

# **Condition Monitoring Services**

Preventative maintenance systems management



# What is Condition Monitoring?

Condition Monitoring is the process of monitoring a machine's health to identify changes in wear trends that may indicate a developing fault. Komatsu Condition Monitoring Services (CMS) are designed to save you time and money by monitoring the health and condition of your equipment through a wide range of services to give you a complete picture of what's happening inside your equipment.

#### Komatsu CMS services include:

- » KOWA (Komatsu Oil Wear Analysis), covers sampling and analysis of all types of oils and lubricants, diesel fuel, filters and coolants
- » Metallurgical testing and evaluation
- » Thermography (Thermal imaging)

- » Positive Material Testing (PMT)
- » Non-Destructive Testing (NDT)
- » Water waste analysis
- » Vibration analysis

# Why use Komatsu CMS?

Komatsu CMS always takes a holistic approach when providing analysis for our customers, so we are able to advise on the complete picture of what is going on inside your equipment or machinery.

The benefits of using Komatsu CMS include preventing premature component failure, which virtually eliminates unscheduled machine downtime, and extending the life of machine components, while reducing the chances of expensive failure costs.

At Komatsu CMS, we have the knowledge, capabilities and technologies to meet all our clients' ongoing service and maintenance needs.



# **Our KOWA service**

Komatsu CMS's KOWA (Komatsu Oil and Wear Analysis) is the spearhead of our services, and includes testing and analysis of oils and lubricants, diesel fuel and coolants. Your equipment is the lifeblood of your business and KOWA acts as a blood test for your machine.

Once the sample has been taken using the correct KOWA kit, the sample is sent to one of our CMS labs. Once analysed, we email you easy to read reports, so you can quickly respond to any issues. Customers can also be alerted via SMS that their reports are available. If our analysis identifies a potentially critical issue, we will contact the customer urgently to advise them what action should be taken.



# Who uses Komatsu CMS?

Not only Komatsu equipment will benefit from our expertise. More than 40% of our analysis and testing is for non-Komatsu equipment, including other makes of construction and mining equipment, along with other mobile and fixed plant, heavy transport equipment, automotive equipment, oil and gas exploration, the building industry, marine equipment, and the industrial sector.

# Our range of KOWA samples



## P/N: KOWA-OILCM Oil test kit - vacuum

Tests include: ICP analysis, FTIR analysis, viscosity, PQ index, fuel, water



#### P/N: KOWA-ANBNCM

Acid/base number kit

Includes standard oil analysis as well as both acid and base numbers for engine oil and acid number for transmission



#### P/N: KOWA-COOLANTCM Coolant test kit

Glycol, pH, conductivity, anions, colour, clarity, visible solids, ICP analysis



### P/N: KOWA-RULERCM

(National part number) RULER + MPC

Includes KOWA-oil plus highlighting measurements of hindered phenolic and aromatic amine antioxidants



#### P/N: KOWA-LIVECM Oil test kit - live

ICP analysis, FTIR analysis, viscosity, PQ index, fuel, water



## P/N: KOWA-DIESELCM

Diesel fuel test kit

Includes KOWA-oil tests plus, moisture by Karl Fischer, density, colour; bacteria/fungi



#### P/N: KOWA-FILTERGRAMCM

Filtergram report kit

Optical microscopy. Includes KOWA-Oil tests and contains at least two highly magnified images of particles considered important to equipment maintenance procedures.



## P/N: FD90VALVE2LP

Live Sample Valve

1/8" – 27TPI NPT male thread.



#### P/N: KOWA-GUN KOWA Vacuum Gun

Standard vacuum sampling gun

# **CMS** Website

Report data can also be easily accessed via the Komatsu CMS website (my.komatsu.com.au/conditionmonitoring) - giving you access to your equipment's KOWA data and reports anytime, anywhere.

You can browse your full sample history, trends and results, create your own customised sample cards quickly and easily, as well as accessing other online tools to help you better view and understand your report data - access to this information is key to better identifying equipment problems and managing machine performance.





## For more information:

**Australia** 

Ph: 1300 199 054 | Web: my.komatsu.com.au/condition-monitoring

**New Zealand** 

Ph: 0800 433 116 | Web: my.komatsu.co.nz/condition-monitoring











