

Interview

with Ted Walko

ExxonMobil



Announced in February 2017, ExxonMobil is expanding its Singapore refinery to support the production of the company's EHC™ Group II base stocks.

Current lubricant specifications require base stocks to be of a higher refinement in order to improve the overall quality of the finished product. This has led to a steady increase in the use of higher performance Group II lubricant base stock and, this is one of the reasons ExxonMobil Basestocks has continued to invest in refinery expansions in Rotterdam, Netherlands; Jurong, Singapore and, Baytown, Texas.

In June 2016, ExxonMobil broke ground on the construction of a new hydrocracker at their refinery in Rotterdam. The unit will upgrade heavier feed stocks into cleaner, higher-quality finished products, including ExxonMobil EHC™ Group II base stocks, and ultra-low sulphur diesel. This February, in a presentation at the 21st ICIS World Base Oils & Lubricants Conference in London, Ted Walko, Global Basestocks and Specialties Marketing Manager announced that ExxonMobil is similarly expanding base stocks operations at its Singapore refinery to support the production of EHC Group II products.

Suzy Jarman, editor of LUBE Magazine, caught up with Ted at the conference to ask him about these and future developments in both ExxonMobil and the base stocks market as a whole, as he saw them...

Suzy Jarman: So, to start us off with the basics; what is EHC?

Ted Walko: EHC is the product name given to all of our Group II base stocks.

SJ: Is EHC an acronym for anything?

TW: The name is associated with ExxonMobil HydroConversion, the term encompasses the manufacturing processes we use for Group II base stocks production.

SJ: When did ExxonMobil decide/realise that they wanted to build the Rotterdam Refinery Hydrocracker?

TW: The project was officially launched on 15 June 2015, but we've been working on it for a number of years. We take a long-term approach to investments, and it's quite common for ExxonMobil to line projects up 10-15 years in advance of their eventual execution.

We have a leading role in the industry; and, as one of the world's largest suppliers of base stocks, we carefully study market trends. Thanks to ExxonMobil's global reach and robust network, we can work on projects that can go on for decades. At ExxonMobil, we pride ourselves on reflecting present and future needs. [As my presentation showed] we have charts looking ahead to 2030. We anticipate the market will shift by 2030, and as such, we're looking at our assets and addressing ways to meet that demand now.

SJ: How many people do you have working on the project in Rotterdam itself?

TW: The refinery employs approximately 650 people and supports numerous contractors and service providers. On average, more than 600 additional workers will be on

site daily during the three-year construction period, with workforce numbers peaking at approximately 1,300 workers in 2017. These numbers consist of construction personnel as well as individuals hired to maintain plant operations once it's up and running.

SJ: What role have you been playing in this project?

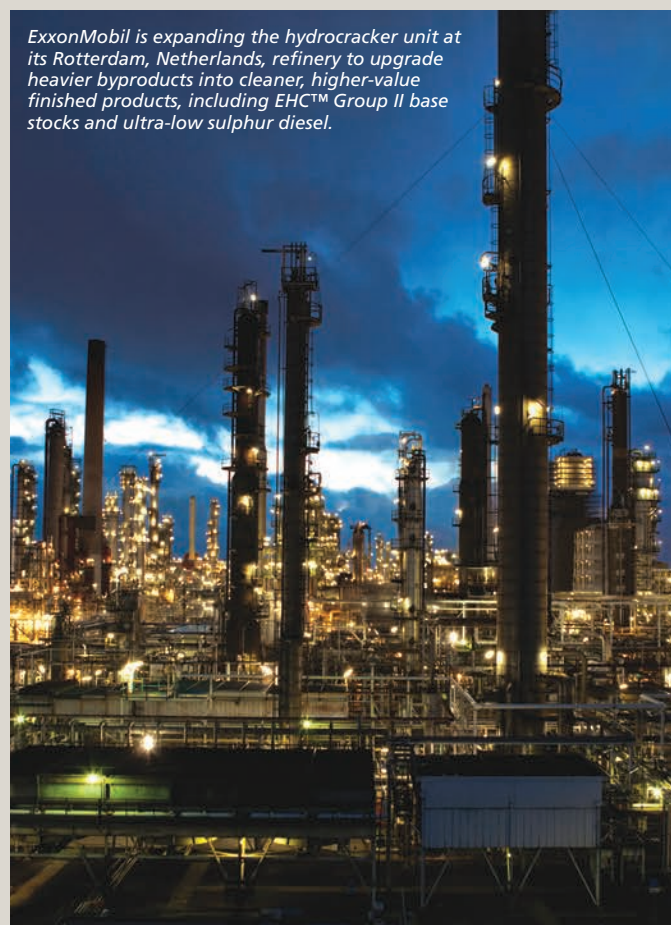
TW: My position is the Global Basestocks and Specialties Marketing Manager. Essentially, it's my job to understand customer needs, and get the right products into the market. We [the marketing team] are designing product lines, selecting the products we want to produce – whether its EHC heavies or lights, etc. Our marketing department is also responsible for coordinating with additive companies and creating and communicating our marketing position. My team is managing all the marketing components, on a global scale, for Rotterdam.

