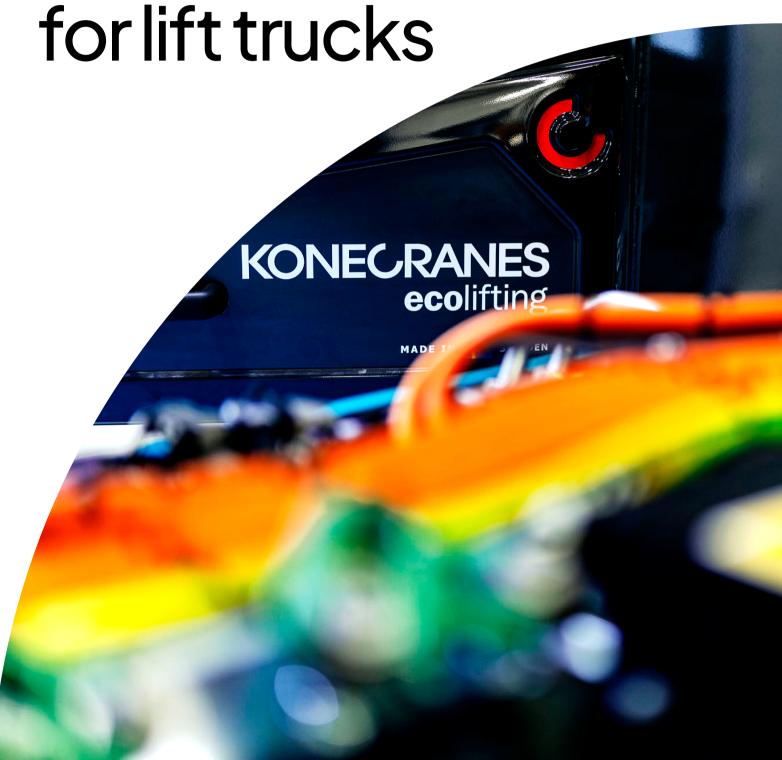
Uncompromised performance for lift trucks





### KONECRANES ecolifting







## The Path to Ecolifting offers solutions that decrease your carbon footprint without reducing performance.

- 1. Change from conventional diesel to biofuel.
- 2. Make your diesel drives as eco-efficient as possible.
- 3. Step forward to fully electric equipment.

### Uncompromised performance

Konecranes Ecolifting future-proofs your lift truck fleet by significantly decreasing your fuel consumption, on-site emissions and overall carbon footprint without reducing performance.

Not only do our factories use renewable energy, but our trucks are available with a range of technical innovations and energy options so that you can choose the solution that best suits your world.

### **KONECRANES POWER DRIVE**

# Same power, less fuel with Power Drive

Konecranes Power Drive is a cost-efficient way to start reducing your emissions and fuel expenses. Power Drive brings you remarkable fuel and cost savings without compromising on performance.

### A little investment, significant benefits

By placing the Power Drive system in a new machine, you could save thousands of euros annually compared if you were using lift trucks with a normal driveline. Not only would you save on fuel consumption, but it would pay itself back in less than a year. Power Drive is the most cost-efficient way to start reducing emissions and fuel expenses.

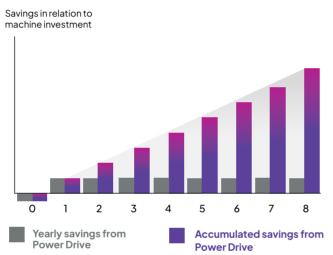
### How is Power Drive made?

We added a new, unique hydraulic system configuration and customized pump setup. We also optimized the drive line and added a transmission with lockup function. These changes ensure that fuel consumption goes down while performance stays the same.

