GRABNER INSTRUMENTS

AMETEK® OIL & GAS

LT INDUSTRIES, INC.
LIGHT TECHNOLOGY INDUSTRIES

Parafuel™ Asphaltene Precipitation Analyzer

Parafuel™ Measures Many Other Crude Oil Properties

API Gravity
Vapor Pressure
Viscosity
Methanol
Pour Point
Aniline Point
Freeze Point
Cloud Point
Olefins
Solids
Acidity (includes TAN)
Wax
Water Content
Asphalt
Asphaltene Content
TBP and distillation points
N-Parafins
Hydrogen
C/H Ratio
Sulfur
Total Aromatics
SARA
Density

Parafuel™ systems from LT Industries offer a ***fast, accurate, easy and proven system for determining the point of asphaltene precipitation, crude oil stability*** and other key properties in crude oil. Parafuel™ systems are designed for use in both laboratories and the field. The analyzer can help you optimize process conditions to avoid asphaltene deposition in pipes and in the refinery, saving you time and money.

A fast, accurate and proven technique

The Parafuel Asphaltene Analyzer quickly determines the onset of asphaltene aggregation without any calibration or process modeling. The test provides fast, easy, and repeatable determination of the point of solvent-induced precipitation The Parafuel™ greatly simplifies otherwise complex, time consuming, and error prone laboratory assays.

Optimize operations, reduce cleaning

Parafuel™ systems can determine the onset of asphaltene precipitation, helping you avoid the headaches associated with asphaltene deposition. Precipitation points can vary based on system temperature, pressure, solvent or any crude blending. Examine the effects of these conditions easily. ***Preserve equipment, keep production running and achieve optimal crude blending with NIR***.

Maximize usage of high-value crudes

The Asphaltene Analyzer accurately determines the point of Asphaltene Precipitation in crude oil blending. This provides you the critical information for optimizing blend ratios allowing for maximizing usage of lower cost crudes and minimizing the use of more expensive crudes.

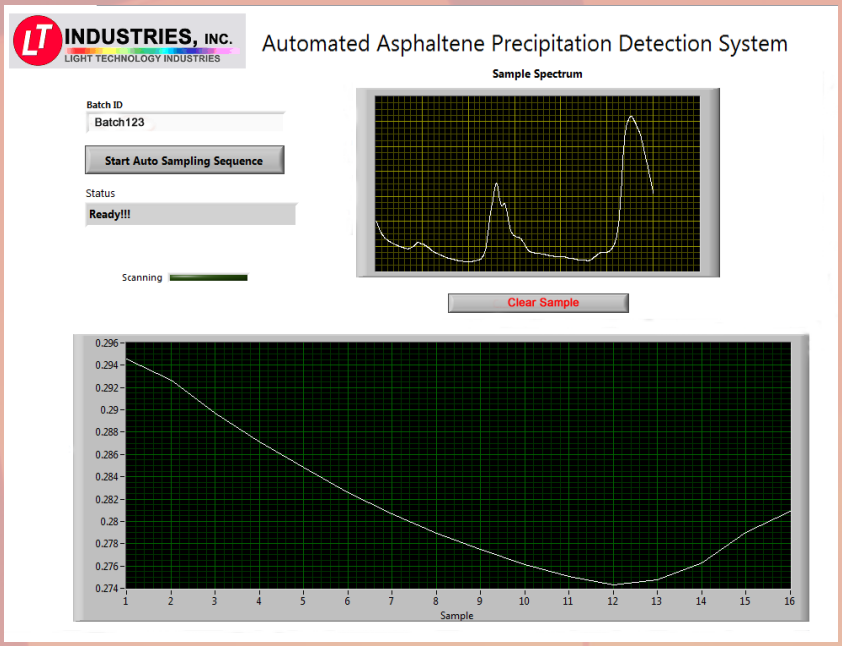
Measuring Tools for all Conditions

The ParaFuel™ Analyzer comes complete with probes and flow cells built to suit your measurement needs. They are available in a variety of lengths, configurations and materials depending on your measurement requirements. High pressure and temperature sampling probes can withstand the conditions associated with oil production and refining. Whatever your measurement needs, the ParaFuel™ has the tools to ensure success.

Save time, save money, save your equipment

Get readable results with OpCon-II

The OpCon-II Asphaltene Precipitation user interface ***is fully automated***, allowing for single button operation, data-logging and result reporting on an easy to read screen. The exact asphaltene precipitation/deposition point is show both graphically and numerically in minutes.



Seamless Integration

Instruments are designed for direct integration into existing control systems via the LTBus automation & communication software. The ParaFuel™ Analyzer can communicate directly via standard protocols such as Modbus & multiple 4-20mA.

Reliability in Critical Operations

With a high mean time between failures (MTBF) and the ability to be remotely serviced by a team of experts, the ParaFuel™ will be a long-lasting part of your process. The system can be placed in hot, cold, dusty, wet or hazardous areas with NEMA or IP enclosures rated to withstand your environment. Online measurement of Asphaltene Precipitation point is also available with Class 1, Div. 1, Groups C through G Hazardous Environments in accordance with NEC and NFPA 496 codes.

Features

- Find the Asphaltene Precipitation Point in minutes with minimal sample preparation
- Fully automated user interface
- Multiplexer for 20 analysis points.
- Specialized probes for high temperature & pressure, chemicals, and various mountings
- Enclosures available for any environment, including Class 1, Div. 1, Groups C through G Hazardous Environments
- LT Bus software for communication using Modbus, 4-20mA and other protocols
- Remote diagnostic capability

Benefits

- Achieve optimal crude blending ratios and minimize the usage of high-value crudes
- Reduce equipment cleaning
- Keep production running
- Measure the asphaltene precipitation point quickly and accurately without calibration
- Real-time, automated results on a simple interface
- Improve process control
- Utilize the knowledge of a company with over 30 years experience developing and applying NIR analyzers
- Rapid return on investment

Contact
Grabner Instruments
Messtechnik GmbH
Dr. Otto Neurathgasse 1,
A-1220 Vienna, Austria
Tel. +43-1-282 16 27-210 Fax.
+43-1-282 16 27-300
www.grabner-instruments.com
grabner.sales@ametek.com