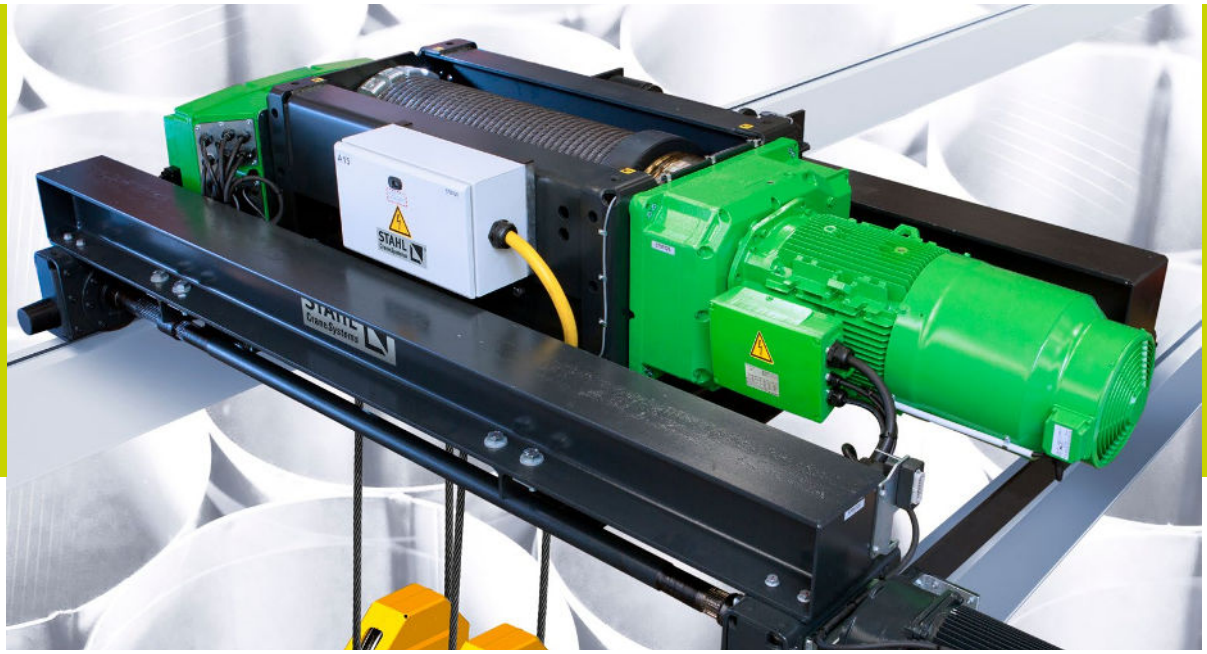
The AS 7 wire rope hoist overload protection

09.2024



To increase reliability, the proven principle of the SH series load measurement systems has been integrated into the AS 7 wire rope hoist. Thanks to the completely redesigned and space-saving overload system, the AS 7 wire rope hoist is now also suitable for explosion-protected areas and LNG applications and fulfils the requirements of category 3, performance level d, in accordance with EN 13849-1.

Design

The free-floating gearbox is held in position on the mounting plate. The permanent load measurement takes place at the torque arm of the gearbox by means of a pressure sensor, which is attached to the supporting structure. Due to this design, the hoist is extended by 87 mm.

Standard reeving 1/1, as well as reeving without hook displacement 2/2-1 and 10/2-1 can be realised. The twin hoists 6/2-1, 8/2-1 and 10/2-1 are equipped with this overload protection. Other reeving systems are available on request.

Measurement Technology

The overload protection enables load measurements even in the lower partial load range with a high accuracy of ± 6 % of the nominal load. Additionally, measurements can be taken at a standstill, as well as active and passive load measurements. Thanks to the proven load sensor technology from STAHL CraneSystems, the system is suitable for all areas of application and compatible with all evaluation devices.

