



TriboIron 2.0

Scrape Down Analysis - Iron Detection

- Abrasive & corrosive iron detection
- Total range 0 – 600 / 2500 ppm*
 - Abrasive iron 0 – 600 / 2500 ppm*
 - Corrosive iron 0 – 600 / 2500 ppm*
- Accuracy +/- 10%
- Test Kit includes 60 tests
- Non-dangerous consumables!
* depending on lube oil up to 2500 ppm

After 1st January 2020, the new fuel sulphur cap became mandatory by IMO NOx Tier III. The new fuel so called FUEL 2020 is mainly a blend fuel and it caused the main engine and gensets break down due to compatibility, stability, CCAI number, flash point, high catfines etc. - the cylinder liner gets polished and scuffed due to this new fuel.

To round up the whole range of measurement the TriboIron 2.0 Test Device is also capable to determine corrosive iron.

In order to monitor the scrape down analysis within reasonable time, the ship owners must keep the IRON and BN test kit on board. Yet laboratory analysis can take 20 days to return results. Within this time problems can develop and cause severe damage.

The 3rd generation of TriboIron 2.0 Test Kit:

- Easy to use with automatic pipette
- Reduced reagents consumption
- 17 different lube oil + 1 general available
- Automatic shaker optional

What makes our new TriboIron 2.0 Test Kit different?

The overall goal of redesigning our Iron Test Kit was the improvement of it's performance. For this we did some major changes to reduce the complexity of the measuring process:

- Test time: 12 cylinders < 30 min
- Lower operation costs due to reduction of reagents
- Easy handling thanks to new iron pill
- Less errors with new automatic pipette

Consumables: #1518 (60 tests)
#1519 (120 tests)

Order No.

1505 **TriboIron 2.0**
1506 **TriboIron 2.0 plus shaker**
1507 **Automatic shaker solo**



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The interaction of fuel and lube oil is more challenging after the new regulations of low sulfur fuel (VLSFO) became effective. While too high a contamination with iron particles leads inevitably to severe damage on piston ring and cylinder also too low values will cause major problems.

The result of low iron values is the beginning of polished cylinders due to lack of lubricant film and will end in scuffing if no countermeasures are started.

