



An Overview of Offsite Operations



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Title An Overview of Offsite Operations
Category **M-Manage Infrastructure**
eLearning **Basic**
Level

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 that involves mixing two or more types of 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 procedures concerning environment and government regulations and create the final product that will meet the increasing market demand. 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. In a refinery, the blending process is applied to lube oils, fuel, diesel, gasoline, crude etc. In the petrochemical industry, naphtha plays significant role in blending.

Opposing Forces in the Refining Industry

There are many opposing forces that compel a refinery to find new ways to tackle various challenges. These opposing forces also threaten the production of petroleum products, thus rendering the industry useless. These forces may include the following aspects:

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

Customers wish to use every single drop of oil in the barrel to get the maximum out of product, so the refinery processes crude 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 the delivery of the refined product to the pumps. The unrefined products have very little use. Therefore, the refining process holds a lot of significance as it turns crude oil into a number of 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