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CASE STUDY

1000 words

Electric forklifts for fast-growing drinks producer

Multi-national beverage manufacturer, Kingsley Beverages, has become the first largescale company in South Africa to make the switch from internal combustion-engine forklifts to more productive and efficient electric machines from Linde.

With a fleet of more than 80 forklifts the company has steadily begun replacing its fleet of 2.5 and 3 tonne internal combustion forklifts with smaller 2 and 3 tonnes electric models which are equally as effective inside the factory as they are outdoors in the loading yards.

According to the company's experienced maintenance team, Jakes Olivier and Fanie Horn, the reason for the switch is a simple case of mathematics in which the electric machines clearly outperform the internal combustion diesel and gas forklifts in all departments, including fuel consumption and performance, as well as having a positive effect on driver productivity.

Business decision

Says Jakes, "The primary reasons behind the switch are related to improving the overall cost-of-ownership and availability of our forklift fleet as far as possible. For example, we calculated that the cost of fuel for our Malvern fleet has decreased from approximately R10 000 per day to a bill of less than R2000 per day for electricity.

"The same applies to our other facilities throughout the sub-region and will certainly be used as a basis for our plants in Dubai, the UK and planned plant in the USA. What's more, the electric units require considerably less maintenance and take less than a third of the time that is usually required to service an equivalent gas or diesel machine.

"This type of availability improvement across our fleet effectively means that we can move the same amount of product with fewer forklifts. And, the benefits extend even further when reliability is taken into consideration, as the electrics work in all weather conditions and endure the same punishment as our diesels. Yet they easily keep up and require less maintenance in the long-run," says Jakes.

All-rounder

Fanie Horn explains that in terms of maintenance, thus far, the longest serving electric forklift has racked up an impressive 6000 traction-hours and have not required any unscheduled maintenance. Even tyre wear is less due to the even application of power, as well as controlled stopping and turning that is afforded by the electrical controls.

And there is more, in the hygienically clean beverage environment the benefits are still greater with no emissions whatsoever and as a result no need for costly particle filters. The oil and coolant free motor and running gear also reduces the risk of oil spills and contaminants in the environment making the electric forklifts more environmentally friendly too.

"By comparison, our previous all-diesel and gas forklift fleet would generate nearly a tonne of used oil per year, as well as crates full of other maintenance items like filters, cambelts, water pumps and other service items. All considered, we are actually racking up a massive saving on parts and maintenance alone, notwithstanding fuel savings, increased availability and improved productivity."

Solid reputation

Jozua Coetzee of Linde Materials Handling South Africa, stresses that in the fast-moving consumer goods industry, suppliers such as Kingsley Beverages have to maintain tight delivery schedules in order to uphold their reputation for reliability. It is therefore important to ensure the entire supply chain operates flawlessly from delivery of raw materials, to production and distribution. Considering each litre of Kingsley produced is handled by a forklift at least eight times in the production process, it is easy to see why the company places such a high value on the reliability and productivity of its fleet.

He explains, "The company has always used Linde forklifts to optimise productivity, making use of our brands' unique handling abilities and precision hydraulic transmission with auto-levelling suspension to carry more loads per shift. Even so, the forward-looking technical staff were still prepared to trial an electric truck which quickly convinced them that the future is electric.

"Since then they have never looked back and the electrics have outperformed the diesels in every department, both indoors and outdoors. Able to run up to one and a half shifts per battery, there is no downtime for refuelling etc. The move to electric has had only positive effects on the productivity with loading staff reporting faster and safer loading with better overall availability of the forklifts.

"This is a market leading move and shows the kind of strategic thinking that has contributed to Kingsley Beverages taking the local and international beverage industry by storm," says Jozua.

Futuristic models

The Linde E20PH and Linde E30/600 supplied to Kingsley are designed for high throughput applications where they out-perform traditional machines in terms of stacking, transporting, loading, and unloading of a wide variety of goods in multiple application types.

The high productivity capability of the machines is due to Linde's patented compact COMBI-AXLE technology, which features two three-phase traction motors integrated into the front axle as well as unique maintenance-free brakes.

The forklifts are suitable for loads between 2000 and 3000 kilograms and can be adapted for use in almost any application. A number of different varieties, such as compact model for areas where space is at a premium, or a tall truck with a long wheelbase for tall, bulky loads are also available as required. The new charger and Linde energy management technology also ensures smart, easy-to-understand energy management.

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ENDS...

<<Fact box>>

Fast growing concern

When it comes to Kingsley Beverages the sheer scale of the operation is enormous and warrants further inspection. Look at these fast facts:

- The company has grown at an average 20% per annum since 2007
- It produces beverages from 1.6 million litres per day from its largest factory in Malvern
- Forklifts move about 1.8 million kilograms of goods per day at the same factory
- It has factories in South Africa, UK and the Middle East
- All beverages and packaging is done in-house
- The company bought its first Linde H25D 2.5 diesel and H30D 3-tonne internal combustion engine machines in 2007

Captions

1-4

Linde forklift in operation at Kingsley Beverages' Malvern plant

