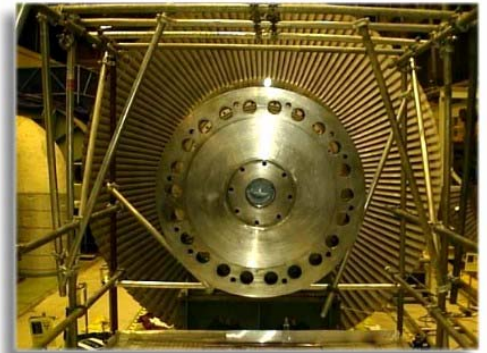
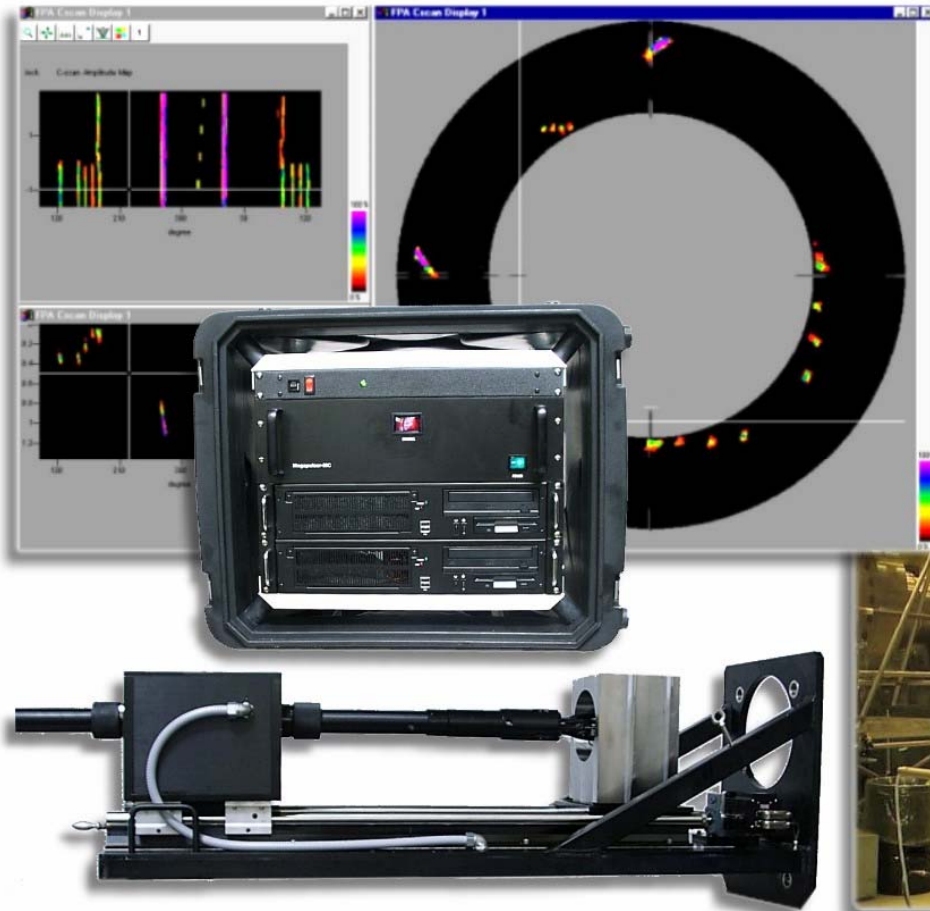


Turbine Rotorbore

For the NB-2000MCx Automated UT Data System



1-925-335-9206

Automated Bore Inspection, Simple and Easy

Compact, Small, Easy to Transport

Windows XP Based, High Speed 125 MHz A/D

EPRI Qualified

Examine Bore Diameters Down to 2.8" OD

Optional Bore Head for 2.0" OD

Automated Flaw Detection

Simple Operation, Proven, and Reliable

Procedures and Calibration Blocks Available

AIS

4861 Sunrise Dr. Ste. 101, Martinez, CA 94553
www.ais4ndt.com



Turbine Rotorbore System Specifications

ACQUISITION SYSTEM STANDARD PACKAGE

Dual Industrial PC Computers

- 1240x1080 display, 1 Gbyte Ram, 160 Gbyte Disk, DVDr

Pulser

- Model Megapulser

Digitizer

- Model AIS 125

Software

- Data Calibration & Acquisition
- Data Display and FPA Algorithm
- Angle Beam
- Cscan
- TOFD
- Scanner Control
- Windows XP

SPECIFICATIONS

Channels

- 8 channels (no. of pulser/receivers)
- 16 transducer connectors

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

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
- Donut Map

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, sealed
- Laptop, instrument, power supplies
- 27"x24"x24" (35 lbs)

Power Requirements

- 100 – 240V, 50 – 60 Hz AC

Scanners

- Turbine Rotorbore Sled
- Motorized magnetic wheel scanner
- Motorized TOFD scanner
- Manual pipe scanners
- Manual X-Y magnetic wheel scanner
- Manual TOFD scanners
- Squirters and immersion tanks
- Custom scanners available
- Automated pipe scanner: