

CDO BN Test Kit



Electronic BN TestCell



BN Reagent

The CDO BN Test Kit software has been developed specifically to give reliable results despite the fact that used drain oil may have only down to 10% BN reserve left compared to the fresh oil.

Together with the CDO Iron Test Kit the Electronic BN Analysis Kit allows to monitor the most important parameters of the drain oil allowing to optimize the feed rate of the cylinder oil and and at the same time to avoid unnecessary wear of the individual cylinder liner.

Main parameters influencing the corrosive wear in the combustion chamber are the sulphur in the fuel, part load optimisation such as T/C-cut out, the load pattern and naturally the lubrication rate and the BN level of the cylinder oil. The corrosive wear will be indicated by the BN values and the iron content of the drain oil from the cylinder lube oil.

Engines are regularly over lubricated in an attempt to avoid problems including scuffing, but this practice not only causes high lubrication costs, it can sometimes lead to associated problems such as bore polishing. Therefore, although optimising cylinder lubricant usage is one method of achieving commercial advantage, there is a point where savings can be eroded by increased maintenance costs.

Sulphuric acid forms during the combustion of sulphur containing fuels. The sulphuric acid may condensate on the cylinder liner wall depending on the temperature of the wall and the pressure in the cylinder. The lower the pressure during combustion the lower is the dew point. In modern engines the dew point of sulphuric acid may be as low as 280°C leading to a higher amount of acid condensation compared to an older design engine with the same fuel consumption.

The measured BN in the drain oil is an indication of the oils remaining ability to neutralise this acid. A low BN value indicates that the oils alkalinity reserve is close to exhaustion and therefore cannot protect the engine from the acid. The concentration of iron particles in the oil is composed of the abrasive wear and the corrosive wear. It is important to monitor both parameters, BN and iron content closely to avoid damage to the cylinder liner.

The CMT BN Test Kit provides state of the art analysis and gives fast, accurate results within a couple of minutes.

Ordering Information

OTK-CT-11214

Electronic

CDO BN Test Kit

(for cylinder drain oil)

Range: 1-150 BN

Accuracy: Typically +/- 5% of new oil BN

Dimensions: Ø 68 mm x 84 mm

Weight: 490 g

Test Time: 5 minutes

Memory: last reading

Reagents: non hazardous

Reagent & Spares

OTR-CT-12002

Base Number Reagent Pack

OTS-CT-13002:

BN TestCell

OTR-CT-11000

Test Kit Cleaner (250 ml)

OTS-CT-13004

Set of O-Rings for TestCell

Base Number Reagent Pack

- Replacement reagents can be ordered at short notice.
- Reagents come in ready to use packs.
- One BN reagent pack gives the user full 50 tests.

