

MMS for safety

Multibrand engine safety management system

MMS, the Multifunction Monitoring System manages the engine safeties with a real time stop engine system

Description

MMS for safety provides in a unique panel, the engine stop management system and monitors the crucial operating data of the running engine.

Thanks to three complementary sources of data located in the engine, MMS for safety monitors the health of mechanical components that are experiencing high strain. In doing so, MMS for safety protects all rotating and major components.

What's monitored?

The lube oil temperature coming from crankpins, the main bearing temperatures and the crankcase pressure. When the deviation is tiny so the alarm is triggered. The operator can then identify the anomaly and maintain accordingly before a component failure happens.

When the 2nd threshold is reached, so the engine is automatically stopped. The operator can identify the failure and maintain accordingly before a potential major engine breakdown occurs.



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Applications and equipments

The MMS is designed for all 4-stroke engines, all manufacturers, either new buildings or as a retrofit and fits marine, power generation and nuclear applications.

Benefits

Safety

- Avoids the main risks of major failures
- Decreases the severity of crankshaft and main bearing damages in case of main failure

Operation & maintenance

- Allows a maintenance anticipation under operator supervision
- Decreases the risk of major damages by early detection of tiny deviations

- Generates a better availability and a better reliability of the engine

Modularity

- The MMS system is fully modular. One function = one module. Partial or complete activation of functions according to your needs.

Use

MMS for safety replaces several functions included in existing safety management systems in a sole panel. It is highly compatible with all automation systems.



MMS for safety: 3 modules

Module A – Crankpins lube oil temperatures monitoring

Sensors detect deviations and order an engine stop immediately. Its high reactivity to detect failure protects crankshaft.

Module B – Main bearing monitoring

Sensors detect too high temperatures and activate alarm or immediate stop order. Its high reactivity to detect anomaly protects bearings.

Module C – Crankcase pressure monitoring

Sensor detects a pressure excess and activates an alarm or immediate stop order. Its high reactivity to detect anomaly preserves from major failures inside crankcase.

Stand alone or supervision

Stand alone engine per engine
Onsite and/or connected to remote supervision

Technical characteristics

MMS is based on the SaCoSone technology which is the state-of-the-art of MAN Energy Solutions engineering.

- Panel dimensions: 50cm x 50cm x 30cm
- Modbus TCP or RTU interface, online connection
- Alarms memory & graphical display
- Ergonomy: touchscreen
- Available languages: English, French, German, Spanish, Portuguese, Chinese

Installation & service

Its elementary design allows a short installation time in a limited space. The installation is operated or supervised by MAN PrimeServ with integration of proper installation settings.

Certified quality

- MAN Energy Solutions OEM product
- Compliance: LLOYD's register, RINA, ABS, RMRS, CCS, KR, DNV GL

Compatible additional products

MMS for monitoring

MMS for monitoring provides multiple onsite monitoring modules that make sense for an efficient engine operation, as power, engine speed and overspeed, fluids pressure and temperature, exhaust gas temperature, TC speed.

MAN Fluid Monitor for lube oil

The real time condition monitoring system for engine protection, MAN Fluid Monitor for lube oil, provides a global overview of the condition of the lube oil in operation. You are able to anticipate the needs of maintenance and to maximize the availability of your engine.

MAN Energy Solutions France
Avenue de Chantonay, Porte 7
44600 Saint-Nazaire, France

P + 33 240 90 65 00
primeserv-retrofit-fr@man-es.com
www.man-es.com