### How is Power Drive better than a normal driveline?

- Cuts down fuel consumption and emissions by up to 15%
- Maintains the same performance

### Business case Power Drive, year by year



### Components being used:



**Transmission**With lock-up function



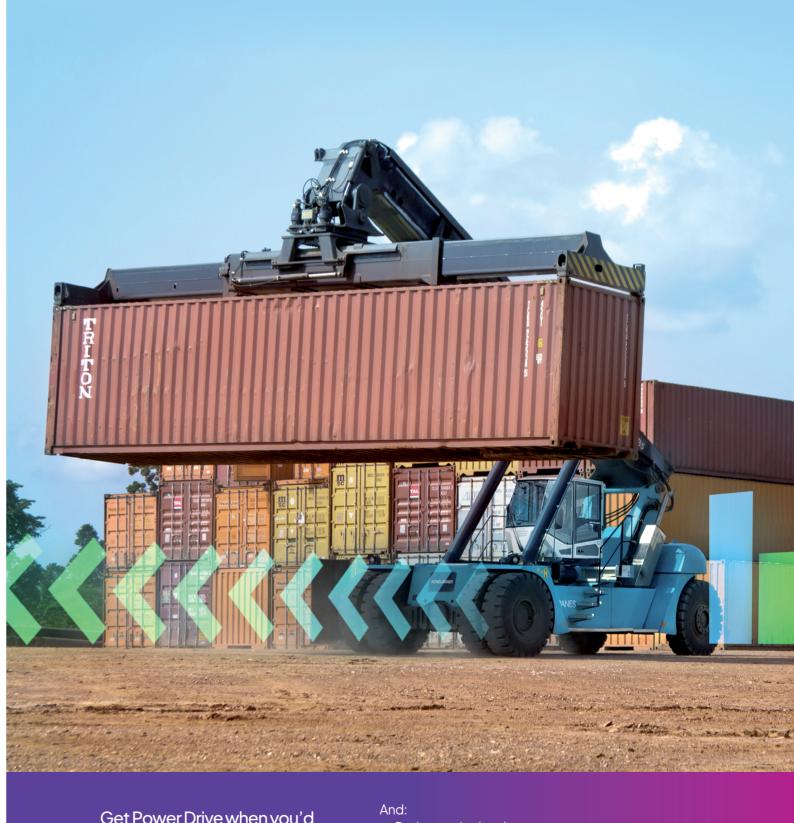
KC Software Engine speed limited to 1700 rpm



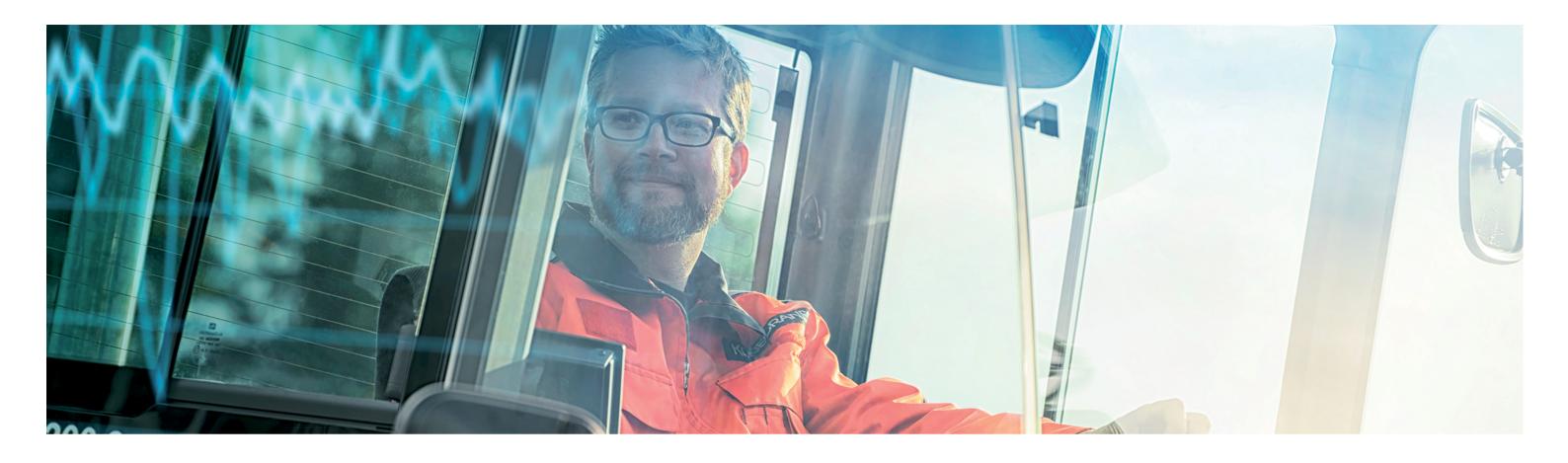
Parker Pumps Increased capacity to secure performance also at lower engine rpm

Get Power Drive when you'd like to have up to 15% less fuel consumption and costs.

