



# Automated REID vapor pressure analyzer AutoREID



- ▶ Direct REID Vapor Pressure (RVP) measurement
- ▶ True Vapor Pressure (TVP) calculation
- ▶ Highest level of test automation
- ▶ Two independent measurements positions
- ▶ Perfectly suited for testing viscous and difficult products
- ▶ Full traceability, complete result documenting
- ▶ Small foot print, fast warm up, precise measurements
- ▶ Modern user-friendly interface

## Standards

ASTM D323  
ASTM D4953  
ISO 3007  
IP 69

The **AutoREID** apparatus from **AD Systems** is a modern automated Reid Vapor pressure instrument in full compliance with ASTM D323-B and similar standards. This specification test method covers procedure for the determination of vapor pressure of gasoline, volatile crude oil, and other volatile petroleum products. The Reid method is particularly suitable for determination of vapor pressure of crude oil for transportation, storage and general handling purpose. The instrument directly measures the Reid vapor pressure without correlation or calculation.

Modern ergonomic design, high level of test automation, convenience in operation makes the AutoREID considerable alternative to mini-methods for precise vapor pressure measurement.

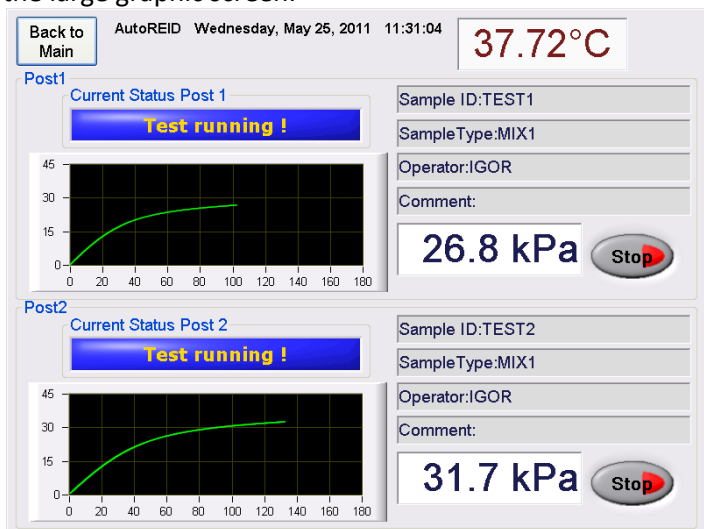
Compact instrument with two measurement positions allows performing two simultaneous measurements independently. Special additional position in the bath is dedicated for air chamber conditioning increasing the test productivity. The test pressure vessels with fast coupling assure fast and easy operation. The AutoREID design allows testing viscous sticky samples or samples containing mechanical sediments without a risk of the instrument damage. All parts of test pressure vessel are easy to disassemble and clean. Vigorous mechanical agitation of pressure vessels accelerates pressure stabilization even on "difficult" samples like crude oil.



POWERED by INNOVATION

## Operation

The sample prepared in accordance with test method requirements is filled in liquid chamber which is coupled in a second with air chamber by means of specially designed quick coupling connector. The assembled pressure vessel is completely sealed. The operator enters test identification information by a few keystrokes, place the pressure vessel in water bath precisely maintained at 37,8°C (100°F) and connect the pressure link by fast connector. Plug and go operation. The test starts automatically. The pressure vessel is agitated by reverse rotation and pressure curve is displayed in real time on the large graphic screen.



As soon as maximum stable pressure is reached the test stops automatically and saturated vapor pressure (RVP) is recorded.

Two simultaneous measurements can be run independently and simultaneously.

## Quality and Safety

During the test progress the software monitors for leaks and prevent the operator in case of pressure drop. To assure high quality of results and safety of operation the watchdog system permanently monitors the bath temperature stability, bath liquid level, overpressure or overheating.

Transparent bath cover helps to the operator visual inspection of the pressure vessels under the test.

Instrument calibration is easy to perform on-site via dedicated menu. Pressure transducers can be checked against a reference manometer at any time. The special T-connector for each measurement position is built-in for this purpose. The bath temperature can be checked by the reference thermometer. The bath cover has special opening for this purpose.

All information related to the instrument calibration is memorized to ensure a perfect traceability. The instrument calibrations are date/time tagged. The calibration interval can be managed in the software.

## Test documenting

All details related to each test result are memorized. Complete test report including sample ID, operator name, date/time, RVP value, pressure curve is displayed on the screen and saved into built-in database. It can be printed, transferred on a USB memory stick and/or send to a LIMS when the AutoREID is connected to a LAN.

Multi-criteria search function facilitates retrieval of test report in the database. The software is able to calculate and report average RVP value of two parallel measurements of the same sample.

## Ordering information

AA310-001	<b>AutoREID –Automated Reid vapor pressure instrument</b> Supplied without REID pressure vessels to be ordered separately
AK310-006	<b>AutoREID Pressure Calibration Kit</b>

## Technical specification

Test method	ASTM D 323, D4953, ISO 3007
Reported results	REID or TVP
Bath	37.8°C (100°F) or 50.0°C
Pressure range	Up to 250 kPa
Resolution	0,1 kPa
Test time	Less than 15 minutes typical
Interface	8' full-color touch screen
Language	English, French, Russian
Results storage	Database, USB stick, LAN
Communication	2 x USB 2.0, Ethernet port
Printing	Graphic printer (optional)
Bath	Stainless steel bath with capacity of 31 Liters
Dimensions	720 x 440 x 460 mm
Weight	30 kg
Power supply	230V; 50 or 60Hz Consumption: 2kW

We reserve the right to alter specifications without notification

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



POWERED by INNOVATION