-Y Gain Spread			
Probe Drive	L/M/H	0-100%	0-100%
Filters, HP and LP selectable			
Rotation Control, Variable			
Impedance Plane Display			
Strip Chart Display, Horizontal, Vertical or Both			
Chart Direction Reversal			
Dual Frequency Capabilities			
Mixed Mode			
Dual-Frequency Display			
Mixed-Frequency Display			
Alarm Delay			
Alarm Duration			
Alarm Headphone Audio Out			
TTL Alarm Output			
Open Collector Alarm Output			
Alarm Buzzer			
RS232 Serial Port			
USB Keyboard Support			
USB Flash Drive Support			
Grid Mode Selection			
Variable Display Color Themes			
Split Screen Display, Impedance and O-Scope			
O-Scope Display			
O-Scope Alarm Gates			
Coating Thickness Measurement			
Digital Conductivity			
Rotating Scanner Support			
Quad Frequency Capabilities			
Mixed Mode			
Quad-Frequency Display			
Mixed-Frequency Display			
Waterfall Mode			
Waterfall Display			
USB Printer Support HP/Epson			
Scan Encoder Support			
Auto Name			
Aux IO			
Multiplexing Software (Optional)			

About PCTE

PCTE have over 30 years' experience in the measurement and testing of construction materials. PCTE can provide more than just the equipment, they can provide expert training. PCTE have a service centre in Sydney in which they can provide calibration, repairs and warranty repairs.