



## RotaVibrometer Vibration Measurement on Crank Shafts

Telemetric sensor head attached to vibration damper (crank shaft pulley)

The survey of vibration modes in torsional vibration dampers of reciprocating engines provides important knowledge for the design and alignment of these components. datatel's RotaVibrometer acquires multi-axis vibrations and rpm on crank shaft pulleys and other rotating vibration dampers.

A specially designed, light weight sensor head combines miniature accelerometers and a multi-channel telemetry transmitter. The compact device is easy to adapt to any torsional vibration damper and is operational immediately. The set-up of this measurement system does not require time consuming adjustment and is therefore particularly suited for use in brief engine test stand applications.

The system features contactless, maintenance free inductive power supply to feed the telemetry transmitter electronics and the associated sensors. The inductive coil-/antenna system is attached axially to the damper (pulley) and can accept great relative movement between rotor and stator assembly.

The portable telemetry receiver and evaluation unit provide the measured vibration data and the rpm signal on parallel analog outputs. External data acquisition systems can be directly connected.

- Measurement of tangential-, radial- and axial vibration on torsional vibration dampers
- Wireless transmission of measured data via telemetry
- High accuracy and signal quality
- Compact sensor head with integrated accelerometers and telemetry transmitter
- Integrated RPM readout (TTL or analog output)
- Absolutely simultaneous signal transmission
- Signal bandwidth 2kHz (-3dB) per channel, optional up to 10kHz
- Easy to install and easy to set-up
- Portable measurement system for test stand applications
- Contactless inductive power supply