Separately, we have strong and robust sales and supply organisations, in addition to a qualified team on the ground, which is responsible for building the assets.

SJ: You have unveiled a project in Singapore as well. Are you managing both Singapore and Rotterdam?

TW: Yes, I oversee our marketing globally. We also have a project manager in Singapore who is managing the expansion through to completion and, is being supported by the construction team.

Once Rotterdam starts streaming, ExxonMobil will have three Group II production centres: Jurong, Singapore; Rotterdam, Netherlands and Baytown, Texas.



ExxonMobil is expanding the hydrocracker unit at its Rotterdam, Netherlands, refinery to upgrade heavier byproducts into cleaner, higher-value finished products, including EHC™ Group II base stocks and ultra-low sulphur diesel.

SJ: As well as press releases and presentations, what other methods are you using to promote Rotterdam and Singapore?

TW: Sales puts a lot of effort into facilitating one-on-one customer meetings. ExxonMobil has already begun engaging customers on Rotterdam, and, we will begin engaging customers on Singapore now that the project has been announced. It takes customers a long time to prepare for a new product – they must consider different formulations, navigate the complexities of blend plants, in addition to, the new and upcoming automotive certifications. Because of this, we typically reach out to our larger customers as soon as we make an announcement.

SJ: There is talk in the UK that emissions from diesel cars are particularly bad for the environment, and there's speculation of them being phased out. If this is the case, and as a consequence the diesel passenger car market declines, what will the effect be on ExxonMobil's Group II production?

TW: Our hydrocracker in Rotterdam is going to produce both diesel and base stock. If the market conditions change, requiring more base oil and less diesel, we'll just adjust our run-rates to match demand, so we don't anticipate this being a significant setback.

Of note, the Rotterdam refinery is already one of the most energy-efficient refineries in Europe, and our expansion project will increase its energy efficiency by a further five percent.

SJ: What does the development of Group II mean for Group I refineries in Europe?

TW: In light of the new and upcoming engine specifications, ExxonMobil recognizes the industry is shifting to Group II. As such, it's fair to assume that Group I demand will continue to decrease in the higher end of the passenger vehicle market. Interestingly, some formulators are mixing Group I and Group III together for passenger vehicle lubricants.

Our Rotterdam expansion project will enable ExxonMobil to provide Group II in-region. Soon, customers in Europe will be able to reliably access high performance base stocks designed to reflect tomorrow's needs; produced locally.

While the industry is shifting to Group II, there are applications that still value Group I products. A heavy product works well in industrial and marine lubricants, for example. In addition, successful Group I players in the base stock industry are those who are efficient and can offer profitable niche products whether wax, bright stock, or, another type of extract.

