



How Talusia Optima is keeping Dole's fruit moving.

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Talusia Optima is about simplicity.

The product has been designed to make ship operators' daily work as straightforward as possible.



Dole Food Company is in the business of delivering its perishable products from Central America to customers in North America and Europe on time and in perfect condition. To achieve this, it relies on a fleet of 15 container and reefer ships, which call at ports along the US East, West and Gulf Coasts, as well as Europe.

Following the introduction of the 0.1% sulphur cap imposed within Emission Control Areas (ECAs) off the US coast in 2015, Dole realized it had a problem. The engines of two of its vessels, 'Dole Chile' and 'Dole Colombia', which had been transporting fresh fruit from South to North America for the past 15 years, were suddenly suffering from rapid cylinder wear. This wear was so severe that liners and rings would need replacement within 100 hours of operation. The company was forced to fly in cylinder liners to keep the ships in service. Faced with problems meeting schedules and spiralling overheads, the situation was not good.

It took over two years of experimentation with different lubricants and feed rates, timing adjustments and the installation of a completely new cylinder lubrication system before the situation returned to manageable levels. Despite this, liner wear rates and ring breakages were still much higher than normal. However, in the latter half of 2017, the company was informed by its lubricant partner, Total Lubmarine, of its newly developed single-oil, BN 100, marine cylinder lubricant, Talusia Optima. The solution enables fuel switching when transiting both in and out of ECAs without the need to change lubricants, while also ensuring reduced wear rates and abrasive deposits.

Reduced wear rates was a factor of immediate interest to Dole, who decided that the two vessels would switch to Optima as soon as supply was available. The first batch of Talusia Optima was delivered to 'Dole Chile' on 3 January 2018 and was immediately put into use.

On 30 January 2018 the Chief Engineer reported:

“Since switching to Talusia Optima, there has been a significant improvement in under piston space condition, piston rings and cleanliness. We were always having trouble with unit seven. This unit liner was changed on 22 January 2018. Today we have inspected all the units, and unit seven’s liner is as good as new, honing marks still present, there is no sign of liner polishing at all.”

Of all of the measures that were taken over the three years of problems, the switch to Talusia Optima was the single most significant improvement the vessels had seen.

This unique product, formulated using Ashfree Neutralizing Molecules (ANM) technology, provides fast and effective acid neutralization without the undesired mineral deposit build up. In addition, high-quality surfactants are used to provide detergency and cleanliness. Compared with other BN 100 products on the market, Talusia Optima has a better-proven resistance to adhesive wear, as well as better thermal resistance and piston coat wearing.

Ultimately, Talusia Optima is about simplicity. The product has been designed to make ship operators' daily work as straightforward as possible. By not needing to switch lubricant, the task of the engine room team is streamlined and the potential for error significantly reduced.

Learn more about Talusia Optima:

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