



# Automated NACE Spindle Corrosion Reader - CT10



- ▶ **Quick, accurate and objective rating**
- ▶ **Proven correlation with visual rating**
- ▶ **Automatic specimen diameter verification**
- ▶ **Compact design, robust construction**
- ▶ **Every test is fully documented and traceable**

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

The corrosivity of petroleum products (gasoline and other distillates) must be determined before transportation through pipelines in order to control the internal corrosion of pipelines. The NACE TM01721 test for “Determining Corrosive Properties of Cargoes in Petroleum Product Pipelines” is considered a reference test and is the most widely used laboratory test for this purpose. 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 the shipper and receiver of the product.

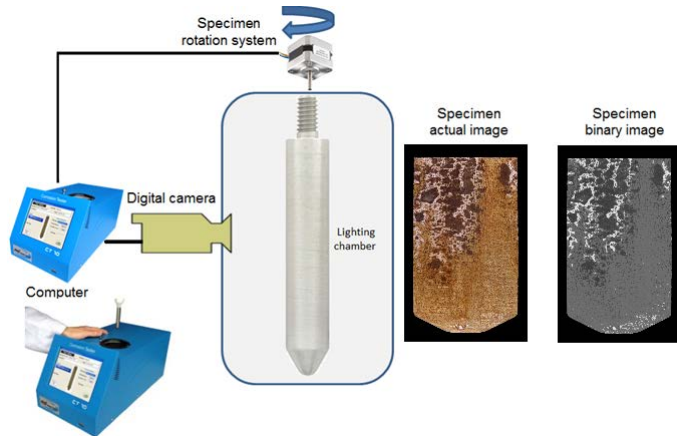
Date	Fri, Feb 27, 2015 15:43:26	Operator	FCM_1
Sample ID	SF4 E1 T8 NACE	Type	NACE_TESTER
Comment			
Corrosion (%)	99.81	Binary Image	
Rating	E		
Specimen diameter	13.0 mm		
Test Conditions			
Standard : NACE TM0172			
Temperature : 38 °C			
Duration : 240 mn			
Additional Result Information			
CT10 N°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



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## Principle

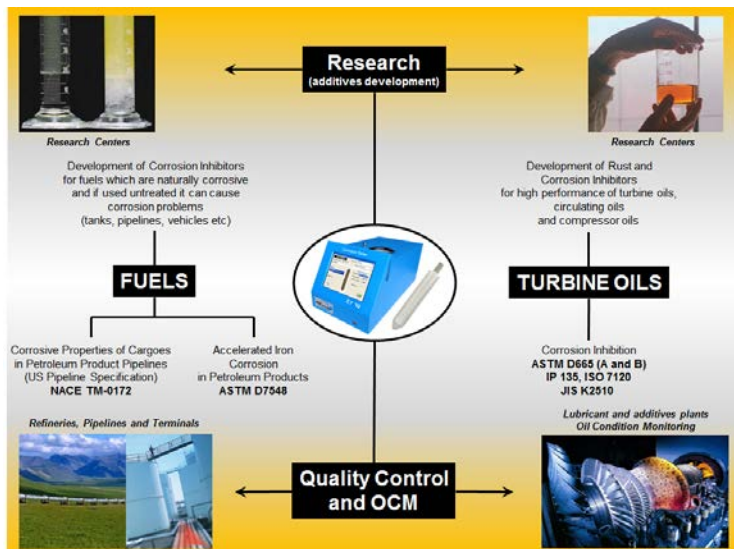
A new instrumental approach for measurement of corroded surface area has been developed by AD Systems in which the exact percentage of corroded area is accurately determined by an automatic instrument reducing test subjectivity. The innovative CT10 instrument images the whole surface of the specimen. 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 NACE TM0172 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 several images are taken. The software builds a flat image of the specimen surface, calculates the percentage of the corroded area and then translates it into a NACE rating. A detailed test report is ready in less than 5 minutes.



## Ordering information

AA230-001	Description
	CT 10 – Corrosion Reader Delivered ready for operation

## Technical specifications

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

## Operation and storage conditions

Operation temperature and humidity range	+15° to +30°C Humidity : 10 to 65% RHL, no condensation
Storage temperature and humidity range	-20° to +50°C Humidity: 5 to 95% RHL, no condensation
Power supply	100 - 230 V; 50/60 Hz
Power consumption	50 W

We reserve the right to alter specifications without notification



Your local distributor:

For additional information:

**AD Systems**

P.A. Portes de la Suisse Normande

Allée de Cindais

14320 Saint André sur Orne - France

+33 (0)2 31 75 02 68

Email: sales@adsystems-sa.com

www.adsystems-sa.com



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