

Container Crane

➤ Container weighing at the twistlock

➤ Requirements

- For all spreader types
- For single and twin lift mode
- Acc. to new regulations of SOLAS
- Transmission of a verified gross mass (VGM)
- Easy communication to TOS or crane PLC
- Customer-specific adjustments

➤ Solution

- Magnetostrictive and contactless force measuring method
- Detects and measures forces in a shaft with magnetic properties
- Comprehensive communication to TOS (e.g. VGM, eccentricity, overloads, error codes, time stamp ...)
- Measurement accuracy < 1%
- Insensitive to mechanical shocks and vibration
- Certified in accordance with OIML
- Replacement of the twistlock does not influence the lifecycle of the sensor



➤ Hardware

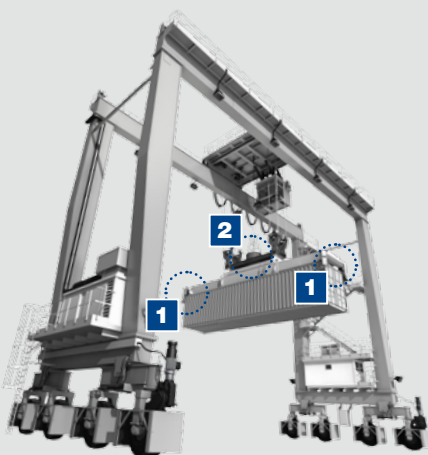
1 fSENS MLS force sensors: contactless and accurate

- IP67 protection rating
- Salt water resistance
- Acc. to EMC standards (2004/108/EC directive)
- Static or dynamic container weighing
- Long service life and robust sensor
- No wear, deforming or sensor rupture
- No zero drift caused by overloads
- Sensor elements compensate bendings in the twistlock

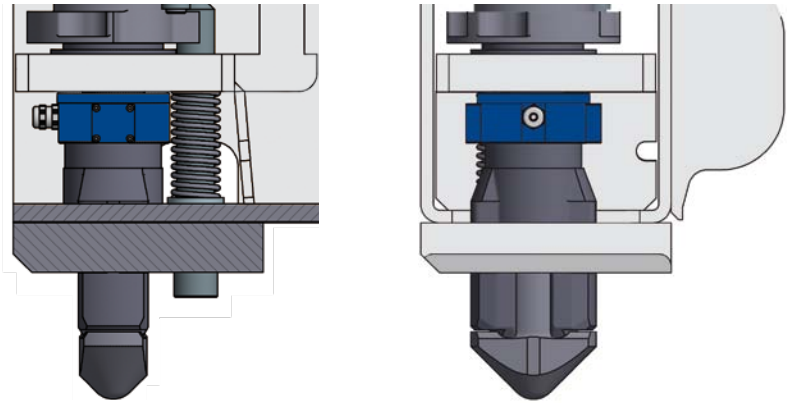


2 cSCALE: controller for harsh environments

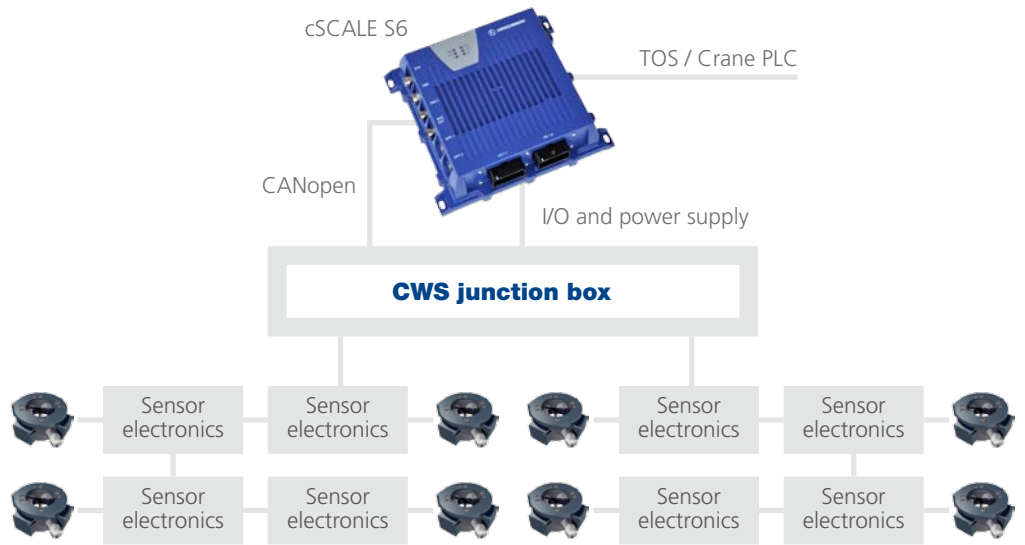
- IP66 protection rating
- Interfaces: CANopen/Ethernet, others on request



Assembly situation fSENS MLS



System overview for a twin lift application



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Hirschmann MCS is the world market leader in safe load indication for telescopic and lattice boom cranes and a specialist for safety solutions in gantry and port cranes.

As one of the leading system suppliers, the company sets standards in innovative automation platforms for mobile applications in harsh environments. Drawing on expertise and experience gained during more than 40 years, the team of Hirschmann MCS enables communication between people and machines. The product and system solutions include software and hardware for sensors, controllers, and consoles for mobile cranes, earthmoving machines,

mining, road construction and port industry applications.

As a reliable, innovative, and flexible provider of leading-edge technology, high-quality products, and first-rate services, Hirschmann MCS is committed to ensuring that today's components and solutions already comply with tomorrow's specific safety requirements and generally valid standards.