



# Corrosion Properties of Mineral Oils & Liquid Fuels

## ASTM D665, NACE TM0172, ASTM D7577

### **CB10 – Automated Corrosion Bath**

#### Methods:

ASTM D665 (A&B)  
D4304, D4378,  
D7155, D7577  
NACE TM0172  
IP135, IP PM DB  
ISO 7120



- ▶ **Pre-programmed test sequences**
- ▶ **Automatic test specimen positioning**
- ▶ **Automatic water injection**
- ▶ **Automatic water reserve monitoring**
- ▶ **PT100 with embedded calibration data**
- ▶ **User friendly touch screen interface**
- ▶ **2 independent test positions**
- ▶ **Ideal with CT10 automatic Corrosion reader**

The CB10 revolutionizes corrosion testing by bringing unmatched automation and precision to the analysis of corrosion properties of mineral oils and pipeline cargoes (liquid fuels and distillates). The test preparation is simplified and the test can be run unattended simultaneously and independently on two positions. Test timing, water injection volume, temperature and specimen insertion are precisely controlled. The dry bath and metal temperature probe make it robust and reliable in operation. With a complete set of accessories and pre-programmed or user defined methods, CB10 is suitable for any type of application.

#### **Applications**

The corrosivity of fuels and mineral oils in the presence of water, the performance of corrosivity-inhibiting and/or metal passivator additives are investigated in research centers, controlled by production and distribution labs, as well as testing labs. The CB10 can be used for a wide range of test methods: ASTM D665, NACE TM0172, ISO 7120, ASTM D7577, JIS K2510, and others.



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## Operation

Running a test with the CB10 is straightforward, easy and safe. The operator just has to:

- (1) pour the sample into the beaker
- (2) install the beaker and test specimen on the CB10
- (3) select the test method and press Start



**The entire procedure is automated:** heating, stirring, insertion of test specimen, water injection. At the end of the test, the CB10 automatically lifts the test specimen in order to proceed with the rating.

## Rating

After the test, the rating of the test specimen can be done either:

- visually
- or with the **automated CT10 instrument for better accuracy and traceability.**



### The CT10, ideal companion of the CB10:

- Prior test, automatic check of the iron test specimen conformity:
  - diameter according to the method
  - polishing quality requirement
- After test, automatic scan of the specimen surface, measure of the corrosion percentage, record the image, print report

The CT10 assures quick, accurate and objective rating according to the selected method:

- D665 /ISO 7120: Pass, Fail (Light, Moderate, Severe)
- NACE TM0172 : A, B++,B+, B, C, D, E
- D7548 : A, B++,B+, B, C, D, E

## Benefits

The CB10 is **the first fully automatic corrosion bath** available on the market and **the most reliable** one. Rigid metal Pt100 probes come with **embedded calibration data**, they are interchangeable without loss in precision. Thanks to its complete automation, **two independent test positions**, direct menu access, the CB10 **reduces the operation time**. The instrument precisely controls all the test conditions: temperature, stirring speed, time, water volume injection. **Easy to use, fully automated** and very **compact** (its width is just 44cm).

## Safety

CB10 brings a **step forward in safety**. Thanks to its direct drive low torque motors, if anything hangs to the stirrer shaft, the stirring will be stopped to prevent injuries.

## Ordering information

<b>AA231-001</b>	CB10 – Automated Corrosion Bath Delivered ready for operation
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Technical specifications	Description
Test methods	ASTM D665, D4304, D4378, D7155, D7577, NACE TM0172, IP135, JIS K2510, ISO 7120, GOST 19199
Temperature range	Ambient to 80°C (programmable)
Temperature probe	Metal Pt100 with embedded calibration data
Stirring	Up to 2000 rpm +/- 50 rpm (programmable)
Water volume injection	Up to 50 ml
Water reserve	Capacity: 1 L
Interface	7" full-color capacitive touch screen
Languages	English, French
Communication	USB (2), Ethernet (1)
Dimensions	440 x 415 x 630 mm (17" x 16" x 25")
Weight	22 kg (49 lbs)
Power supply	100/240 V – 50/60 Hz – 500W
Operating conditions	Temperature: +10°C to +35 °C RH: 20% to 90% non-condensing

We reserve the right to alter specifications without notification

Your local distributor:



For additional information:

## AD Systems

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