e-master

NT GROUP

MK1 e-Master

The Green Future of Handling

NOVATECH

NT Liftec

Strategically designed, thoughtfully developed

Cut Costs, Not Performance

The MK1 e-Master uses a self-powered electric system—eliminating up to **30%** in annual operating expenses.

EFFICIENT

Zero Emissions. Lower Costs.

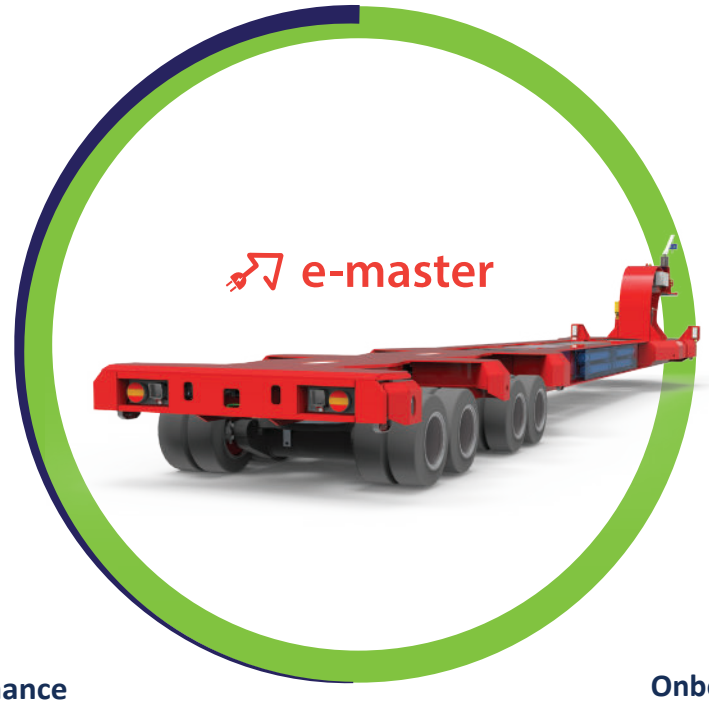
Fully electric operation reduces CO_2 **60,000 + kg per year**—sustainability built into every move.

Smart Monitoring

Integrated **black box** tracks temperature, usage, and battery health.

ECO

CONNECTED



SERVICE

AUTONOMOUS

Fast, Simple Maintenance

Modular design, plug-and-play CAN-Bus modules, and built-in diagnostics **cut downtime and costs.**

Onboard Hydraulic Power

No need for tractor hydraulics. Dual brushless DC motors and **energy recovering** accumulators deliver faster, independent operation.

INTELLIGENT

FLEXIBLE

Intelligent Electric Drive

Adaptive sensors continuously optimize pressure, traction, and steering. Optional **AI** rear camera boosts pedestrian safety.

Total Compatibility

Works with any tug—electric or diesel—no retrofitting required. **Just plug** in a single electric cable and go.

Technical advantages of MK1 e-Master

Full Power. Half the Cost.

Engineered for efficiency, the MK1 e-Master delivers full performance with **low energy** use and smooth load handling—even in tough conditions.

EFFICIENT

Diesel-Free by Design

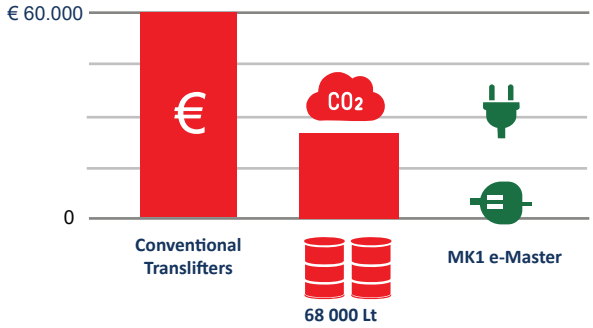
Traditional translifters rely on costly diesel hydraulics. The MK1 e-Master runs independently with its **own electric hydraulic system**, cutting fuel use and emissions.

Big Savings. Smaller Footprint.

Save up **€30,000+** and 60+ tons of CO_2 per year —just by switching to electric.
(Based on - 2 shifts/day.)

The MK1 e-master vs. Conventional Diesel Translifters

Lower fuel costs. Lower emissions. Same high performance



AUTONOMOUS

True independence. No tractor needed.

The MK1 e-Master runs on a fully integrated hydraulic system — no connection to tractor hydraulics required. Dual brushless DC motors and onboard accumulators recover over 50% of lifting energy, cutting energy use and boosting efficiency.

Technical advantages of MK1 e-Master

INTELLIGENT

Intelligent tracking. Total control.

The MK1 e-Master features a built-in smart monitoring system that tracks temperature, cycles, speed, and battery health with 10 ms precision. Optional cloud connectivity and IoT support enable real-time remote diagnostics and predictive maintenance.
Compatible with WMS and fleet platforms, it streamlines operations and improves visibility across sites.
Boost performance further with WiseLink™ — NT Liftec's advanced fleet system offering real-time tracking, remote access, cycle analysis, and cloud-based updates for smarter, leaner logistics.

