

# WIO CHECK

## Instruction Manual

### 0. INDEX

1. Health and Safety Advice
2. Introduction / Sampling
3. Measuring Water in Oil
4. Cleaning
5. Replacement Orders



### 1. Health and Safety Advice

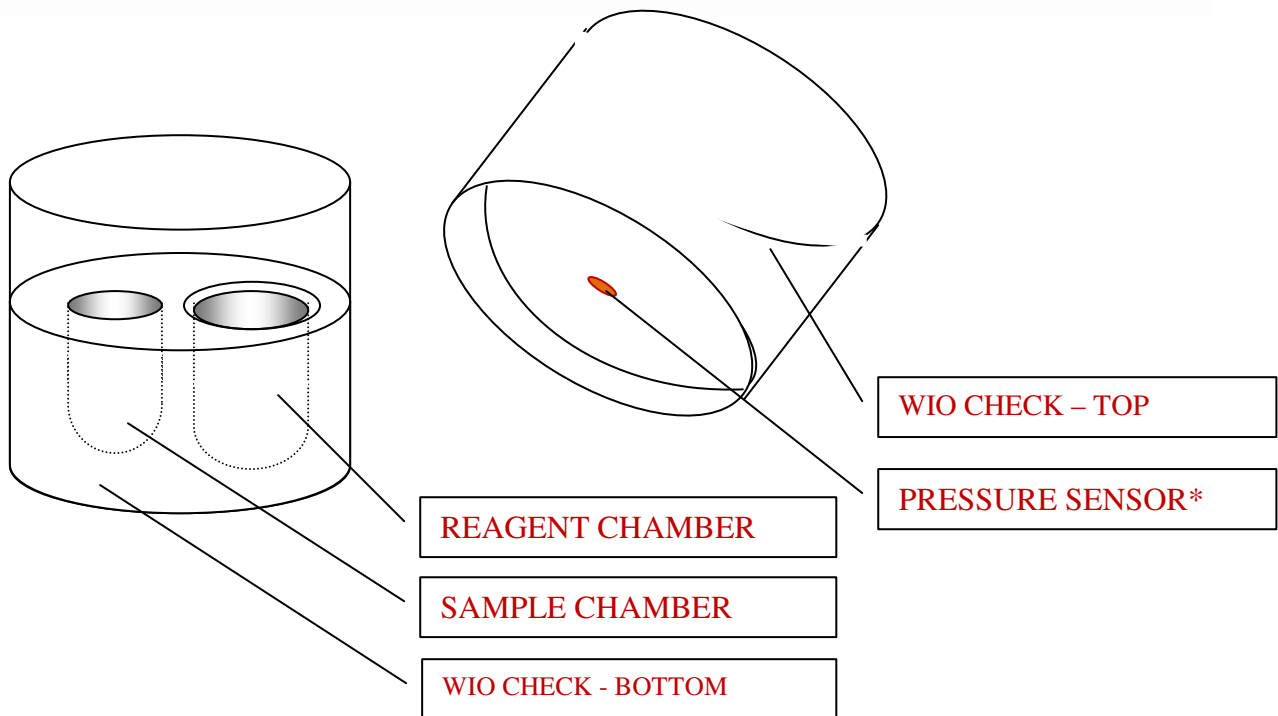
Most important is not to smoke, eat or drink while using the WIO CHECK, wear eye protection, avoid skin contact and ensure good ventilation. So, before using the WIO CHECK, be sure to read and understand the instructions in this manual and the information given in the MSDS. All oil spills on the equipment should be immediately wiped off.

### 2. Introduction / Sampling

To ensure representative results when examining lubricating oil with the WIO CHECK, it is recommended to sample only when the system is at normal operation using a clean container. Before each check shake the sample thoroughly. A good recommendation is MARTECHNIC's sampling equipment which guarantees representative sample with minimum effort for the user.



- **Measuring range: 0-0.4 oder 0 - 1,0 %**
- **Time: approx 15 min.**
- **Accuracy: +/-3%**
- **Seize: 75 mm um 120 mm**
- **Weight: 550 Gramm**



**\*ATTENTION:** Do not use compressed air or sharp/spiky tools to clean the sensor parts!! It is recommended to use only the Martechnic® “Test Kit Cleaner” and a soft rag to avoid damaging the test unit !!

