

HIGH PERFORMANCE – HOIST FOR HOIST



R. STAHL SH wire rope hoists

STAHL

The R. STAHL difference: Perfected design based on 80 years' experience.

Electric wire rope hoists and R. STAHL belong together: decades of experience and continuous development have resulted in an R. STAHL wire rope hoist program that today is a benchmark in the sixth generation. Consummate methods of calculation, innovative ideas for improvements from our development team and systematic orientation on quality mean that SH wire rope hoists constitute the optimum in hoist and material handling technology worldwide.



The R. STAHL wire rope hoist programme:

Size	S.W.L. (kg)							
	1.600	3.200	6.300	12.500	16.000	25.000	50.000	100.000
SH3	[Yellow bar]							
SH4	[Orange bar]							
SH5		[Orange bar]						
SHR6			[Orange bar]					
SH6				[Green bar]				
AS70					[Green bar]			
Max. height of lift (m)	120	120	120	60	40	30	18	9



The advantages of the universal SH wire rope hoist program:

- + Versatility for users, crane manufacturers and OEM customers
- + Productive power for crane manufacturers – as stationary hoists or complete with monorail trolleys or double girder crabs – including versions with no lateral hook displacement (true vertical lift)
- + Flexibility for systems manufacturers and OEMs: superior installation qualities, e.g. with multi-rope designs, variable rope lead-off angles, articulated trolleys
- + Attractive for all users: largely maintenance-free design, productivity ensured by compact dimensions, rope guide in robust cast iron
- + Low maintenance costs: brakes, rope drive, rope guide and motor with power reserves for low wear and long service life
- + Integrated safety features as standard: in addition to the rope guide, SH hoists are equipped with gear limit switch, electronic overload cut-off and temperature control of the hoist motor

Reeving		Available versions				
Standard-reeving	Without lateral hook displacement	Stationary ST	Double Rail crab OE	Monorail trolleys		
				KE	UE	DKE
		■	■	■	■	■
		■	■	■	■	■
1/1, 2/1, 4/1	2/2, 4/2	■	■	■	■	■
		■	■	■		
		■	■	□	□	□
2/1, 4/1, 6/1, 8/1	4/2, 8/2	■	■			

■ = Standard □ = Option

R. STAHL SH wire rope hoists: This programme pulls its weight in every application!



The greatest strength of the SH wire rope hoist programme shows in the concentration of power and function into ever smaller space. Added to this are innovative design, maintenance friendliness and R. STAHL's proverbial reliability. The extensiveness of the equipment provided as standard and the wide range of the most varying options turn R. STAHL SH wire rope hoists into lifting equipment for universal use.

SH options for special requirements:

- ✚ Customised safety packages for particularly demanding applications with redundant safety brakes, emergency lowering devices, brake release devices and numerous other features
- ✚ Smooth and safe transport of loads by means of speed control via frequency converter
- ✚ Precise information on the current load on the hoist and crane by means of a digital load display from the comprehensive STAHLtronic programme
- ✚ Optimum safety with the STAHLtronic SMC1 load spectrum memory for automatic monitoring of the safe working period (SWP)
- ✚ Global player: R. STAHL has the know-how for specific regional requirements all around the world. Approvals have been granted for important markets. The repertoire of the R. STAHL specialists includes UL, CSA or GOST.

R. STAHL competence: Explosion protection for Zone 1 and Zone 2 in accordance with ATEX

R. STAHL has a worldwide reputation as explosion protection specialist. This is also attested to by the SH wire rope hoist programme. The explosion-protected SH types have approvals for use in Zone 1. In addition however a programme of explosion-protected cranes, wire rope hoists and crane components specially optimised for Zone 2 is available. It meets the relevant regulations with reduced technical complexity and corresponding cost advantages.

As technological leader, R. STAHL sets its sights particularly high and meets the new ATEX regulations on mechanical explosion protection. R. STAHL is the first manufacturer to implement the ATEX 100a directive 94/9 in its production programme.

