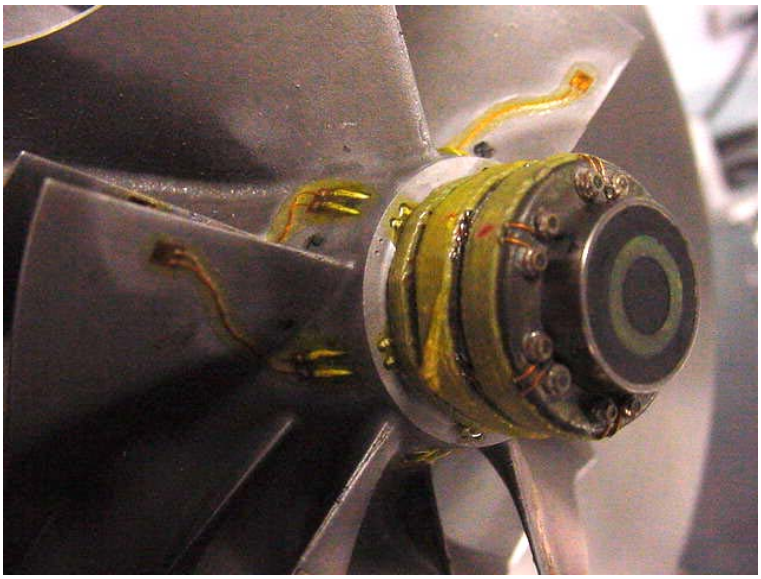
datatel TELEMETRY



6 Channel Scanner Telemetry System for Turbocharger Testing

Instrumented turbocharger with telemetry and strain gages

An advanced concept for scanned transmission of dynamic strain gage signals from turbocharger or centrifugal compressor rotors is available from datatel. A new generation of telemetry transmitters with advanced performance has been developed to meet current and future instrumentation demands of small and medium sized turbochargers and turbocompressors.

The 6 channel transmitter feature very high signal bandwidth combined with excellent measurement accuracy and signal quality. Moreover the modules offer a very useful rotor instrumentation diagnostic system which allows fault analysis of the S/G´s, the associated wiring and the telemetry system itself at any time during the test.

A variety of diagnostic functions can be remotely controlled from the receiver station, such as excitation current on/off, 2 switchable excitation current ranges and dynamic S/G shunt calibration. Managed by on-board micro controller circuitry, all functions are provided selectively for each channel.

The transmitter module is designed for shaft end installation and is powered by an axially aligned inductive power system. The rotor coil / antenna is integrated into the transmitter housing. The sensor interface is available as an exchangeable instrumentation ring with solder terminals.

- State-of-the-art multi-channel measurement of dynamic strain in Turbochargers and Centrifugal Compressors
- Scanned measurement of 6 dynamic S/G´s
- Very high signal bandwidth per channel 20Hz..50kHz (-3dB)
- High accuracy and signal quality
- Suitable for up to 140,000rpm
- Integrated rotor instrumentation diagnostics system
- On-board micro controller management
- Remotely switchable constant current S/G excitation
- Dynamic S/G shunt calibration
- Exchangeable sensor interface

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