

# EVOHOIST

25% less inertia in main hoist



**Significantly reduced inertia in main hoist, saving energy and reducing wear in the gearbox**

- ✓ Reduction in energy consumption during acceleration
- ✓ During braking action, inertia does not load tooth flanks of gears in gearbox

**Cost savings through elimination of high-speed side brakes**

- ✓ Cost savings during entire product life cycle, including purchasing of parts, installation, and maintenance

**Starting Date: End of 2024**

## Q&A

**Has this system configuration already been tested?**

Field testing is currently being prepared and planned.

**Can this system configuration be purchased elsewhere?**

No, there is a patent pending for this concept.

**What is included in EvoHoist?**

EvoHoist includes the EvoTorque safety coupling, a specialized HPU (hydraulic pressure unit) and PLC (programmable logic controller), brakes (EvoBrake) made to our specifications and requirements, and drum couplings, all designed to achieve specific advantages.

**How much will EvoHoist cost?**

The costs will not exceed those of a comparable hoist design.

**Is this option also available for existing hoists in the field?**

Depending on the project and crane, EvoHoist may be retrofitted.

**How do SOS and EvoHoist compare to each other?**

EvoHoist includes all the advantages of SOS but reduces inertia, brake parts and complexity of the drive train significantly, addressing today's challenges such as sustainability and automation.

For more details, please see the **back side of this page**.

## DRIVETRAIN SYSTEMS BY MALMEDIE®

**EvoHoist is a prime example of how we consider the influence of our components on drivetrain systems, beyond merely supplying the components.**

**Achieving over 25% less inertia:  
A realistic example from  
one of our projects:**

- 2 × LS brake disk: 0,96 kgm<sup>2</sup>
- 2 × rope drum: 5,99 kgm<sup>2</sup>
- 2 × drum cplng. (TTXL 34): 0,04 kgm<sup>2</sup>
- 1 × gearbox: 9,11 kgm<sup>2</sup>
- 2 × HS brake disk: 15,11 kgm<sup>2</sup>  
(eliminated in EvoHoist)
- 2 × MSC II: 4,46 kgm<sup>2</sup>
- 2 × motor: 12,7 kgm<sup>2</sup>

**Sum: 87,63 kgm<sup>2</sup>**

**EvoHoist: 57,41 kgm<sup>2</sup> (65,5%)**

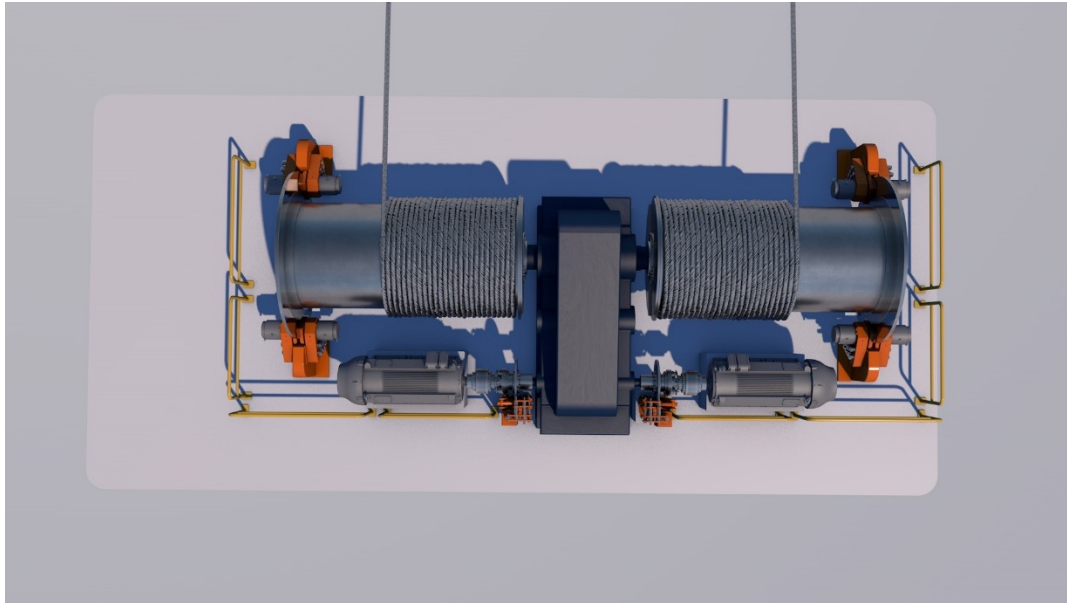
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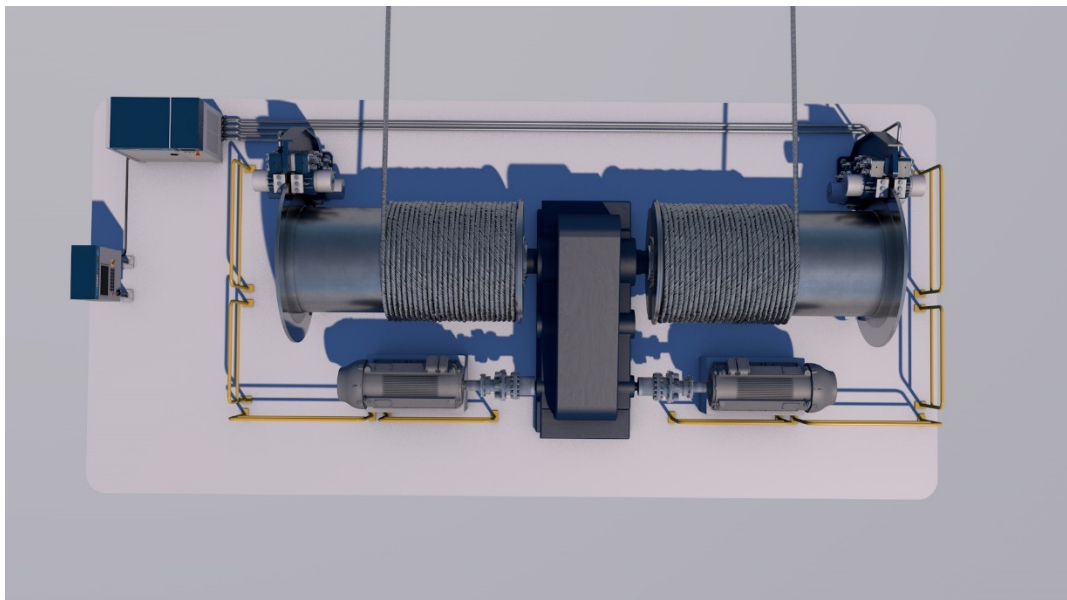
**Below: SOS Hoist System Configuration.**

PLC and HPU for safety brakes not shown.



**Below: EvoHoist System configuration**

Changes: No high speed brakes; EvoTorque, EvoBrakes, EvoHoist HPU and PLC.



For more details, please see the **front side of this page.**

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