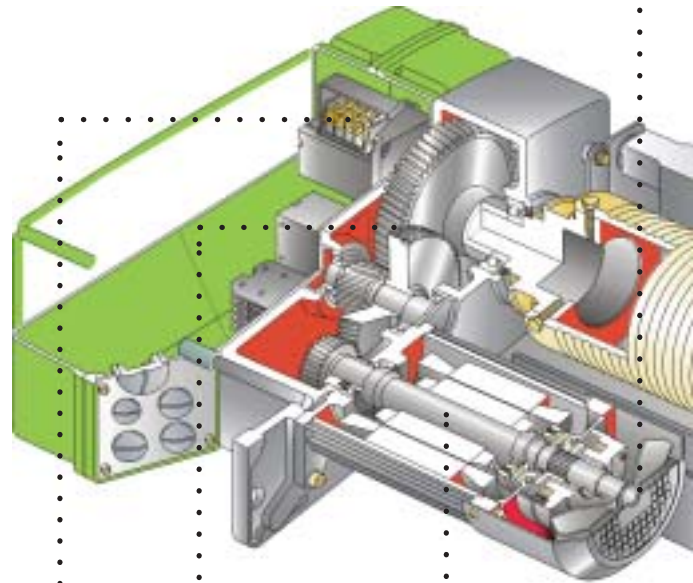
R. STAHL always offers explosion-protected products from a single supplier. The fact that all components of a hoist or crane are of our own manufacture – from motor and brake up to control and switchgear – guarantees optimum explosion protection. In this respect, R. STAHL Fördertechnik GmbH utilises the synergy effect from the equally specialised and comprehensive know-how of the "Explosion Protection" Division of R. STAHL Technology Group.



Application	Category	Protection against	Explosion protection class	Designed in acc. with
Zone 1	II 2 G	Gas	EEx de IIB T4 or EEx de IIC T4	DIN/EN and ATEX, PTB
Zone 2	II 3 G	Gas	EEx n de A IIB T3	DIN/EN and ATEX
Zone 22	II 3 D	Dust	EEx II 3D 120 C	DIN/EN and ATEX
US explosion protection		Gas	Class I, Div. 2, Group C-D, T3	UL

The systematic way to superior solutions – hoist for hoist!

With the SH wire rope hoist programme, it is not just a single performance characteristic that makes the difference. It is the great diversity of advantages that is compelling. Design perfected down to the last detail, high-quality equipment features in combination with low maintenance requirements and the large number of options available lead to optimum productivity, economic efficiency and safety.



Control and motor management: convenient

- low wear thanks to electronic motor management: reduction of damaging inching operation, reduced motor temperature rise and increased brake service life
- versatile: all common control voltages available
- optimised safety thanks to oversized contactors



Hoist gear: runs and runs ...

- carefree operation for many years without maintenance
- lifetime lubrication, gearwheels running in oil bath
- whisper-soft: up-to-date technology ensures greatly reduced noise emission

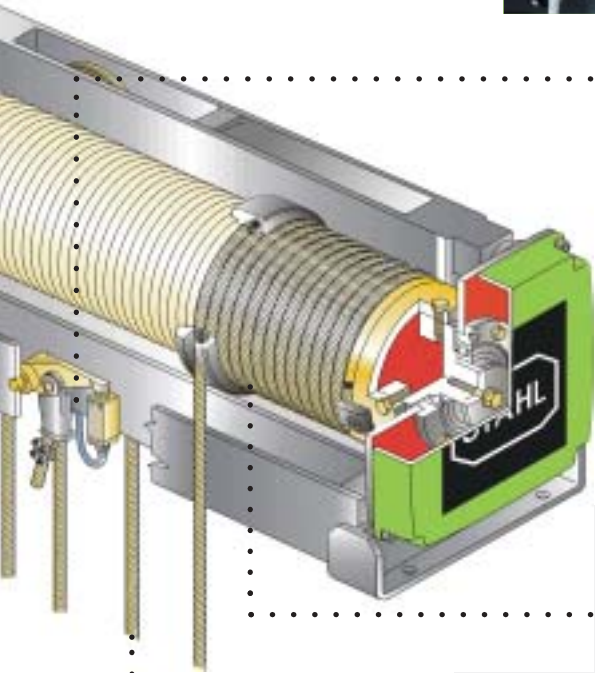




Brake:

extreme staying power

- low-maintenance asbestos-free design, needs no adjustment
- long service life thanks to oversized braking torque
- low noise ensured by electronic brake management



Overload cut-off:

safety first

- reliable: maximum load limited by electronic overload cut-off in rope suspension as a standard feature
- useful for systems manufacturers: overload cut-off even with 1/1 or 2/2 reeving (load measurement in gear)



Rope guide:

robust and reliable

- sturdy: GGG40 material – tried-and-tested with heat, diagonal pull, slack rope
- tradition: fourth generation design principle (C, N, AS, SH series)
- reliable functioning: 360° rope tensioner

Motor:

made in Germany

- specially designed motors for hoist applications
- power reserves: high duty cycle (60% DC) and number of switching operations (360 c/h)
- well-protected: insulation class F and IP 55/IP65 protection



Rope guide:

durable and practical

- specially dimensioned: rope drive with optimum ratio of drum to sheave diameter for low wear
- high standard of safety: special flexible, long-lived rope
- optional: design with no lateral hook displacement (true vertical lift)

Real "crowd pullers" – from stationary to dynamic!