- Reduce noise level
- Decrease heat in transmission
- Extend the lifetime of your drivetrain
- Start decreasing fuel consumption, but with a small investment cost



KONECRANES ECOLIFTING



### **KONECRANES FLOW DRIVE**

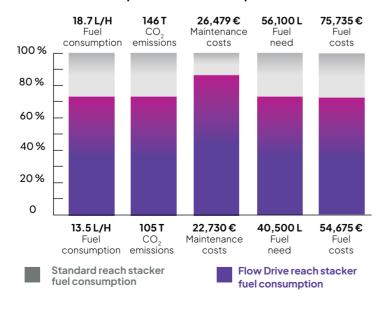
# Improve total productivity with Flow Drive

Flow Drive not only cuts down fuel consumption, but also enhances the driver experience and increases active operation time. It's a solution that brings concrete benefits to everyday operations and a increase in overall productivity.

### What does Flow Drive do?

- Smooth and economical operation
- Dynamic at low speed, yet full power at high speed, with reduced wear and noise
- Combines full performance with ease of driving
- Increases productivity with greater intervals between refueling

### Lower consumptions - lower operational costs



**KONECRANES ECOLIFTING** 

## What does Flow Drive mean to your operation?

Equipped with the innovative Hydromechanical Variable Transmission, the Konecranes lift trucks Flow Drive concept offers smooth and dynamic operations.

Flow Drive combines a driver-friendly ride with a significant reduction in fuel consumption and emissions combined with a heavy duty engine that secures full performance. A new, unique engine compartment design takes care of the specific requirements set by this driveline.

To get the most out of your Flow Drive, we provide driver training and service support for you and your team.

Get Flow Drive when you'd like to decrease lift truck CO<sub>2</sub> emissions, fuel consumption, and costs by up to 25 %.



#### And:

- Increase driver productivity
- Decrease noise level
- Reduce cabin vibration
- Have flexible thrust
- Have higher power and longer use cycles

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### New technology opens environmental benefits

Konecranes Flow Drive is part of Ecolifting, a series of innovative Konecranes solutions specially designed to decrease fuel consumption and on-site emissions while simultaneously improving performance. Andernach's Konecranes Flow Drive lift trucks send their operational data to the online customer portal your KONECRANES in near real time, where they can monitor efficiency through Key Performance Indicators (KPIs) such as operating hours, fuel consumption and asset utilization. This makes it easier to deploy their trucks to the busiest locations in the port and plan a timely maintenance schedule. The Flow Drive reach stackers have clearly shown lower emissions, less downtime and reduced fuel consumption. Modern technology has simplified fleet management and operational sustainability.

Today they operate 3 reach stackers with Flow Drive from Konecranes," says Ralf Gowin, Regional Sales Manager, Lift Trucks, Konecranes. "In cooperation with trusted local distributor Jungbluth, we're pleased to be able to offer the technology and expertise that can help to rapidly advance their material handling goals."

"We're working hard to make our services more sustainable, and the Konecranes Flow Drive reach stackers have become a key part of this goal at the port."

Wojtek Kozbial Rhine Port Project Manager, Stadtwerke Andernach

Stadtwerke Andernach GmbH operates local municipal utilities, including the Port of Andernach, an inland river facility that has grown into a major transshipment hub in central Germany. Located in the west on the Middle Rhine, the port offers expert container handling for connections to a range of destinations both inside and outside Germany.

### Efficient and sustainable operations

Trimodal (ship, train and truck) services provided by Andenach include picking, distribution, unloading and storage. To maintain the tight scheduling required by modern logistics, they need reliable equipment that can deliver speed and precision with low operating costs, maximum uptime and minimal emissions.

