An Overview

of Offsite Operations



Category eLearning Level

Topic ID

Title

OEA52T
An Overview of Offsite Operations

M-Manage Infrastructure

Basic

Introduction

The conversion of crude oil to useful byproducts can maximize profit, thus adding more value to the refining procedure. One of the processes involved in this conversion is the blending operation. It can be further elaborated as a procedure involving mixing two or more ingredients with special attributes into one mixture. This is done to achieve the desired attributes of all the products in one homogenous batch/final product.

This topic will discuss examples of blending, the importance of blending, opposing forces in refining, feasible solutions, etc.

Importance of the Blending Process

Blending might be a complex and time-consuming procedure, but it has many benefits. Blending operations follow the environment and government regulations and create the final product that will meet the increasing market demand. In addition, these procedures try to achieve the lowest cost possible for a final blend.

Blending Examples

Blending operations are not limited to refineries only. This procedure is used in many major industries such as the petrochemical industry, power generation industry, cement industry, paper, and pulp industry, steel manufacturing industry, and food and beverage industry. The different types of blending procedures take place in these industries. These include coal blending, kiln feed blending, pulp, and fiber blending, blast furnace feed blending, etc. The blending process is applied to lube oils, fuel, diesel, gasoline, crude, etc. In the petrochemical industry, naphtha plays a significant role in blending.

Opposing Forces in the Refining Industry

Many opposing forces compel a refinery to find new ways to tackle various challenges. Unfortunately,

these opposing forces also threaten the production of petroleum products, thus rendering the industry useless. These forces may include the following aspects:

The quality and quantity of oil are compromised because of upstream oil exploration from offshore and onshore resources. As a result, the product does not meet the standards that are meant to be achieved.

Customers wish to use every drop of oil in the barrel to get the maximum out of product, so the refinery processes crudely of different qualities. Refinery operations then become more and more complex. Due to rapid technological developments, customers expect low emission and efficient fuels.

Summary

Refining is considered to be one of the most complex procedures in the petroleum product supply chain. Here, many complex processes are in play. They range from the extraction of raw material from a wellhead to delivering the refined product to the pumps. In addition, the unrefined products have very little use. Therefore, the refining process holds a lot of significance as it turns crude oil into several byproducts that can be used every day.

Options for eLearning This Topic

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