Portable [condition monitoring]

OilCMS PRO

[ON-SITE PORTABLE SERIES]

OilCMS is the portable, robust, real-time solution featuring Atten[2] optical technology for particle counting and particle morphology analysis in lubrication systems.

The Portable OilCMS utilizes breakthrough digital imaging technology which provides a greater insight into the size and type of particulate in any oil system. Air bubble elimination and shape recognition gives root cause particle analysis. A water content sensor and stepper motor pump for high viscosity oils completes the package. Giving ISO 4406 counts as well as 4, 6, 14, 21, 38 & > 70 micron sizing and bubble elimination. Digital imaging combined with advanced algorithms sorts particles into fatigue wear, cutting wear and sliding wear categories to give root cause analysis.

This powerful technology, when coupled with additional sensors for measuring water content and oil life, gives unprecedented on the spot insight into the condition of your oil.

All Atten[2] technology functionalities available

- Particle counting according to ISO 4406 standard > 4 microns
- Classifies particles in 7 ranges (>4, >6, >14, >21, >38, 70 µm)
- Shape analysis
- Discrimination and counting of air bubbles
- Fluid image storage

+ Oil degradation (TDN)

+ Humidity (%RH)

[FEATURES]

Digital Imaging Particulate Counter

Classification and counting of particles larger than 4 microns in 6 ranges. 4, 6, 14, 21, 38 & >70 microns. Air bubble and water droplet elimination.

Root cause information

Shape determination to classify fatigue, sliding or cutting wear as well as fibre identification helping to identify the root cause.

Oil degradation sensor

Integrates oil degradation technology that provides information on oil degradation and contamination. It works with virtually any oil, drawing on a database of over 500 common industrial oils.

Water sensor

Inbuilt water sensor that provides early diagnosis, reducing potential failures associated with water presence in lubrication and hydraulic systems, improving machine and process reliability.

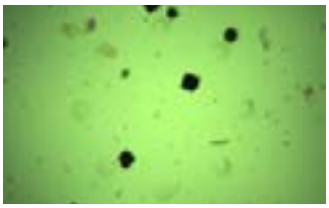
[TECHNICAL INFORMATION]

Fluid compatibility	Synthetic oils, organic oils, mineral oils & diesel fuel (2,400 cSt viscosity limit)
Display information	**Particulate:** ISO 4406, SAE AS4059 & NAS 1638, bubble elimination and particle wear analysis **Water:** relative humidity (RH%). **Oil condition:** determine the remaining life of any oil profiled (TDN)
Modes of operation	High-pressure live system sampling (up to 350 bar) - via a high-pressure adaptor Bottle sampling and tank sampling (up to 2,5 bar)
Data	All data stored locally and backed up off-site. Export to CSV or PDF
Calibration	500 oils profiled with the ability to self calibrate any oil also included, via a one time routine.

[DIMENSIONS]

10kg

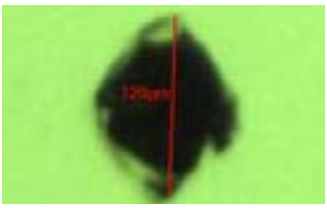
[REAL IMAGE VISUALIZATION]



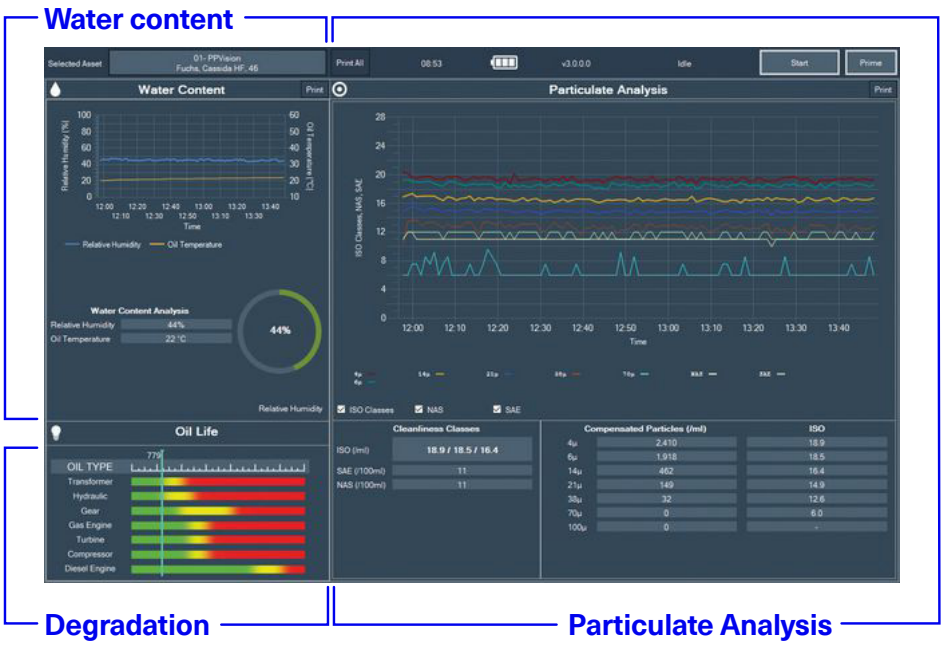
Oil enters the counter for continuous analysis and images periodically captured

Air bubbles can be seen in images, which are size categorised and removed from particle counts

Fibres can be visually inspected for analysis of origin



Images can be magnified for analysis and measurements taken



New Software

A 10” touch screen LCD allows users to view data in great detail, with zoom, trending and analysis breakdown. Within the software we have embedded oil ageing profiles for over 500 oils. Also included is the ability to self-calibrate an oil life profile, should your oil not be on the database. This is a one time routine where oil is taken through a heat cycle.

Spider infographic

A multi-stage infographic helps engineers understand at a glance the condition of their oil, based on all of the data collected from the internal sensors.

Internal Stepper Motor Pump

We’ve developed a fully controllable stepper motor driven pump to deliver exact flow rates for any oil from 1 to 2,400 cSt. The pump also allows connection to a live system up to 350 bar via a high pressure adaptor.

Battery life

Internal rechargeable lithium battery provides a long life for remote use.