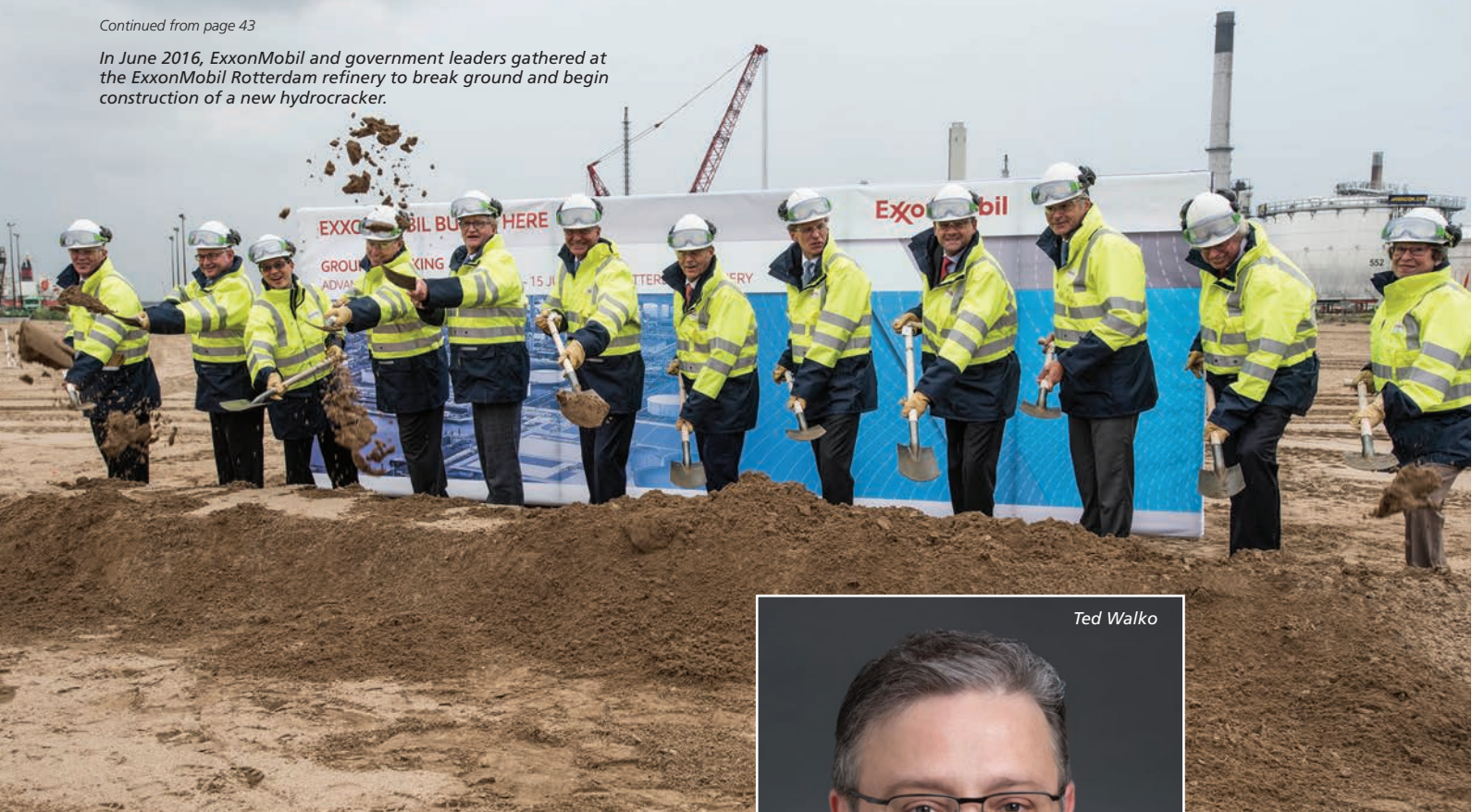
SJ: But Group I can't ever really finish for good, surely?

TW: As I said earlier, ExxonMobil looks about 30 to 40 years ahead as part of our planning process. In the coming 30 to 40 years, we don't anticipate there will be a time when the industry will claim "Group I is finished for good!"

As I've already mentioned, there are applications that value Group I, despite the overall shift to Group II that we are seeing. Instead of exiting the Group I market as other companies have done, ExxonMobil recognises the need for Group I, and this will continue into the future. Given this, we are continuing to offer customers a reliable supply of Group I base stocks through ExxonMobil refineries.

Continued on page 44

In June 2016, ExxonMobil and government leaders gathered at the ExxonMobil Rotterdam refinery to break ground and begin construction of a new hydrocracker.



SJ: You mention that people need to adopt early to maximise...

TW: You want to adopt early, but not too early, just right around the time when the specifications are released. The ACEA specifications change every couple of years. Companies won't capture much value if they adopt at the very end of that, because, this will result in them having to reformulate again, which is expensive. It's important to adopt early in the growth curve of the new category of engine specifications. We believe that that time is soon approaching again. That's why it's important for manufactures to start thinking about how and when to convert to Group II.

ExxonMobil is well positioned to support transitions at a time and pace that is most appropriate to individual finished lubricant manufacturers' operations.

SJ: How will buyers of ExxonMobil products adopt?

TW: We have added the formulations and are ready to commence with some of the larger additive companies. Our customers can do one of two things: they can call ExxonMobil's sales force for guidance, or they can call the additive companies, who are also prepared to assist the customers in getting set up with Group II. It will take some time as customers have to adjust their blend plants. Unfortunately base stocks are not like consumer packaged goods (CPG), where you finish a gallon of milk and just replace it with a new one in the fridge. It's a complicated process which can require customers to recertify and work through all of necessary logistical details.

SJ: You talked about three beliefs in your presentation. What are your three beliefs?

TW: First, Group II is well suited to meet the new performance specifications; second, European marketers and blenders will benefit from local, reliable manufacturing of Group II; and third, now is the time to begin planning your conversion.

The lubricants industry is a constantly evolving market, and lubricant blenders and other manufacturers need to evolve alongside the requirements in order to meet the demands and specifications of customers.

LINK
exxonmobil.com/basestocks