ULTRASONIC INSPECTION SYSTEM INSTRUMENTATION UP-GRADES

This equipment is for the up-grade of ultrasonic instrumentation and software of any of the systems listed below. See the reverse of this brochure.

Al-Fin insert bond inspection in diesel pistons.

Gas cylinder inspection.

Tube and Bar inspection.

Any ultrasonic application where our standard chart recorder software can be used.

If you have an ultrasonic system that is using old un-reliable or obsolete ultrasonic instrumentation, it is now possible to up-grade that system to use the latest ultrasonic instrumentation and software.

We are able to offer ultrasonic systems with up to 32 channels, which are supplied in a free standing cabinet, with a simple Harting plug connection to your existing mechanics.
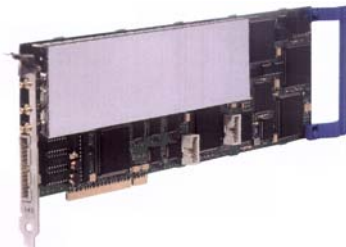
Ultrasonic Instrumentation

Our ultrasonic instrumentation is based on a single channel PCI card, which can be coupled to an 8-Channel multiplexer if required.
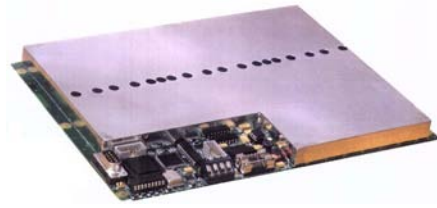

The features of our PCI ultrasonic instrumentation are;

- 0.5 to 20MHz bandwidth.
- 20KHz pulse repetition rate.
- 10 Bit Analogue to digital conversion, 200MHz at the maximum pulse repetition rate.
- Excellent near surface resolution.
- Very low noise in the PC environment at less that 20% full screen height.
- Designed for high speed A-Scan, B-Scan and C-Scan bus master data transfer.

The features of the 8-Channel multiplexer are;

- 8 remote pulsers, per-amplifiers and attenuators.
- Maximum pulse repetition rate per channel is the 20KHz pulse repetition rate for the PCI card divided by the number of active channels.
- Gain, monitor gates, DAC and outputs are independently set per channel.

Industrial Workstation Computer

The Industrial Computer is based on a standard PC using a Pentium III class processor. It is mounted into the cabinet at a height convenient for most operators. The system features:

- 15 Inch LCD screen.
- Passive industrial backplane.
- Plug in processor card, for easy of maintenance.
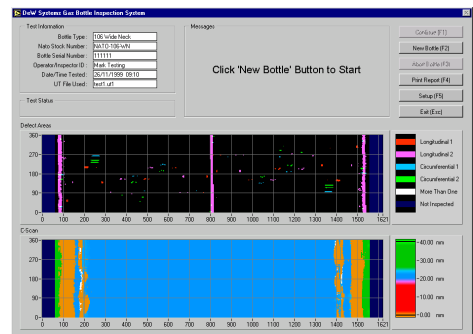- Membrane keypad, 59 keys, and a touchpad, pointing device.

Available Software Packages

Supplied as part of the up-grade, is the software. We are able to offer the following software packages;

- Piston inspection - checking the bonding of an Al-Fin insert in a diesel piston, or crater cracking and oil cooling gallery position with up to 8 channels.

- Gas cylinder inspection using 4 shear wave channels and a single compression wave channel.

- Tube and bar inspection and any other ultrasonic system where our standard chart recorder software is suitable.