

# Iron II Test

The main indicator for wear in 2 stroke diesel engines remains iron. Testing cylinder drain oil for iron content and residual base number (BN) is a very commonly applied technique for screening drain oil samples onboard seagoing vessels. CM Technologies has developed a completely new technology for testing Iron in CDO on-site. The improved CDO Iron Test II has become much faster, easier and much more accurate.

The established patented CMT Iron II Test is based on a simple two component wet chemistry which is tested in an electronic photometer. An electric shaker will assist the user to perform the test. The simple test procedure just takes 3 minutes to achieve an accurate iron test result. For higher iron readings the user can do a second test to test for corrosive iron only. This will provide the values for total, corrosive and abrasive iron.



Electronic Iron II SM Test Device

### Your benefits:

- Greatly increased repeatability and accuracy. (+/- 20 ppm)
- Differentiation between corrosive and abrasive iron
- No soot dependence of the test for most reliable results
- Fastest on-site wet chemistry test
- Intuitive usage due to touch screen functionality
- Manual on the display
- Large memory for storing data
- Easy trending thanks to a high resolution graphic display
- Simple USB data transfer to a PC
- No hazardous chemicals
- Small footprint for easy handling on board

### **Ordering Information**

#### OTK-CT-11228

#### **Electronic Iron II SM Test Kit**

Range: 50 - 1500 ppm
corrosive iron: 0 - 100 % of total
abrasive iron: 0 - 100 % of total
Accuracy: +/- 20 ppm
Repeatability: 10 ppm
Test Time (ave.): 3 min. per Test

No. of initial Tests: 50

Memory: last 20 readings / cyl.

max. 14 cylinders

Reagents: non hazardous

#### OTS-CT-13034

### Iron II Test Reagent Pack (Version II)

No. of Tests: 50 drain oil samples Reagents: non hazardous

#### OTS-CT-13029

### **Glass Tubes Consumables Pack**

Glass Tubes with Cap: 100

Set of syringes

### OTR-CT-12010 Vial Cleaner

Size 250 ml Reagent: non hazardous

## **Patent**

(No. 2910933)



Monitoring of the iron content in the cylinder drain oil and the launching of remedial actions in due time can help to avoid cold corrosion and unnecessary abrasive wear in the cylinder liner.

Together with the CMT CDO BN Test Kit the Electronic Iron II SM Analysis Kit allows to monitor the most important parameters of the drain oil on site providing the user with the necessary information to optimize the feed rate of the cylinder oil and at the same time to avoid unnecessary wear of the individual cylinder liners. Both kits are also available as a combined CDO Test Kit

CMT also offers a complete Cylinder Drain Oil Service which includes the on-site Cylinder Drain Oil Analysis Test Kit and a periodical onshore independent laboratory oil analysis providing complete results about wear, contamination, oil condition and additives together with a diagnostic statement from our tribology and engine experts.