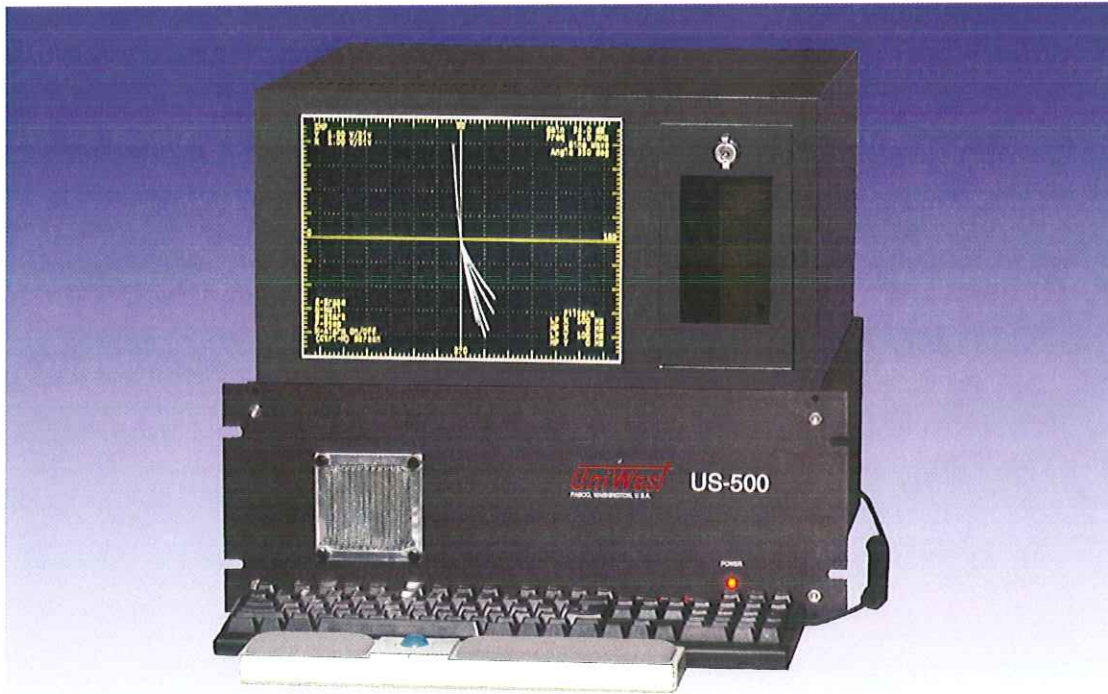


US-500 Eddy Current Instrument



The US-500 is a computer based eddy current system for high-speed inspection of critical components containing small discontinuities such as cracks in jet engine parts. It is adaptable to fully automated inspection systems as well as semi-automated devices that require high levels of sensitivity as well as system integration for turnkey operations. Features of the US-500 include:

- Can be used for most eddy current applications on metals including crack detection, materials sorting and hardness, coating measurement, plating thickness, and conductivity measurement.
- System is rack mounted and can be installed into the users system or purchased turn-key with cabinet included.
- Fully compatible with other systems components for turn-key operations such as printers, controllers and data acquisition devices.
- Works best with custom designed probes selected for compatibility to receive the best sensitivity and signal to noise ratio for the application.
- Operating software is Windows based and easy to use.
- Works with many of UniWest custom designed systems for automated eddy current inspection.

Hardware

Frequency Synthesizer

100 Hz to 10 MHz

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

7.5 V p-p with an output impedance of 10 Ohm, 200 Milliampere drive, slew rate 2000 V/us.

Probe Configuration

Absolute, differential, reflection and differential reflection.

Analog Outputs

15 bit X&Y digital to analog conversion. + or - 12 volts output.

Sensitivity

60 Volts/Ohm

Power Requirements

120 Volt AC

Computer Requirements

The recommended US-500 system comes with a built in computer that includes a minimum of:

Pentium or better

16 MB Ram

200 MB Hard Drive

ECP Parallel port

Windows 98

Software

Filtering

Variable band pass, low pass, and high pass filtering selectable from 0 to 10,000 HZ

Rotation

Continuously variable 0-360 degrees

Electronic Null

Under 2 seconds

Automatic Liftoff Adjust

Automatically nulls and adjusts lift-off

Strip Chart Recorder

Simulated strip chart recorder showing X & Y data

Auto Clear

0-10 seconds adjustable in 1 second steps

Data Presentation

X-Y (rectangular coordinates)

R-0) (polar coordinates)

Alarm

Box, Circle, X or Y only (computer buzzer will be activated for alarm conditions)

Test Setup Storage

Storage of complete instrument settings (limited only by hard drive).

Data Storage

30 seconds minimum of strip chart data stored to disc. (limited by hard drive)

Screen Storage

Storage of impedance plane display including 4 overlays (limited by hard drive)

Conductivity

In % IACS

Thickness

Both conductive and non-conductive coatings.

To order the US-500 ask for part # 95293

WWW.UNIWEST.COM

E-MAIL: INFO@UNIWEST.COM

122 SOUTH 4TH AVENUE

PASCO, WASHINGTON 99301

UniWest[®]