

# New technology protects the environment and equipment

The need for high-performance lubricants has grown, because mechanical taxation of systems keeps increasing, the temperatures that parts reach also rise, and more is required of lubricants. Van Meeuwen responds to this trend by partnering with businesses focused on innovation.

Van Meeuwen Lubrication delivers high-quality lubricants. In order to provide the best products, they work together closely with end users: the industries. "When we discover a problem or improvement, we reach out to one of our producers who we think might be able to develop a suitable product for that specific application. Van Meeuwen and the R & D department know the requirements and demands that a product must comply with, and the product is developed in mutual collaboration. Together with the customer, we perform field testing to see if it meets wishes and requirements. Because we work together so closely with the end user,

and gather our information first-hand, we can adjust quickly," says Taco Mets, Technical Director at Van Meeuwen.

**Muibat Gbadamosi: "Royal Purple is always aware of environmental impact and considers sustainability an important factor."**

Customers often have high expectations. "We have noticed a growing demand in recent years for high-performance lubri-

cants and products", Mets states. "System content and construction is getting smaller, which means parts reach higher temperatures, mechanical taxation is higher, and more is required from the lubricant. Fewer and shorter service stops also require lubricants with a longer lifespan. It is more important than ever to use the right lubricant."

## Partnership

Van Meeuwen collaborates with brands such as Bel-Ray and Royal Purple in order to keep abreast of developments. Mets: "We have been distributors for Bel-Ray Company for more than fifty years. Bel-Ray became a subsidiary of Calumet



Specialty Products in 2013, a publicly traded company focused on the downstream sector. Bel-Ray and Royal Purple constantly invest in research and field testing. Their technologies resulted in the development of an extensive line of non-toxic, food grade H1, HT1, and 3H lubricants, refrigerants, solvents and lubricants for heavy operating situations. Biodegradable, more eco-friendly lubricants were added to their portfolio recently.”

### **Biodegradable**

Royal Purple is also a subsidiary of Calumet, and part of the Van Meeuwen portfolio. “They are known as a brand specialized in high-performance indus-

trial lubricants, and have a particularly strong line of biodegradable lubricants. Biodegradable lubricants are not at all easy to develop,” Mets indicates. “They have gone through a very unusual evolution. The technical applicability of vegetable oils has generally been considered very low, as they have a number of disadvantages: They are not very water resistant, and not effective at temperatures above forty or fifty degrees Celsius, at which point they quickly begin to oxidise and deteriorate.”

The next step was synthetic esters which are produced by a reaction between alcohol and fatty acids. “It is a

known phenomenon that this kind of biodegradable oil is prone to hydrolysis. When it comes into contact with moisture, it separates into alcohol and fatty acids. This is linked to problems such as sludge and slime formation, clogged channels, et cetera.”

Based on newly developed technology, Royal Purple developed a biodegradable basic oil in combination with Synerlec® technology. “By applying this new technology, the biodegradable oil is now immune to hydrolysis. Water can be very easily suctioned off during periods of downtime, and corrosion does not stand a chance because of its superior attach-

# ROYAL PURPLE<sup>®</sup> SYNTHETIC OIL

**THE PERFORMANCE OIL THAT OUTPERFORMS**



## SUPERIOR PRODUCTS, SUPERIOR PERFORMANCE

Royal Purple formulates the most advanced lubricants available on the market today. If you currently use Royal Purple's products, you already know this. If you do not, they offer the opportunity to greatly improve the reliability and efficiency of your equipment and to lower your operating costs.

### *LUBRICATION BENEFITS*

- » High Film Strength
- » Longer Life
- » Outstanding Corrosion Protection
- » Excellent Demulsibility
- » Saves Energy
- » High Cleanliness



Taco Mets: “Royal Purple Biomax™ EAL is a biodegradable oil, and is immune to hydrolysis. Water can even be very easily suctioned off in periods of downtime, and corrosion does not stand a chance because of its superior attachment to moving parts.”

ment to moving parts. Thanks to this technology, equipment runs smoother, cooler, quieter, longer and more efficiently, with less vibration and less wear. The Biomax™ EAL lubricants are also EU Ecolabel certified.”

### Two goals

Mrs. Muibat Gbadamosi, Manager Research & Development at Royal Purple, tells us why the company is so focused on biodegradable lubricants.

“Royal Purple is always aware of environmental impact and considers sustainability an important factor. One of the requirements we hold ourselves to is the manufacturing of eco-friendly lubricants that comply with the requirements of industry as well as environmental regulations. This new technology protects the environment as well as equipment. The combination was not always available.”

Biomax™ EAL is one of the newest product lines in our portfolio. It is a very special product that meets both goals.

There is a hydraulic oil as well as a gear oil: Biomax™ EAL Hydraulic Oil and Biomax™ EAL Gear Oil. Gbadamosi: “The great advantage of Biomax™ EAL products is that they carry the EU Ecolabel, which means they are certified eco-friendly lubricants. The impact on the environment in case of unintentional leaks and waste has been reduced, as the product is durable, biodegradable, non-toxic and non-bioaccumulative.”

The product also has certain unique characteristics. “It provides excellent protection against corrosion, has superior demulsifying characteristics, high oil purity, excellent performance at a wide range of temperatures, thermal and oxidative stability, unique anti-wear properties, extreme pressure and film

strength properties, is immune to hydrolysis, and complies with US EPA 2013 Vessel General Permit (VGP).”

This new product can be used for a broad range of applications such as bridges, locks, port cranes and in the shipping, dredging and offshore industries.

### Innovative ideas

“Royal Purple constantly invests in product development”, Gbadamosi says. “Our company keeps exploring innovative ideas for automobile and industrial applications. These innovative technologies are brought to market in new products and through improvements to existing products.”