R. STAHL SH wire rope hoists can be used over the whole breadth of applications – both stationary and individually mobile by means of trolleys and drives. In addition, optional high performance components broaden the spectrum of applications and the capacity of the system exactly as required.

With a total of five frame sizes, the R. STAHL SH wire rope hoist programme offers a modular system with everything in demand in hoist technology. If the S.W.L. requirement exceeds the limits of the SH, the tried-and-tested R. STAHL AS70 is available. Whether in a standardised crane, in off-standard cranes or in systems manufacture – wire rope hoists from R. STAHL are lifting equipment for universal use.



SH stationary design



SH "short headroom" monorail trolley



SH double rail crab



AS 70 on double rail crab

SH stationary design: performance in place

Because the obvious is often the best, R. STAHL SH wire rope hoists are always available in stationary design – foot-mounted or suspended, depending on the situation. The stationary SH – the optimum too for using on existing trolleys.

SH with blanket coverage: flexible and dynamic

As part of a system with slewing cranes, bridge cranes or suspended monorails, R. STAHL SH wire rope hoists are mobile – with powered trolleys or crabs. All trolleys and crabs are equipped with two travel speeds.



KE and UE monorail trolleys: space-saving

Specialised trolleys with extremely low headrooms. Thus large hook paths are possible even in low buildings. As an alternative, a UE standard headroom trolley with reduced width is available. Trolleys are also available for single-fall wire rope hoists (1/1 reeving).

OE double rail crab: guaranteed "road holding"

Thanks to its "floating" design, the R. STAHL double rail crab guarantees that all four wheels lie on the rails at all times. If the clearance to the roof is not sufficient, the double rail crab is also available in dropped down design. Optional maintenance platforms make the hoist easily accessible for maintenance and repairs. If even more power is required, a higher-speed auxiliary hoist can be fitted.



DKE articulated trolleys: safe cornering

R. STAHL DKE articulated trolleys are intended for use on runways with bends. They feature lateral guide rollers that master even tight bends with minimum wear on the runway.

The hoists illustrated are designs with no lateral hook displacement.

R. STAHL Support: Comprehensive consulting and assistance



R. STAHL's experienced and specially trained engineers are at your disposal for selecting a suitable wire rope hoist from the comprehensive SH programme. They will give you competent application-oriented advice and will be pleased to respond to your special requirements. Also part of the scope of supply is adapting the hoist designs to the particular regulations and standards of individual companies and other countries.



R. STAHL Service: Systematic benefits

A permanent safety and economy component of all R. STAHL SH wire rope hoists is R. STAHL Service. It comprises the supply of original parts, factory service, maintenance, inspections and annual tests to ensure that accident prevention regulations are met, as well as seminar and training programmes for customers and users.



R. STAHL Crane Service is a member of the GKS Gütegemeinschaft Kranservice e. V. (Crane Service Quality Group) and is certified in accordance with the "RAL crane service quality symbol".



You can take our wire rope hoists as examples!

R. STAHL SH wire rope hoists are in operation successfully all over the world. Their versatility permits them to meet the most varied requirements – in many different fields and branches of industry. The large number of references and application examples speaks for itself. Characteristic SH application fields include for example:

- aluminium and steel
- chemical industry – in particular petrochemical
- printing, paper and media
- foodstuffs/nutrition
- galvanising plants/foundries
- motor manufacture
- offshore applications
- vehicles/aircraft
- recycling/energy
- wholesale trade, logistics

R. STAHL customers find convincing solutions for their particular requirements on the basis of the SH wire rope hoist programme. This holds good for the wide load spectrum and off-standard installation situations as well as particular operating requirements and applications in harsh environmental conditions.



R. STAHL – worldwide

R. STAHL Technology Group is represented in numerous countries and on all continents.

Production plants, branch offices, affiliated companies, subsidiaries and sales partners ensure that customers and markets everywhere are well served. What has gained recognition on the German market in the course of over 125 years, nowadays also leads to success throughout the world: R. STAHL's quality and innovation, safety and efficiency in hoist and crane technology are in demand everywhere and at all times.

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