### 3. Measuring Water in Oil using original Martechnic Water-in-Oil Test Solution (i.e. WIO Solution, WT05 or WA-SOL)

3.1 Open the WIO CHECK reaction vessel.

3.2 Prepare Water-in-Oil Test Solution\*\* - either by shaking vigorously [WIO & WT05] or by mixing the two components [WA-SOL®].



**\*\*NOTE:** For water in oil testing there are three different kind of reagents at Martechnic® available: (1) “S 201” - WIO Solution; (2) “S 220” – WT05 Solution & (3) “S 300” – WA-SOL® - Composition Kit. Please refer to each individual manual for preparation of the reagents before testing with TWIN CHECK!

## Measuring Water in Oil - continued

3.3 Fill 10 ml of oil sample into the smaller chamber, using the 10 ml syringe.



3.4 Fill reagent into the big chamber of the reaction vessel, up to the mark / lip.



3.5 Close the reaction vessel carefully. Make sure that the liquids do not mix yet.

3.6 Shake the WIO CHECK to mix both liquids.

3.7 Shake it regularly every 1 to 2 minutes for several seconds.

3.8 The test is finished after 20 minutes.  
The measuring range is: 0 - 1.0 vol% of water.

3.9 When the water content indicates a higher value than 1.0%, the measurement must be stopped and the sample reduced for repeating the testing.

If the measurement with the reduced sample volume is completed, the indicated value of water is multiplied by the figure which was used as divisor to reduce the sample.

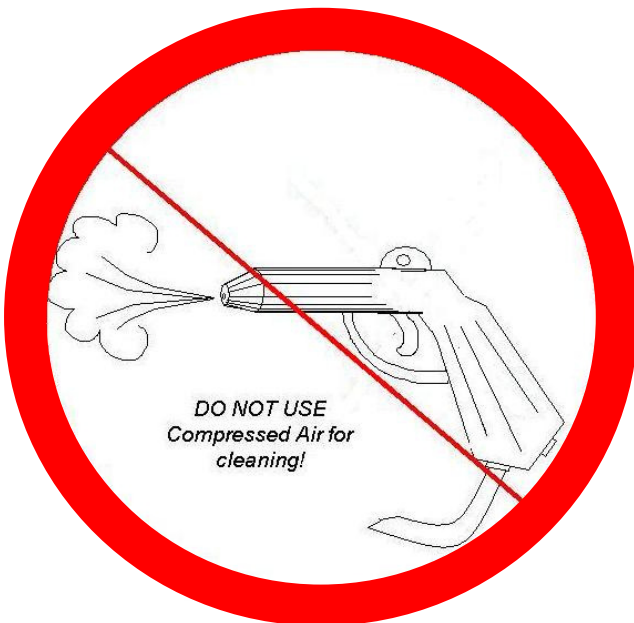
Bsp.:  $\frac{1}{2}$  Sample  $\rightarrow$  2 x displayed value

$\frac{1}{4}$  Sample  $\rightarrow$  4 x displayed value



## 6. Maintenance

**6.1 Cleaning:** The WIO CHECK device should be cleaned after each test with TEST KIT CLEANER to ensure accurate measurements. The reaction vessel can be wiped out with a soft cloth, but do NOT use sharp tools as they will irreparably damage the container. NEVER USE COMPRESSED AIR FOR CLEANING!



## **7. Replacement-Orders**

Any item of the WIO CHECK should be replaced when consumed or broken. Issue re-orders to:

MARTECHNIC GmbH  
Adlerhorst 4  
D-22459 Hamburg  
Tel.: +49-40 853128-0  
Fax: +49-40 853128-16  
Email: [info@martechnic.com](mailto:info@martechnic.com)

## **8. SPARE PARTS**

C 240 -WIO CHECK vessel  
C 1111 – gauge 0 - 1.0 %  
C 168 – gauge 0 – 0.4 %  
C 165 – Syringe (10 ml)  
S 105 – Test Kit Cleaner

### **Water reagents:**

S 220 – WT05 Solution\* [0 – 0,5%]\*  
S 300 – WA-SOL<sup>®</sup> water in oil composition kit\*\*  
S 201 – WIO Solution\*\*\*

\* UN 3148 - Class 4.3 Packing group III

\*\* Non dangerous for transport & storage

\*\*\* UN 3148 - Class 4.3 Packing group I