ExxonMobil's Rotterdam Refinery Expansion Continues on Schedule

Rolando Garcia, Project Executive, ExxonMobil

As emissions regulations continue to tighten in the European automotive market, the need for formulations that deliver fuel economy benefits and exceptional protection at lower viscosity grades has become essential. This shift played a large role in ExxonMobil's decision to invest \$1 billion in a Group II base stock capacity expansion at its Rotterdam, Netherlands, refinery through the construction of a new hydrocracker.

In June 2016, the team broke ground on the expansion in Rotterdam, which will increase overall energy efficiency at the plant by five percent, and will enable the refinery to upgrade heavier hydrocarbon byproducts into cleaner, higher value finished products, such as our EHC[™] Group II base stocks. EHC Group II base stock production in Europe will prove very beneficial for global marketers with local blending operations. Given our Group II base stocks are part of our global slate, marketers will not need to recertify their products in each region or develop region-specific formulations, reducing complexity and saving them both time and money.

Since breaking ground less than 18 months ago, with safe execution a core value, the project continues to progress on schedule and has safely surpassed several key milestones. In April, the team completed the heavy lift of the vacuum fractionation tower for the hydrocracker, which is designed to separate products while under less pressure in order to achieve high quality cuts in the finished products. The tower is the largest piece of equipment to be placed, standing about 50 meters tall and 11 meters wide. This successful heavy lift comes only two months after the lift of the three reactors with a total weight of 2,000 tons, which, in tandem with the fractionation tower, has transformed the skyline at the refinery.

On the heels of the heavy lift came the installation of the preassembled racks (PARs), which are often referred to as the 'spine' of the hydrocracker, weighing in at roughly 2200 tons. Once the installation was complete, the team was able to begin further piping and instrumentation work on the hydrocracker.

The refinery expansion efforts continue to progress smoothly, and, in parallel, our commercial team is getting very positive responses as they support customers to ensure they are wellpositioned to make the transition to Group II at a time and pace most appropriate for each of them.

As we look ahead, the ExxonMobil team is happy to report the refinery expansion remains on schedule and on time to introduce our industry-leading EHC[™] Group II base stocks into the European market by Q4 2018, with commercialisation of the products scheduled for early 2019.



ExxonMobil engineers work to install the pre-assembled racks (PARs) at ExxonMobil's Rotterdam, Netherlands, refinery in June 2017; these are commonly referred to as the 'spine' of the hydrocracker.



The vacuum fractionation tower, the largest piece of equipment to be placed on the foundation intact, arrives at ExxonMobil's Rotterdam, Netherlands, refinery in October 2016.



ExxonMobil engineers look on as the three reactors arrive by barge at the Rotterdam, Netherlands, refinery.

LINK www.exxonmobil.com/en/basestocks

Originally Published in LUBE Magazine, Issue 142 (December 2017)