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Rail Sensor Solutions

for asset monitoring and maintenance optimisation

GILL

WearDetect

OIL DEBRIS SENSORS, CONTINUOUSLY MONITORING FERROUS WEAR

- Earliest maintenance warnings protect critical assets
- Captures and measures both fine & coarse ferrous wear debris
- WearDetect sensor data can be used to predict and schedule maintenance actions
- Proven high return on investment by minimising unplanned downtime
- Easy to install and straightforward to interpret results
- Additional oil temperature or water presence measurement

WearDetect monitors ferrous wear and communicates via DCS/PLC/CMMS or IoT systems

LevelPro

ROBUST, RELIABLE LIQUID LEVEL SENSORS

- Accurate and reliable, continuous liquid level measurement
- Durable in aggressive liquids and environments
- Stable measurement in moving liquids
- Wide operating temperature range
- High quality stainless steel construction with sealed electronics
- Tank profiling system for irregular tank shapes

LevelPro continuously monitors liquid levels in harsh and moving environments

Rail Applications

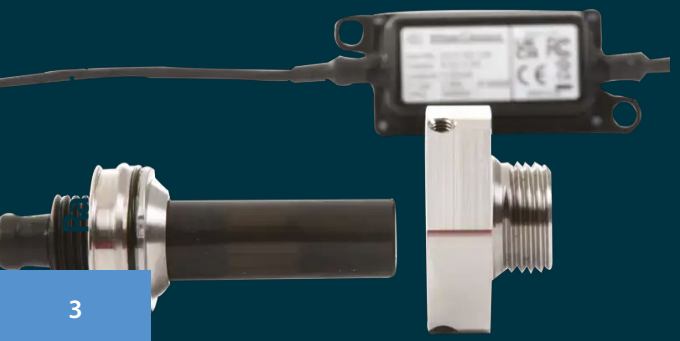
Gill offers systems that allow customers to achieve total asset monitoring, to deliver optimised maintenance and operations. Gill products are based on robust solid-state (no moving parts) technology, making them highly reliable for long term operation.

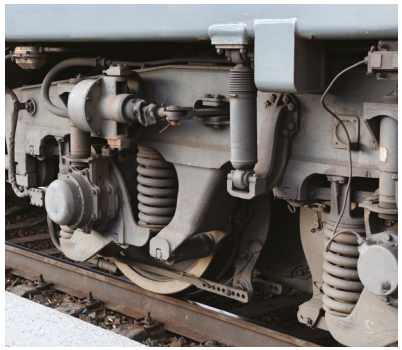
WearDetect oil debris sensors are proven to detect the earliest warning of the initial stages of ferrous wear.

WearDetect provides real-time, continuous condition monitoring of critical assets and is primarily used in oil based systems, such as gearboxes.

Gill liquid level sensors provide highly accurate, reliable and continuous contact based measurement in a wide range of liquids, including fuels, oils and coolants.

LevelPro sensors are robust, built in stainless steel with sealed electronics, making them ideal for use in aggressive liquids and harsh environments.





Axle wear monitoring

Maintaining the reliability of train axles is crucial for both safety and operational efficiency. Manual inspections and oil sampling, however, can be challenging due to location, bad weather or scale of network.

WearDetect addresses these challenges by continuously monitoring changes in wear debris in oil within the axle. Maintenance professionals are informed at the earliest stages of wear, allowing time to schedule corrective action and reduce the risk of costly disruptions.

VIEW APPLICATION

Coolant level measurement

High locomotive reliability was being compromised by low coolant levels leading to locomotives being shut down unexpectedly. Visual inspection of a sight gauge was proving ineffective for a number of reasons.

LevelPro capacitive liquid level sensors were used to provide robust, accurate level measurement directly in the cab, alerting the driver to low coolant during start up or operation, avoiding locomotives being taken out of service.

VIEW APPLICATION

Diesel fuel tracker

Severe winter weather conditions can make it difficult for diesel level sensors installed in locomotives to remain functional. Additionally, the sensor needed to be able to track fuel consumption accurately and report any fuel loss.

A Gill level sensor, constructed from corrosion free anodized aluminium and resistant to heavy shock and vibration loads, was selected. Proven to operate in temperatures of -40°C to +125°C, it offers easy installation, minimum maintenance and does not require re-calibration.

VIEW APPLICATION

WearDetect

For further information on **WearDetect** and **LevelPro**, including manuals, datasheets and software, please click here:

Technical specifications
Real-time and continuous condition monitoring
Communicates with DCS/PLC/CMMS or IoT systems
Outputs: 0-10V, 4-20mA, CAN, Modbus
Captures and measures both fine & coarse ferrous wear debris
Multiple thread adaptor options for easy installation

LevelPro

Technical specifications
316 stainless steel construction
Accuracy +/- 2% FSD @20°C
Probe lengths available between 100mm & 2000mm
Mounting: SAE 5-bolt, 1.125" UNF, 1.25" BSP or 2" NPT thread options
Suitable for top of tank or inverted installation

Where to buy

Gill Sensors & Controls products are available directly or through a worldwide network of distributors.

To discuss your needs and be put in contact with the most appropriate distributor, contact us at **contact.gsc@gill.group**

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