OM

OM-Finland Oy

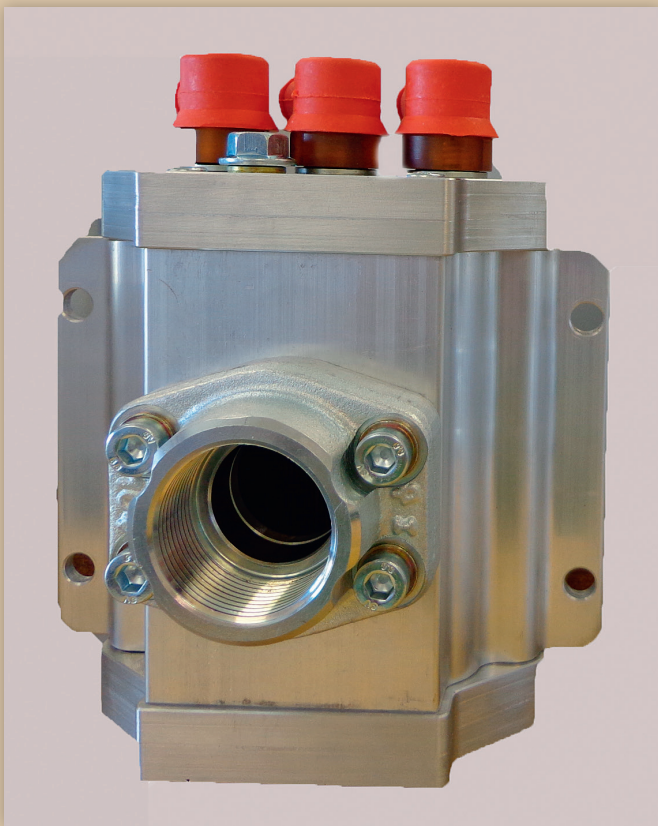## Machine Health 🛢 Monitoring 🛢

Advanced Metal & Moisture in oil detection

Reducing down times and remarkable cost savings

OM
OM-Finland Oy

CPD-sensor detects, alerts and counts the presence of all conductive **metal particles** in non-conductive fluid systems. CPD detects **water** in oil and gives moisture in oil alerts.

METAL PARTICLES

- No false alarms from air bubbles & oil colour or non metal debris
- High reliability in harsh environment
- Detected debris size 130um or above

WATER AND MOISTURE

- Moisture content 200ppm and upwards detected
- Accuracy is insensitive for fluid flow changes
- Pre-settable threshold for alarms

TYPICAL APPLICATIONS:

Diesel engines; marine, emergency power etc.

Gear boxes; process industry, mining, wind turbines

Marine thrusters; azimuth, VSP etc.

Turbine bearings; hydro power, gas &steam turbines

DIFFERENCE COMPARED TO OTHER TYPE OF PARTICLE DETECTORS

CPD sensor can operate in fully automatic or in manual mode.
Manual mode enables operator to pick up the debris for further metal classification and analysis.

CPD sensor operates both with engine and gear/bearing applications without any modifications. This enables user to monitor complex mobile and stationary power train systems with multi sensor network.

Sensor has three independent parallel channels. Detection of several particle burst hitting sensor simultaneously is sensed with the three channels. Alarm setting is simple for rapid variations of particle amounts in oil. CPD has display for time derivative of particle trend curve (debris rate/time).

CPD has two sensors in one unit, metal debris detector and water-in-oil sensing.
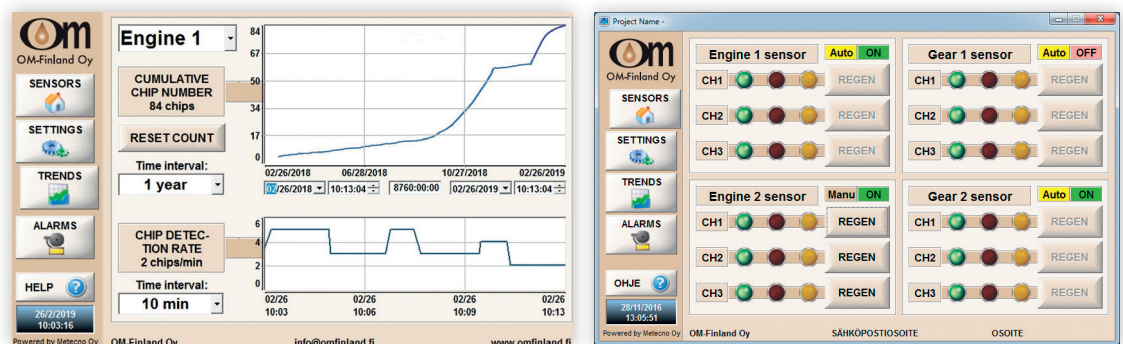
MACHNERY MONITORING ALARMS

– Metal and Water trends from selected period
– Cumulative amount of debris, pre-settable threshold
– Debris rate/time, pre-settable threshold
– Water content ppm, pre-settable threshold
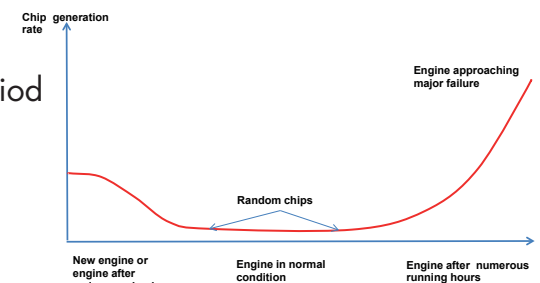
KEY FEATURES & BENEFITS

- Accurate real-time In-line and On-line monitoring via flow sensor.
- No false alarms from air bubbles & oil colour
- Continuous operation regardless of random debris
- Standard grid space 0,2 mm, 0,5 mm and 0,75 mm
- Water in oil detection range 200 ppm…2000 ppm water in oil
- Fluid flow rate 3…300 l/min
- Operating voltage 24V DC
- Selectable data interfaces, Modbus RTU, Profibus, EtherCAT or Ethernet
- IoT connectivity, LoRa, MS Azure etc.
- Stand alone system option with PC or touch screen panel PC HMI
- Sensor is suitable for all types of engine and gear oils and hydraulic fluids

OM-Finland Oy

OM-Finland Oy was founded 2014 in Tampere. OM-Finland develops and sells its patent protected machine health monitoring solutions for several industries.

By monitoring machinery oil, OM-Finland's CPD sensor provides customers real-time awareness for machinery condition and help in preventive maintenance.

As a result of CPD sensors continuing and false alarm free detection, OM-Finland's customers have one problem less to solve.