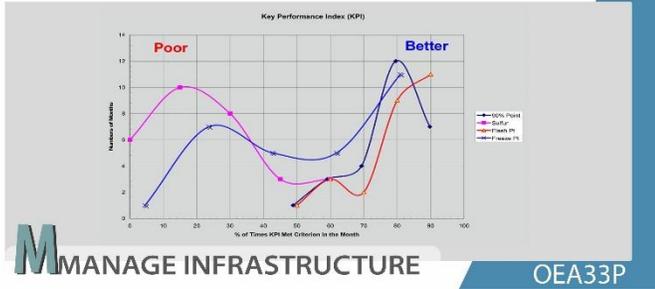




How to Realize and Sustain Benefits



Topic ID OEA33T
Title How to Realize and Sustain Benefits
Category M-Manage Infrastructure
eLearning Level Basic

Introduction

For kerosene and diesel systems, tank qualities have to be estimated. KPI plays a significant role here. To assess or realize the profit in a refinery, some critical parameters need to be considered. The concept of key performance indicators (KPI) is an important technique to assess the progress toward success and achievement of the refinery objectives. In context of OM&S, KPI is measured on a monthly basis. It is known as a number of closed movements.

This topic deals with the diesel rundown blender, kerosene rundown blender, open-loop KPI criteria, monthly KPI report, open-loop KPI for diesel and kerosene blenders, steps to improve KPI, definition of KPI, parameters in the KPI technique, and benefits of KPI.

Obtaining Baseline KPI

Data concerning the total number of monthly closed movements is used to obtain baseline KPI.

The size of a tank farm and its number of closed movements are inversely proportional. Crude processing capacity is directly proportional to the number of closed movements.

KPI also focuses on data feasibility to make or support a particular decision. KPIs differ from one refinery to another, depending on its priorities or performance criteria.

Open and Closed-Loop Blending

In case of open-loop blending, a static mixer uses a specified volumetric ratio. There are alarms/indications for blend variation.

In case of closed-loop blending, the volumetric ratio used by the static mixer refers to output quality only. Alarms/indications or blend variation are modified using the component ratio. This is done to have a quality product.

Replacing a Rundown Blender

A rundown blender may be replaced by a new state-of-the-art in-line blender. This will help pumping of components. Components are pumped from storage and sent to common header. Here, blended components are analyzed by a near infrared (NIR) analyzer. Then final blend properties are estimated.

Steps to Improve KPI

Model-based KPI predictions of tank qualities concerning diesel and kerosene systems have improved with time. This is because:

Frequent better equipment (flowmeter) calibration and persistent system analyzer maintenance, advances in system software control algorithms, ability of advanced feedback systems to give feedback on predictive blend model errors.

Other factors include proper and frequent checking of leakage as well as effective involvement of shift managers and process operators using the system.

Summary

The number of closed movements may vary significantly for different refineries. Key performance indicator (KPI) is used for prediction and control strategies such as tank quality prediction. Various steps may be taken to improve KPI parameters.

Mode of eLearning	Available?
Free Course	No
Refresher Course	Yes
Pick N Choose (Custom Curriculum)	Yes
Advanced Level Course	Yes
Structured MCOR Curriculum	Yes