intertek
Total Quality. Assured.

CRUDE OIL ANALYSIS

INBLEND
REAL-TIME ANALYSIS

Industry leading technology driving your performance

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REAL-TIME ANALYSIS

Timely and accurate analysis of crude oil properties is vital for the efficient and effective use of refinery crude oil distillation units.

InBlend produces fast data for measuring the properties of hydrocarbon streams.

Fast and Accurate Data

Obtaining real-time hydrocarbon composition measurement data, monitoring crude quality and using it to aid future decisions can result in increased productivity, reduced operating and production costs and, ultimately, a growth in profit.

Our InBlend system combines advanced Near Infrared (NIR) spectrum analysis with state-of-the-art topological modelling to produce fast and accurate data for measuring the properties of hydrocarbon streams.

When combined with online NIR analysers, this technology delivers real-time hydrocarbon composition measurement capabilities to optimise crude blends.

Real-time hydrocarbon composition measurement provides you with an effective solution to optimising plant performance in a competitive climate.

Intertek InBlend

Timely and accurate analysis of crude oil properties is vital for the smooth operation of refiners' crude oil distillation units (CDU). However, measuring the quality of crude in a laboratory environment is a complicated and time-consuming process.

Refineries typically rely on crude assay data for production planning. However, the information this yields is often based upon old samples and at best represents an average figure for the crude oil type being used.

We have developed InBlend as a solution to this challenge — this industry leading software generates real-time predictions of crude oil sample properties.

InBlend utilises NIR with a topological model that allows accurate predictions of compositional data from samples of crude oil.

InBlend Applications

InBlend provides a complete set of tools — from the pipeline to the refinery.

- Online composition measurement and quality assurance at platforms and pipelines
- Fiscal allocation and hydrocarbon accounting for shared pipeline systems
- Feed forward to pressure/flow control stations and gas/oil separators to avoid disturbances to production
- Composition measurement and quality assurance of incoming crude oil
- Up-to-date properties and yields prediction for refinery optimisation
- Optimal management and scheduling of crude storage
- Optimal feed for CDU
- Enhancing the performance of CDU advanced control system (APC)

InBlend for Refinery Optimisation

Near Infrared (NIR), as an analytical technique, is very well established within industry, both in the laboratory and online.

The principals involved are simple — instrumentation illuminates a sample with a polychromatic light source and measures the proportion of light that is absorbed.

Our in-house methodology has been developed specifically to exploit the real-time property measurement of:

- live/stabilised crudes (e.g. at offshore platforms and pipelines),
- crude feeds,
- and products streams (incoming crudes at jetties, CDU feeds and products).

In addition, it can characterise feedstocks and products online, producing analyses every few minutes. This provides real-time data for the advanced control and optimisation of crude blends and CDU feeds.

InBlend is a multi-dimensional topology-based non-linear chemometric modelling solution.

Unlike other methods available, it enables accelerated analysis and has the ability to determine multiple properties in a single model.

FOR MORE INFORMATION

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