FLEXIBLE

Built for versatility. Ready for anything.

The MK1 e-Master adapts to different container sizes, loads, and layouts. Its modular, customizable design fits a wide range of industries and logistics operations.

ECO

Intelligent ECO

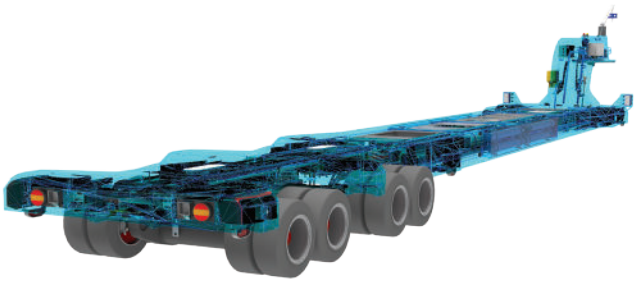
The fully electric e-Master, thanks to advanced software embeded in its controllers, allows for full optimization of energy consumption. An advanced dual-pressure hydraulic system with energy recovery allows for precise delivery of exactly the amount of energy required to the acutators.

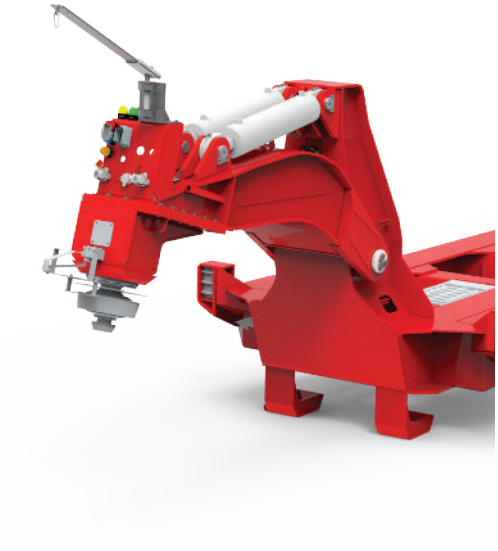
Strategically designed, thoughtfully developed

INTELLIGENT

Smarter with Every Move

Advanced sensors and algorithms enable real-time obstacle detection, predictive decisions, and energy optimization—improving performance with every cycle.





Safe Roll™ option

The optional hydraulically controlled gooseneck provides further versatility for the machine. It can be used with any tractor that has the appropriate load capacity and power. A hydraucally lifted fifth wheel on the tractor is no longer required.

SafeRoll™ improves efficiency and increases safety when handling cassettes. With SafeRoll's™ excellent stability, and due to cassette block stowing, little or no lashing is needed, thus saving time and and reducing labor costs.

SERVICE

Simplified Maintenance

Standardized parts across models speed up service and cut inventory needs—maximizing flexibility.

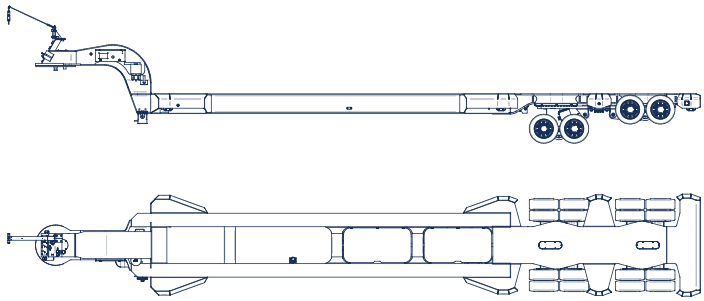
Smarter Lubrication

Advanced bogie sensors and precise lubrication reduce wear and prevent failures.

Built for Uptime

Easy-access components, self-diagnostics, and optional predictive alerts keep downtime to a minimum.

Technical specification of MK1 e-Master



Hydraulic System

Feature	Description
System Type	Dual-pressure with BLDC motors (high efficiency, low maintenance)
Operation	Low-pressure for standard tasks; switches to high-pressure under heavy load
Control	Computer-managed with multiple suspension sensors & e-controlled hydraulic blocks
Energy Optimization	Hydro accumulators & recovery system; shielded and externally mounted
Load Recovery	Over 50% energy recuperation during lowering cycles
Independence	Fully self-contained; no tugmaster hydraulics required

Electrical System – Battery, Charging, and Optional Configurations

Feature	Description
Battery Type	Lithium Iron Phosphate (LiFePO)
Runtime	8–16 hrs standard; supports multi-shift operation with optional blocks
Charging Options	on board charger up to 10kWh, optional external charger up to 50kWh
Charging Time	2-12hours on onboard charger, 20 min on external charger (50kWh)
Battery Life	~1000 full charge cycles before notable capacity reduction
Battery Management	Smart BMS prevents overheating and optimizes charge/discharge cycles
Optional Configurations	From 1 to 5 battery blocks depending on power demand
Software	Dedicated modular software system

Electrical System – Battery, Charging, and Optional Configurations

Feature	Description
Communication	CAN Bus (simplified cabling, diagnostics, and display operation)
Options	Wireless module, cabin display, CAN link to tractor
Interface	User-Friendly interface with intuitive display (simplified service processes and diagnostics)