



PCH1420 Vibration Monitor

The Symetro™ Gear unit can be equipped with a permanent 2-channel digital vibration and process monitor type PCH1420.

The monitor is an important part of the gear unit's safety system. It detects abnormal increases in the vibration level and trips the mill motor after a suitable delay before severe damage happens. Abnormal increases in the vibration level are typically a consequence of decreased oil film thickness, misalignment, wear or broken parts in the gearing or the roller bearings.

Installation and settings

The monitor is configured to meet the highest possible safety level with respect to measurable vibrations in the entire gear unit. The configuration can be fine-tuned after installation.

PCH1420 replaces the previous model PCH1008 one-to-one.

Reliable surveillance kit

Two transducers placed on the highspeed bearing housing monitor the vibration level as an online broad band RMS value.

- Transducer no. 1 axial direction, 200-8000 Hz, in m/s^2 (acceleration)
- Transducer no. 2 radial direction, 3-2000 Hz, in mm/s (velocity)

Alert level (pre-warning) and danger level (trips mill motor) can be connected to individual relay outputs. The monitor is equipped with two LED displays on the front cover showing the actual level in acceleration and velocity. The two vibration levels are available as a 4-20 mA signal as well. This level can be processed as 4-20 mA or 0/2-10 V to separate systems.

The monitor system includes

- A monitor configured according to Symetro Gear standard
- Ruggedised enclosure with two displays
- Two CTC 90°-angle transducers
- Two 5 m steel-protected cables pre-connected to the monitor
- Erection accessories, such as lock-tight connection paste, cable holders, and plug tap/pre-drill for transducer erection
- User manuals incl. software
- 100-240 VAC or 24 VDC Power Supply

Symetro Gear unit with PCH1420 vibration monitor

