

Ferrous Wear Debris Meter

Testing lubricant samples especially Cylinder Drain Oil samples for Ferrous Wear Debris is a well established method to detect developing and impending damages of the engine. This test delivers important information about the wear life cycle of the tested equipment. With the FDWM this important measurement data is instantly available.

The FWDM - Ferrous Wear Debris Meter - developed by CMT is the precise, easy-to-use and fast solution to take measurements of the Ferrous Wear of any engine on board.

The repeatable and accurate detection of any ferromagnetic particles including large particles with a resolution of up to one PPM makes the FWDM the best solution for measuring the current condition as well as wear cycles on marine engines and industrial production machines.



Both the device and the firmware have been optimized to make the testing process as easy as possible. Therefore, the execution of the test can be done by non trained personnel.

The 3.2" color display of the FWDM guides the user through the test process.



Your benefits:

- Easy to use
- Without additional chemicals
- Intuitive operation via color code
- Particularly suitable for wear detection
- Can be used for all media (fits in the sample container, otherwise no restrictions)
- No particle size limitations



Like all the devices developed by CM Technologies GmbH, the FWDM is focused on high accuracy while still being easy to operate. The high accuracy is achieved by using an advanced firmware, as well as a high quality sensing element.

The sensor is using the magnetic properties of iron debris to determine the exact amount of iron within the sample. The result corresponds to a mass percentage of any size or quantity of iron particles, even sub-micron particles are easily detected.

In contrast to the usual laboratory methods, the measurement method from the FWDM is not affected by particle size, dielectric properties of liquids, additive packages or water content. The results are being displayed in mg Fe/I or PPM.

The entire test is not reliant on any chemicals or additives, which makes operation much easier and safer for your crew. Any sample of any oil can be measured with the FWDM within seconds as long as it fits into the sample containers.

Ordering Information

OTK-CT-20500

FWDM Ferrous Wear Debris Meter

Range: 0 - 2000 ppm
Resolution (ferrous): down to 1 ppm
Repeatability: +/- 10 ppm typically
Power supply: 12 V DC @ 250 mA

Weight (device): 485 g
Test time: 1 second

OTS-CT-13039

FWDM Consumables PackNo. of 2 ml Test tubes: 250