

# CT10 – Automated Steel Test Rod Corrosion Reader

## Methods:

ASTM D665, D7548  
NACE TM0172  
IP 135  
ISO 7120  
JIS K2510



- ▶ Quick, accurate and objective rating
- ▶ Proven correlation with visual rating (Comparative study, rating NACE TM0172)
- ▶ Automatic specimen diameter verification
- ▶ Compact design, robust construction
- ▶ Image saved in color
- ▶ Every test is fully documented and traceable

The ASTM D665 method is used to evaluate the ability of inhibited oils to aid in preventing the corrosion of ferrous metals in presence of water. The NACE TM0172 method is used to determine the corrosiveness of petroleum products (gasolines and other distillates) before transportation through pipelines.

The CT10 precisely measures the Spindle corrosion according to the selected standard, after being exposed in the oxidation bath. The

CT10 strictly follows the test method removing the subjectivity inherent to the manual test and significantly improving repeatability and reproducibility with a final evaluation which eliminates disputes between shipper and receiver of the product.

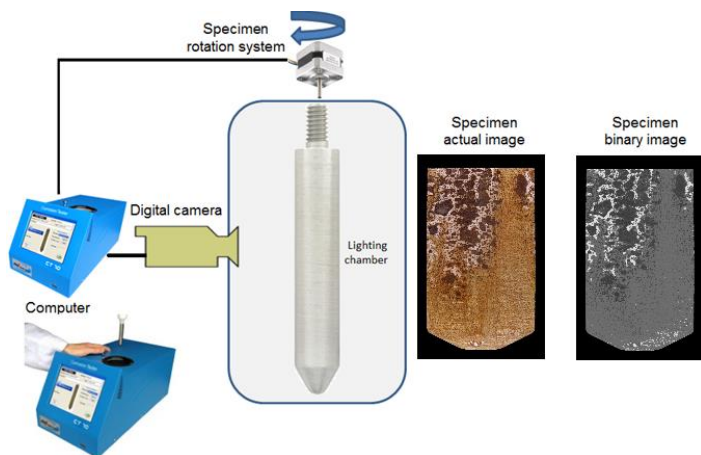
Date	Fri, Feb 27, 2015 15:43:26	Operator	FCM_1
Sample ID	SF4 E1 T8 NACE	Type	NACE_TESTER
Comment			
Corrosion (%)	99.81	Binary Image	
Rating	E		
Specimen diameter	13.0 mm		
Test Conditions			
Standard	NACE TM0172		
Temperature	38 °C		
Duration	240 mn		
Additional Result Information			
CT10 N°	1		
Software version	1.0.1.8		
Status			



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## Principle

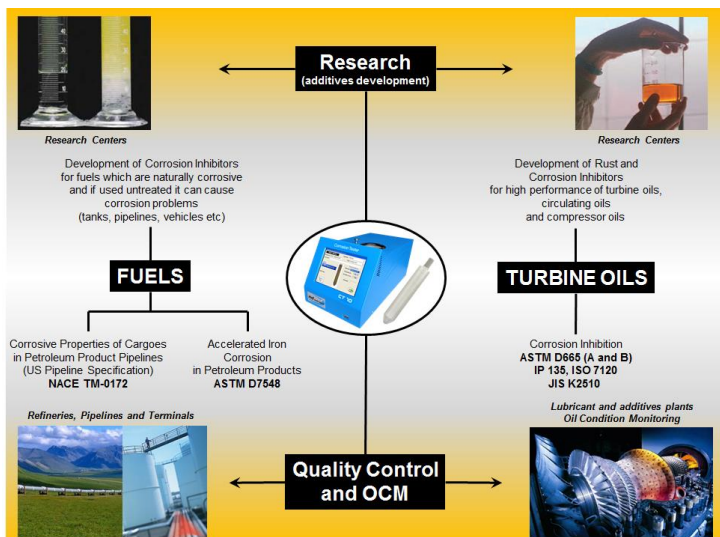
A new instrumental approach for measurement of corroded surface area has been developed by AD Systems in which the exact percentage of corroded area is accurately determined by an automatic instrument reducing test subjectivity. The innovative CT10 instrument images the whole surface of the specimen. Operation is based on a homogeneous lighting source, CCD camera, specimen rotation system, and specially designed Windows CE® application software. The test can now be run unattended which reduces labor costs.



The CT10 performs an objective and accurate rating of the test specimen

## Operation

The CT10 test is simple and straightforward. The specimen is prepared according to the chosen test procedure and is placed in the test chamber of the CT10. The operator enters sample information, using an intuitive graphical interface with touch screen panel, and starts a specimen scan. Specific light is emitted onto the surface of the specimen. The specimen is rotated and images are continuously taken. The software builds a flat image of the specimen surface, calculates the percentage of the corroded area and then translates it into the selected method's rating. A detailed test report including spindle diameter is ready in less than 5 minutes.



## Ordering information

AA230-001	CT 10 – Corrosion Reader Delivered ready for operation
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## Technical specifications

Test method	ASTM D665, D7548, NACE TM0172, IP 135, ISO 7120, JIS K2510
Corrosion range	In percentage: 0.00% to 100.00% According to the test method: A, B++, B+, B, C, D, and E
Resolution	0.01% Spindle diameter 0.1mm
Interface	8" full-color touch screen
Image Size and resolution	1,600,000 pixels 510 PPI
Language	English, French, Russian
Results storage	Database, USB stick, LAN Capacity only limited by external device
Communication	2 x USB 2.0, Ethernet port
Printing	Graphic printer (optional)
Weight	10 kg

## Operation and storage conditions

Operation	+15°C to +30°C Humidity : 10 to 65% RHL, non-condensing
Storage	-20°C to +50°C Humidity: 5 to 95% RHL, non-condensing
Power supply	100/240V – 50/60 Hz – 50W

We reserve the right to alter specifications without notification



Your local distributor:

For additional information:

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