CMCO INTELLIGENT MOTION Columbus McKinnon

STAHL CraneSystems ®

The overload protection

- Rotatable gearbox
- Permanent, precise load measurement by pressure sensor on the gearbox torque arm
- Various reeving options available
- Increases the reliability of the overload protection
- Measurements also in the lower partial load range
- Measurement at standstill
- Active or passive load measurement
- Proven load sensor technology
- Compatible with all common evaluation devices

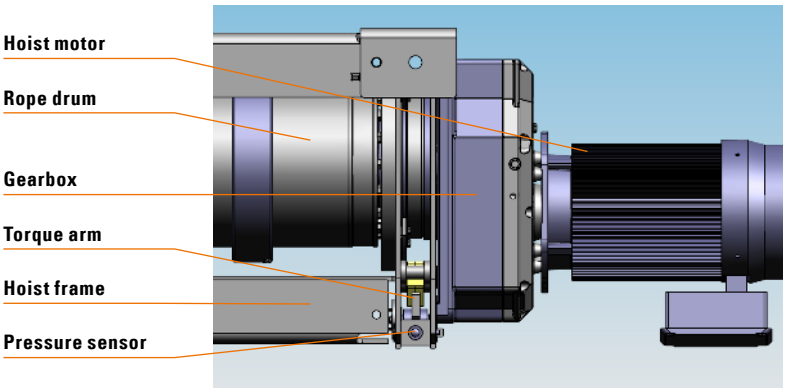
The AS 7 wire rope hoist

- Compact dimensions and extremely short approach dimensions help to make optimum use of the workshop space
- A wide variety of designs and trolleys enable various application possibilities
- Classification according to FEM/ISO standards
- Two lifting and travelling speeds
- Further reeving and speeds, and customized solutions on request
- Optionally available in explosion-proof design in accordance with ATEX or IECEx and NEC/CEC

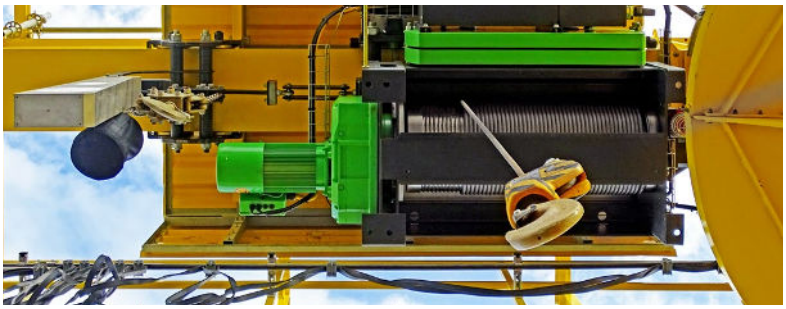
Example of use

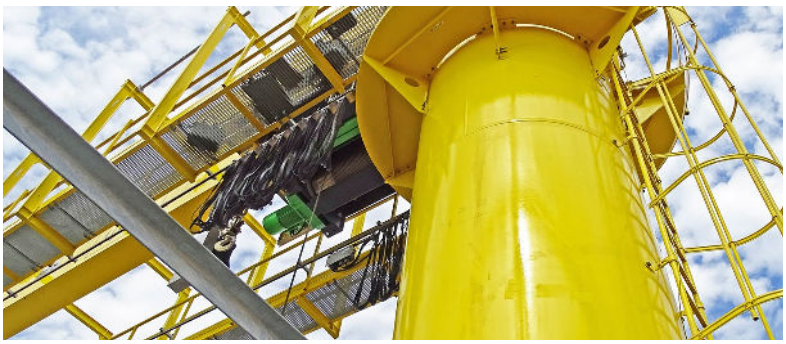
An AS 70 ex wire rope hoist with a load capacity of 6,800 kg is used on the slewing crane of an LNG tank. Due to the 1/1 reeving, no deflection is possible, and the overload cut-off must engage directly on the gearbox. A torque arm takes over the transmission torque. The load detection on the torque arm is realized by a dual pressure sensor, which supplies analogue load-dependent signals.

They are analyzed via the configurable SLE basic control unit. It takes over the parameterisation and storage of the overload cut-off by safely switching off the lifting movement. Extended functions are offered by the new SMC 4 Multicontroller, which is used for frequency-controlled hoists, for example. It is also used when a high level of work and process safety, data storage, and intelligent networking are required.



Model	Load capacity [kg]	Reeving
Single-groove rope drum	3,000 – 12,500	1/1
Double-grooved rope drum	6,300 – 12,500	2/2-1
	45,000	10/2-1
Twin hoist	40,000 – 80,000	ZW 6/2-1
	80,000 – 100,000	ZW 8/2-1
	100,000 – 125,000	ZW 10/2-1





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Printed in Germany 192 109 608 EN-09.24