OMS WEBINARS MANUAL

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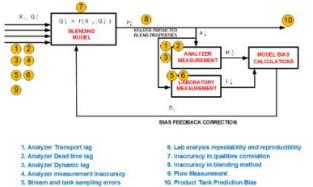
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July 23, 2015

How to Identify and Reconcile Fuels Blending Errors?

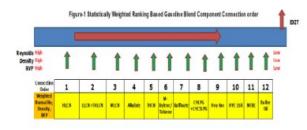


Fuels blending is a very complex process in concept, mathematics and systems integration. There are many sources of inherent sources of errors in the blending system. They could be in flow measurements, blending models, qualities, analyzers, laboratory and predictions to name a few. This webinar discusses all these errors with respect to their origins, how to estimate them and minimize if possible. Optimization and reconciliation of blend models parameters will also be discussed briefly.

You will learn-What are the inherent sources and causes of errors in a fuels blending system from start to finish. Systematic methodology to handle, estimate, minimize and reconcile these errors to accurately predict the blend properties to meet specs. <u>Click here</u> to view this webinar online.

June 18, 2015

Design of Fuels Blend Header



In an in-line fuels blending system, blend header is a collector of all incoming blending components and it serves the purpose of through mixing of all components. At first, it seems simply a piece of pipe, but in detailed analysis it requires lots of design consideration from component connecting order, connection points, flow regime, pressure drop, booster pump requirement etc.

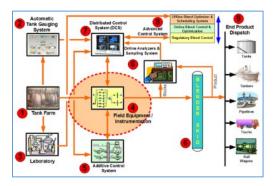
This webinar gives an overview of all design consideration for blend header and takes myth out of *"Blend header is just a piece of pipe"*.

You will learn- What are the parameters to design a fuels blend header, such as, optimum flow regime, pressure, physical dimension, component connection points, etc. Statistical methodology to determine the modes and location of component connection Points. *Click here* to view this webinar online.



May 21, 2015

Strategic Fuels Blending Management and Technology



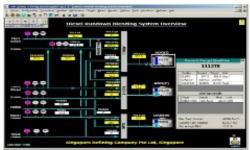
In today's global economy of fluctuating crude oil prices, the worldwide refining industry is struggling. Costs are rising while refining volumes are decreasing. High fuel prices in recent years have reduced the global use, resulting in an oversupply of reserves. As a result, the volumes of crude oil being refined have decreased. For countries with government controlled fuel and crude oil prices, the diminished refining volumes become a critical issue.

You will learn- An overview of fuels blending operations in terms of definition, modes, configurations, problems and challenges, etc. Brief overview of complexity of blending technology, models, optimization and systems implementation and integration.

Click here to view this webinar online.

April 23, 2015

Models based Predictions of Tank Qualities Reduce Lab Operational Cost



A typical refinery tank farm has 100-300+ tanks to store both feed stocks and final products. The analyses of 15+ qualities of each of these tanks are required by refinery operations and activities such process units control and optimization system, refinery wide planning and scheduling system, Offline and online blend optimizers, final product certifications before dispatch to the customers.

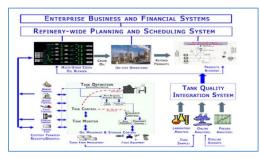
The traditional method of analyzing these tank qualities is to take infrequent samples and analyze them in the lab. This methodology is expensive, manpower intensive, time consuming and furthermore it delays the manufacturing processes due to lengthy analysis procedures. The information imparted during this webinar will discuss a model based online tanks quality tracking system how its implementation can save millions of dollars in the lab operational cost. It will also discuss the benefits of 2M+/year realized by a refinery in Singapore by its implementation for run-down open loop diesel, Jet Fuels and Kerosene Fuels blending systems.

You will learn- A newly developed methodology for the Cost analysis of lab operations based on a typical refinery lab samples schedule and analysis for inline blending tanks qualities. <u>*Click here*</u> to view this webinar online.



February 19, 2015

Strategic Management and Automation of Refinery Offsite Operations



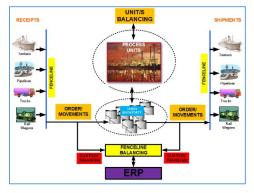
The refinery operations are categorized as onsite operations and offsite operations. All process units and ancillary facilities fall under onsite operations and they mainly focus on safe, efficient and optimized production of inter-units feed stocks. Offsite operations on other hand cater towards producing end-products. These end products are blended products such as gasoline, fuel oil and diesel, kerosene, jet fuels, LPG, etc. and makes heavy use of tank farm management, oil movements, custody transfer

across fence-line, hydrocarbon management, etc. It is no surprise that offsite operations account for 80-90% of refinery's end products and hence affect the refinery bottom line in terms of efficiency, accuracy, accountability and minimization of quality giveaways.

You will learn- The information imparted during this webinar will affirm the existing knowledge and increase learning and comprehension of the various systems of refinery offsite automation, thereby contributing toward efficient and economic management. The webinar will review all offsite operations activities and their management and automation problems and challenges. *Click here* to view this webinar online.

January 19, 2015

Hydrocarbon Management (HM) in the Refining Industry



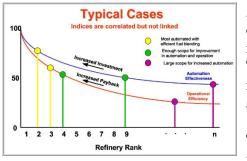
The term Hydrocarbon Management (HM) or mass reconciliation or oil loss all mean to the balancing of the input and output of a refinery. The typical best run refineries average imbalance is between 0.35-0.55% of refinery crude throughput and this translates into yearly loss of 35-60M\$ for a 300KBD refinery with crude price of \$100/bl. This loss does not even account for loss due to demurrage, data inconsistencies in custody transfer data, etc. This is huge incentive for not so efficient refineries, at least it should be, to manage its assets efficiently, streamline the accounting procedures, calibrate its meters, etc.

You will learn- This webinar discussed the concept of HM landscape in a refinery, process of reconciliation, asset management systems (Tanks, oil movement, custody transfer, vendor/customer management (ERP), etc.) and relates them with elements of the accounting process. <u>*Click here*</u> to view this webinar online.



October 24, 2014

How to benchmark the state of refinery's Fuels Blending System?



A refinery typical produces 45-65% fuel products (gasoline, diesel, LPG, fuel oil) of its crude throughput by blending 10-12 refinery products which vary in both qualities and monetary value. These fuels products have very strict specifications to meet and refinery use automated fuels blending control system to optimize and control their properties.

This webinar discussed a methodology to benchmark the state of fuels blending system in a refinery to compare with other

refineries by using two indices, Automation Effectiveness and Operational Efficiency. These two indices also gauges budgetary investment required either to convert manual to automated system or upgrade automated system to state-of-the-art blending control system.

You will learn- To be able to benchmark the current state of refinery's fuels blending system with respect to industry standards and to estimate investment budget to automate or upgrade fuels blending system.

<u>*Click here*</u> to view this webinar online.