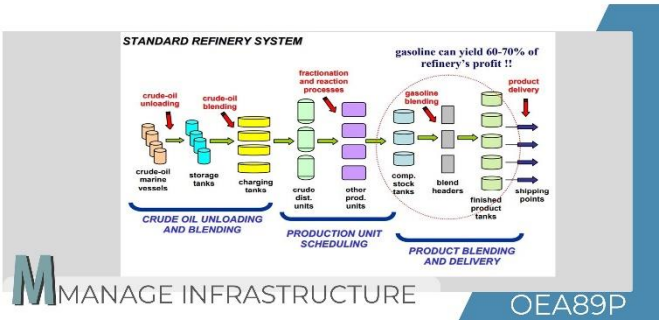
Why Blending Projects Fail



Topic ID	**OEA89T**
Title	**Why Blending Projects Fail**
Category	**R-Reconcile Hydrocarbon**
eLearning Level	**Basic**

Introduction

For each refinery, the blending process is unique and customized. There are many factors responsible for the complexity of the blending process. The refinery's profitability depends on this process. Hence, it is a significant process. Different blend models and rules are non-linear. The blending process is influenced by the composition and quality of components. A well-experienced and active operator is required for the successful completion of the process.

This topic will discuss Factors behind the complexity of the blending process, blending as a non-linear process, steps to match the blending with reality, sources of errors, management commitment and vision, ROI vs. Implementation strategy, blending project success recipe, etc.

Failure of blending projects

In the context of the blending process, there are different sources of errors. These errors have to be corrected. There may be a one-by-one correction for each error. It is difficult to work on different errors simultaneously. Re-blending has to be done in case of spec violation and quality gives away. Re-blending hurts ROI (return on investment. Hence, a refiner aims for an efficient blending process. Many times, a refiner is not able to complete the blending process. There may not be any budget for up-gradation/re-blending. The operator should be trained to handle such complex scenarios.

The operator supervising the blending process should not be shifted to other units. It will hamper the process flow as operators are familiar with the old blending process.

They do not understand the importance of training. As a result, sometimes, equipment and infrastructure are not upgraded, outdated, and not maintained well.

There are many reasons for the failure of the blending process. For example, budget issues, delay in process execution, poor understanding of the process, inefficient staff, poor management, incompatible vendor, poor operator visualization, etc. Focus on correction of faults may lead to successful completion of the blending process. If the blending process is implemented as an offside operation then, the chances of success are high. However, many refineries do not give much importance to the up-gradation of fuel blending systems. They go for manual blending. Onsite operations are preferred. Many times, efforts for up-gradation fail. It is not completed.

In the case of old blending infrastructure, maintenance is poor. Desired components may not be there. For the implementation of the blending project, suggestions from external experts may be useful. Vendor selection has to be appropriate.

Summary

Optimizer consists of generic blend models. Therefore, it may cause significant spec violation or giveaway and may need reblending.

There may be a focus on manual blending. However, for a successful blending process, the operator should evaluate and verify the available blend model, develop a plan for improvement, consider the latest techniques, use online analyzers for quality monitoring, etc.

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