When looking for their next investment in container handling equipment, Andernach held a Europe-wide tender to find the best machines available on the market. They chose three Konecranes SMV 4632 TC5 reach stackers equipped with Flow Drive, an innovative solution using a hydromechanical variable transmission (HVT) to limit power at low speed, reducing wear and carbon emissions while cutting fuel consumption by up to 25%. These reach stackers are robust machines with a load capacity of 46 tons that can stack up to five

full containers high. They utilize central greasing to minimize maintenance and downtime, and a range of safety features such as a reverse camera, auto engine shutdown and tire pressure monitoring. TRUCONNECT® collects telematics data in real time to help optimize fuel consumption, tailpipe emissions and usage across the entire fleet.

"We're working hard to make our services more sustainable, and the Konecranes Flow Drive reach stackers have become a key part of this goal at the port. With greater intervals between refueling, we've increased our productivity while significantly cutting our fuel costs. The telematics data shows that our fuel consumption has dropped by about 25%, just as expected," says Wojtek Kozbial, Rhine Port Project Manager, Stadtwerke Andernach.



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### **KONECRANES E-VER**

### **Driven by** electrical effiency

The Konecranes E-VER electric forklift includes features that help drivers feel confident, safe and ready for whatever the day might bring.

With zero fossil fuels and zero tailpipe emissions, the Konecranes E-VER electric forklift significantly decreases your energy costs and reduces your environmental impact. It also improves your drivers' comfort and provides you with excellent performance, with a lifting capacity of 10 to 25 tons.

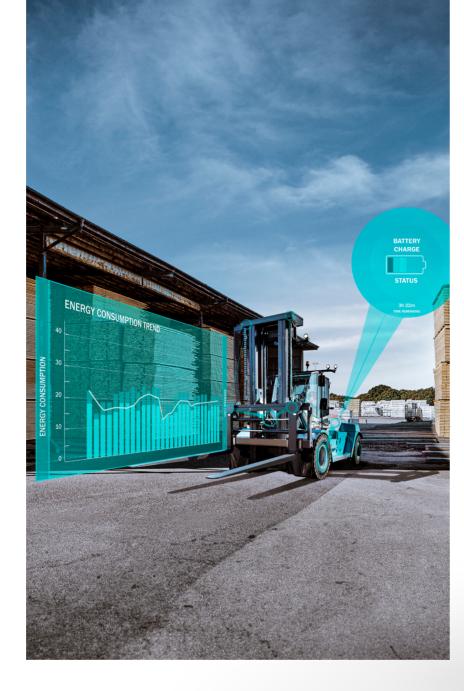
Comfort and safety are further enhanced by ergonomic controls, high visibility and smooth movement with less noise and vibration.

It uses a lithium-ion (Li-ion) battery that powers highly efficient electric motors for traction and hydraulics. Following the common charging standards CCS1 and CCS2, battery charging can take less than an hour - as short as the average lunch break.

The E-VER is built in easy-access modules with the same sturdy frame design, steer axle and lifting equipment as a diesel forklift. With fewer moving parts and no gearbox, maintenance costs you less time and money.

#### A wise choice for:

- indoor and outdoor operations
- use near residential areas
- your company sustainability profile
- local, regional and global legislation and standards
- supporting health and safety in the workplace



### LIFTING ATTACHMENTS

A range of different attachments for every lifting

### **PROVEN TECHNOLOGY**

The electric forklift uses extensive Konecranes expertise well-tried and -tested in the field.

### LIFTING SPEED

The same lifting mechanisms as a diesel forklift operate up to 25% faster.

### **OPTIMA CABIN**

The safest, quietest and roomiest cabin in the industry with ergonomic controls in a comfortable working environment. Unobstructed visibility in all directions.

DYNAMIC DRIVING

Able to handle slopes with up to 20% faster acceleration.

### IMPROVED **ERGONOMICS**

Drivers experience up to 50% less noise and vibration during operation.

SUSTAINABLY SOURCED LI-ION BATTERY 1, 2 or 3 sustainable Li-ion

batteries last for a full shift.

### **FLEXIBLE RECHARGING**

1, 2 or 3 Li-ion batteries fully charged with CCS charging in less than 1 h.

REGENERATED ENERGY

Up to 15% of used energy stored for later use.



The Konecranes E-VER electric forklift is powered by one, two or three Li-ion battery packs.

Thanks to the fully modular design of the truck, you can choose the battery setup that best suits your needs. The main advantages of Li-ion batteries are high energy in the battery, low energy losses and the ability to fast charge, indoors or outdoors. In average conditions, each battery can last from 5 to 10 years of operation.

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### The challenge

With a growing worldwide interest in wood products, the Swedish sawmill was looking to expand their forklift fleet for more site capacity. In line with the Moelven Group's strict environmental policy, the new lifting equipment also had to produce minimal emissions to ensure sustainability throughout their value chain.

### The solution

Moelven purchased a Konecranes E-VER 13.6-600 C electric forklift, a sturdy lifting machine with a capacity of 13,600 kg and a fully electric drivetrain powered by lithium-ion (Li-ion) batteries. Its battery management system ensures energy efficiency, while fast charging optimizes operations and minimizes downtime. A range of special features improve ergonomics, stability and safe handling in a sawmill environment.

#### The benefits

The Konecranes E-VER electric forklift aligns perfectly with Moelven's sustainability goals, because it cuts energy consumption and produces no local emissions. Smooth movement and fast acceleration allow the driver to focus on moving wood safely and efficiently. TRUCONNECT® Remote Monitoring easily integrates with the truck's smart electrics for operational efficiency and maintenance planning.

"With the addition of the Konecranes E-VER electric forklift, Moelven now has 34 Konecranes lift trucks across their Scandinavian operations. Local dealer N.C. Nielsen helps to provide the necessary support to maintain this impressive fleet."

Daniel Sjöstrand Sales Director, Lift Trucks, Konecranes

KONECRANES ECOLIFTING 13

### **KONECRANES E-ACE**

### **Electric** empty container handler for yourneeds

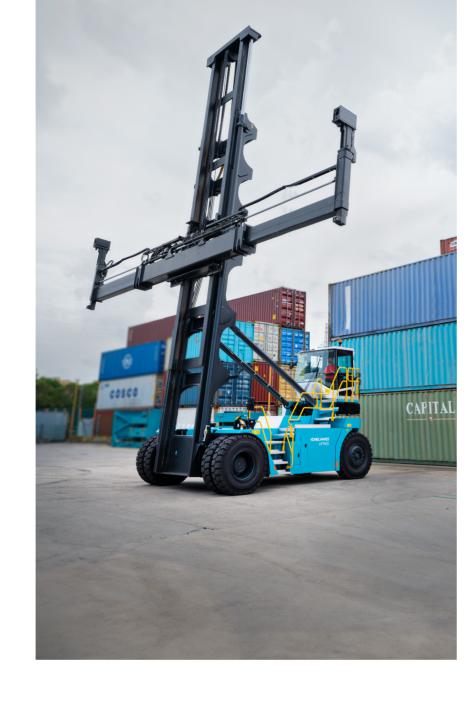
### High quality and easy operations

The powerful, durable and safe Konecranes Liftace empty container handler has become a firmly established player for container terminals due to its high quality and ease of use.

These battery electric models have a load capacity of 9-10 tons, and are available as single or double stacking.

### Advanced digital experience

- Smart Connected Lift Truck sensors collect information about truck performance. maintenance schedule, location, and more
- Battery life maximized through analytics, including charge, truck autonomy, energy consumption
- YourKONECRANES customer portal keeps all data, manuals, and truck information in the same place





A panorama roof window and large. lowered windows with no corner posts lead to superior visibility.

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Operational time between 9-12 h thanks to powerful Li-lon battery packs.



Double connector for quick charging.



more efficient in operation than a diesel.





Konecranes is a global leader in material handling solutions, serving a broad range of customers across multiple industries. We consistently set the industry benchmark, from everyday improvements to the breakthroughs at moments that matter most, because we know we can always find a safer, more productive and sustainable way. That's why, with around 16,800 professionals in over 50 countries, Konecranes is trusted every day to lift, handle and move what the world needs. In 2024, Group sales totalled EUR 4.2 billion. Konecranes shares are listed on Nasdag Helsinki (symbol: KCR).

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