EVALUATING RETROFITS

Hybrid

The Konecranes Hybrid retrofit allows for normal operational lift of a 50LT container, with a speed of 31m/min and full acceleration. Competitors have limited their drive parameters due to limited power capacity.

WHAT YOU NEED TO KNOW

- Small new diesel genset for battery charging purposes. Projected to be 30% of total of E/S, scalable for emergency use of maximum load with reduced speeds.
- Batteries in constant control, charge monitoring, with graphical interface, base modem for monitoring, 100% free of costs for battery charging.
- Battery power is in both directions, DC-DC converter for controlling power flow. Can be split into two separate units and for the external GC use separately.
- Complete integration of Konecranes systems, including CAN, CANopen control system, CANopen LIN monitoring system.
- Remote Transformed control service system enabling remote diagnostics.

SELECTED REFERENCES

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Rubber-Tyred Gantry RTG

HOW IT WORKS

- The crane is operated with electrical power from the battery and diesel generator.
- In normal use the operations use only battery charged energy and at peak power (over 40LT) diesel and battery are operating parallel.
- The energy from braking is recharged to the battery.

EQUIPMENT

- The technology can be applied to any Konecranes RTG.
- The Hybrid Power Pack turns a diesel RTG into a diesel-electric hybrid RTG without compromising the capacity. With the hybrid power pack, you significantly reduce operational costs dramatically.

BENEFITS

- Maximize crane uptime
- Drastically reduce maintenance and running costs
- Significantly lower fuel consumption
- Increased eco-efficiency with fewer emissions and significantly lower noise levels
- Reduce time spent refuelling and maintaining diesel engines
- Small new diesel genset for battery charging purposes installed on the access of RTG, suitable for emergency use of all motions with reduced speeds
- Designed for high utilization (13 mph, 20 t/d, 350 t/y = 91,000 moves / year)
- Batteries in constant control, charge monitoring, with graphical interface, base modem for monitoring, 100% free of costs for battery charging
- Battery power is in both directions, DC-DC converter for controlling power flow between battery pack and the common DC bus network
- Complete integration of Konecranes systems, including CAN, CANopen control system, CANopen LIN monitoring system
- Remote Transformed control service system enabling remote diagnostics

Konecranes is a world-leading group of Lifting Businesses™, serving a broad range of customers, including manufacturing and process industries, shipyards, ports and terminals. Konecranes provides productivity enhancing lifting solutions as well as services for lifting equipment of all makes. The Group has more than 16,000 employees at 600 locations in 50 countries. Konecranes shares are listed on the Nasdaq Helsinki (symbol: KCR).

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