

AIS

NB-2000 Plus

Automated UT/Laser Data System



Combination ultrasonic and laser displacement system.

When combined with the AIS RoboScanner, this system records high resolution Corrosion mapping fast and efficiently. Use our dual crystal straight beam for far surface mapping (thickness and corrosion measurement). Switch to our high resolution laser displacement sensor to record near surface (OD) corrosion.

One system does it all.

 **Victor
Aviation**™

SALES REPRESENTATIVE:

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NB-2000 Plus Specifications

ACQUISITION SYSTEM STANDARD PACKAGE

Industrial PC Computer

- 1240x1080 display, 512 Mbytes Ram, 100 Gbyte Disk, DVD

Pulser

- Model Nanopulser 2

Digitizer

- Model AIS 125

Software

- Data Calibration & Acquisition
- Data Display
- Angle Beam
- Cscan
- TOFD
- Scanner Control
- Windows 7

SPECIFICATIONS

Channels

- Single Channel Data System

Range

- 2 uS – 3264 uS, selectable in many increments

Velocity

- One point calibration function
- Two point calibration function
- Full velocity range adjustment
- Units: in/S, in/uS, ft/S, m/S

Delay

- 0-3264 uS

Transducer Frequencies

- 0.5 MHz – 10.0 MHz

Pulser

- Negative square wave pulse, -150 to -300 V
- Width 70 nS to 1500 nS
- Fall time less than 10 nS
- Impedance 50 or 500 ohms

Receiver

- Gain 0-100 dB, 0.1 dB steps or keyboard entry
- Max input signal 10v peak to peak
- SNR 90 db
- Bandwidth 300 KHz to 28 MHz
- Rectification RF, Full, +Half, -Half
- Test Modes: PE, T/R, TOFD, Linear or Log
- Band Pass Filter – User Selectable

Maximum Repetition Rate

- 8000 Hz with external trigger

Reject

- Full linear control to 100% screen height

Real Time Averaging

- 2, 4, 8 or 16 waveforms

DAC

- 128 points, 100 dB range
- Slew rate 100 dB between any two points

Gates

- 12 individual gates, Amplitude/Depth
- Fixed delay or front surface interface mode

Detection

- Maximum/Minimum peak
- Rising/Falling edge
- First peak

Displays

- Multichannel A, B, C, &D Scan; Stacked A-scan
- Combine displays from several scans
- Correlate displays from multiple channels
- Weld geometry overlay
- Curve correction
- Frequency spectrum

Digitizer

- 125 MHz 14 Bit Resolution
- Sample points: up to 16K samples
- Range: 16 – 4080 (increments of 16)
- Delay: 0 – 4080
- Trigger: External or Software control

Enclosure

- Portable industrial grade PC
- Instrument, power supplies
- 24"x24"x30" (35 lbs)

Power Requirements

- 100 V, 60 Hz AC
- 240V, 50 Hz AC

Scanners

- AIS RoboScanner
- AIS RoboCrawler
- AIS RoboGantry (Dual Axis X-Y Scanner)
- Manual pipe scanners
- Manual X-Y magnetic wheel scanner
- Manual TOFD scanners
- Custom scanners available
- Automated pipe scanner: