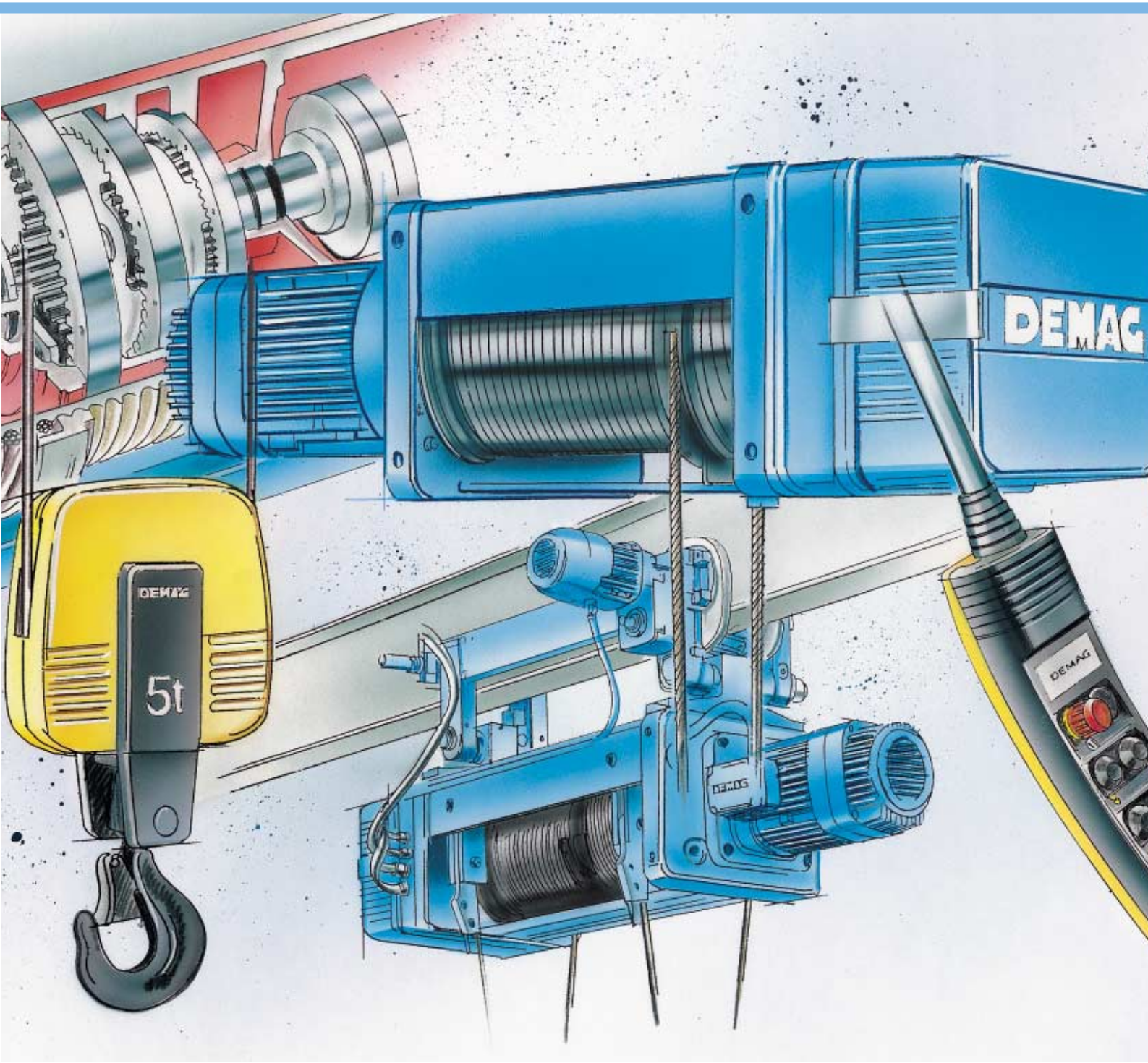
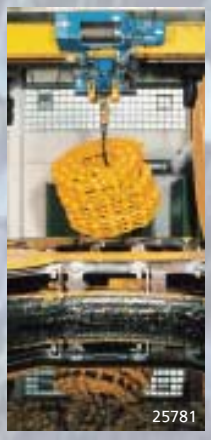
DEMAG
Cranes & Components

Demag DH hoist units

State-of-the-art system modules for mechanical and plant engineering



Hoists – we speak with experience



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Lifting, conveying, driving, positioning, distributing, storing – these are the tasks Demag Cranes & Components has concentrated on for more than 180 years. We have initiated significant new developments, realised new technologies and considerably furthered progress with materials handling solutions.

Innovation and performance have made us the leading world manufacturer offering the most comprehensive range of products in the industry. Hoists have been a part of our range since we launched the first steam-driven crane at the 1873 World Exhibition in Vienna. With ever new improvements, they have not only become indispensable in the crane sector, but are now also valuable components used in many other fields for a wide variety of applications – in theatres and above stages, in load lifts, on industrial furnaces, in mining equipment, in aircraft maintenance systems, in refuse incineration facilities…

Demag DH hoist units combine our extensive experience with state-of-the-art technology and modern, functional design. They are of consistent modular construction and are based on perfectly matched components of outstanding quality which are manufactured in series. Our hoists are the optimum basis for solutions tailored to meet your needs with a maximum of safety and reliability.

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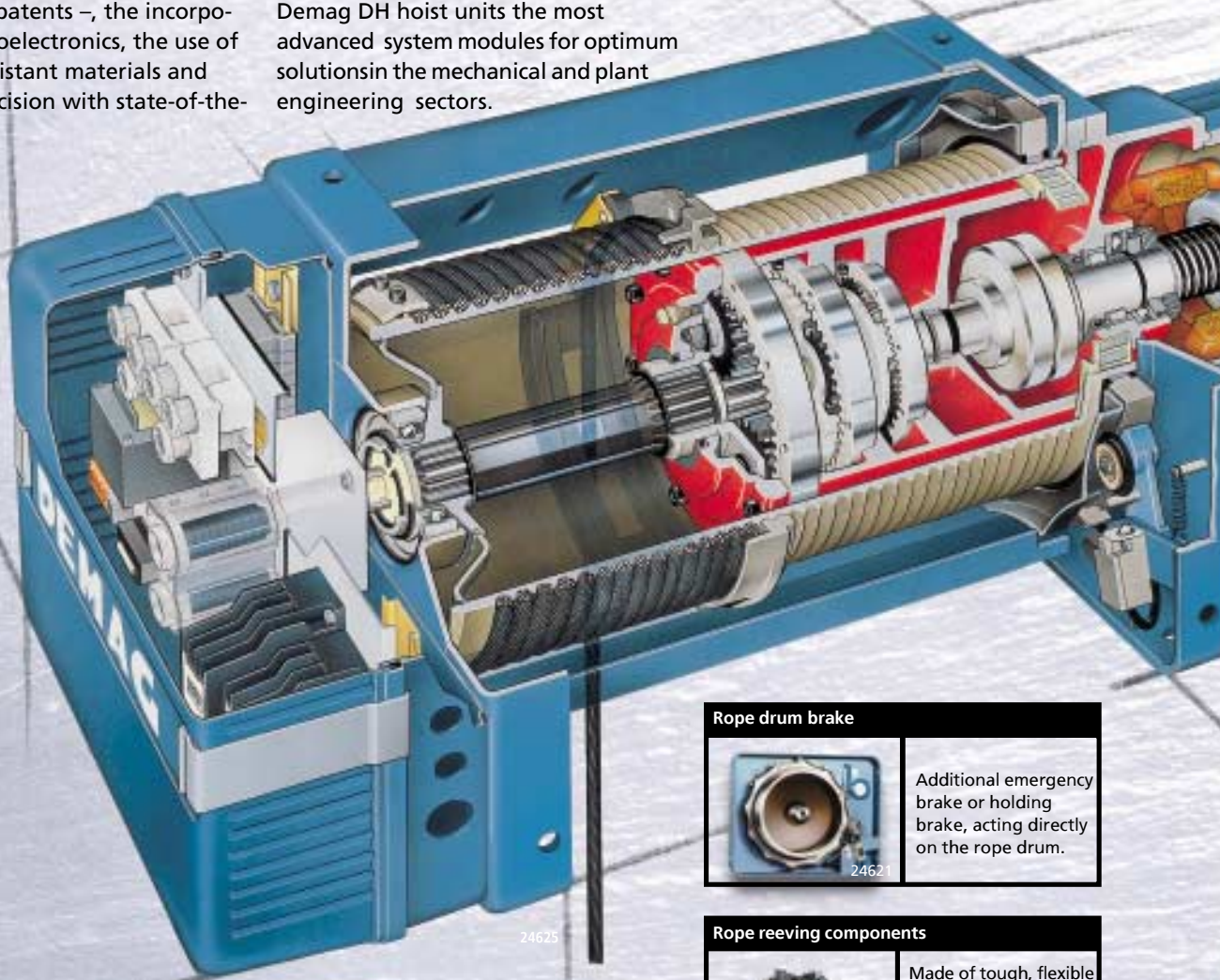
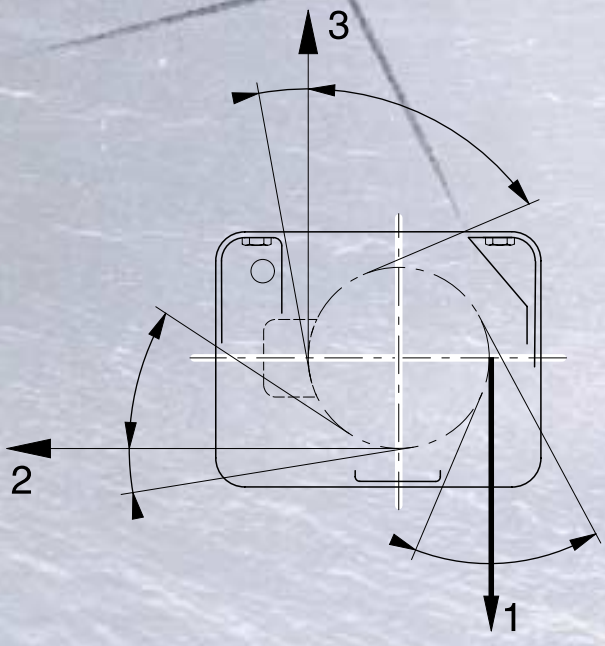
Demag DH hoist units – giving you the certainty of significant benefits

Design innovations – acknowledged by numerous patents –, the incorporation of microelectronics, the use of new, wear-resistant materials and maximum precision with state-of-the-art manufacturing methods make Demag DH hoist units the most advanced system modules for optimum solutionsin the mechanical and plant engineering sectors.





Rope drum brake

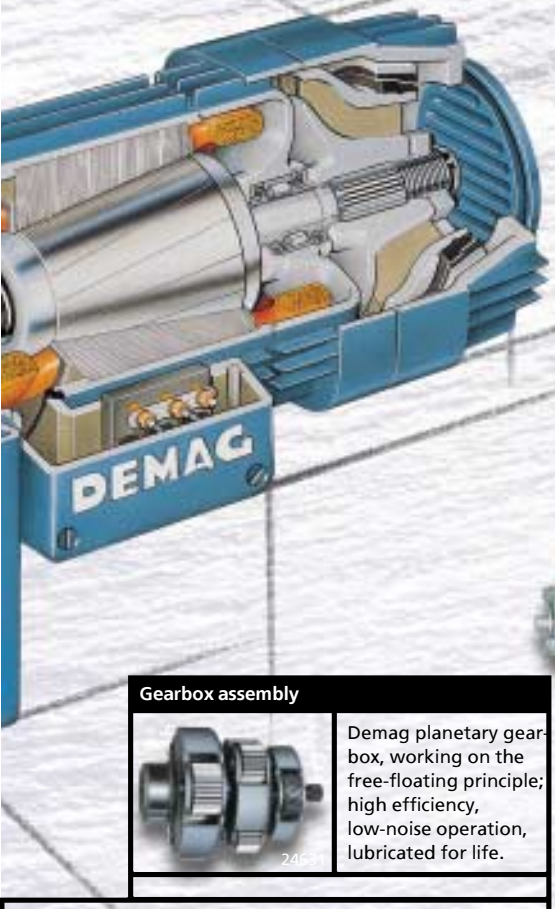
Additional emergency brake or holding brake, acting directly on the rope drum.

Rope reeving components

Made of tough, flexible and low-friction plastic with low-wear qualities. Hardened pressure rollers mounted on ball bearings.

Bottom blocks with rope sheaves of fine perlite material with uniform hardness for a longer working life. High handling safety due to favourable rope opening and improved grip for operators.

Single and multi-sheave bottom blocks depending on the reeving arrangement. All bottom blocks with load hooks to DIN 15401.



Whatever you are planning and building – with our hoists you can implement a reliable solution to meet your needs without any problems and set new standards for lifting, conveying, transferring, towing, holding and positioning thanks to

- minimum maintenance,
- convenient operation,
- reliable function monitoring,
- low dead weight,
- compact design,
- simple integration in automatic facilities,
- energy saving units,
- design which complies with national and international engineering standards.

Drive assembly

Demag sliding-rotor motor with integrated conical brake; i.e. high braking capacity and reliable braking without any control devices on switch-off or in the event of a power failure; asbestos-free brake linings.

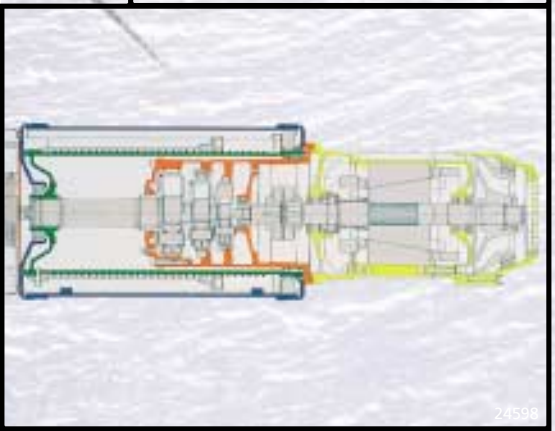
Pole-changing creep speed giving 1:6 and 1:4 ratios; separate creep speed motor giving a ratio of 1:10 or more for high starting frequencies, three or four speeds when combined with a pole-changing main hoist motor. Up to 12 motor types for each hoist size – squirrel-cage motors, slip-ring motors, DC motors, explosion-proof motors.

Frequency inverter (option)

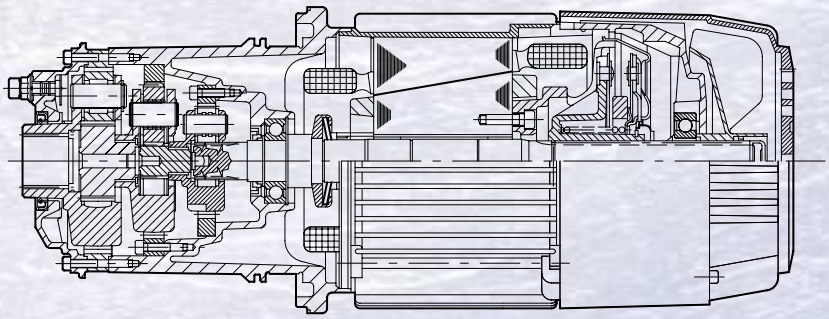
For maximum dynamics, reliable braking and the outstanding positioning characteristics of the Demag brake motor; permits infinitely variable speed control.

Gearbox assembly

Demag planetary gear-box, working on the free-floating principle; high efficiency, low-noise operation, lubricated for life.



Long service life and high safety levels due to load and power distribution. The load in each stage of the gearbox is borne by three teeth at any one time.
Low rolling speeds; case-hardened and ground gear wheels; connected to the motor via a torsionally and axially flexible roller coupling.



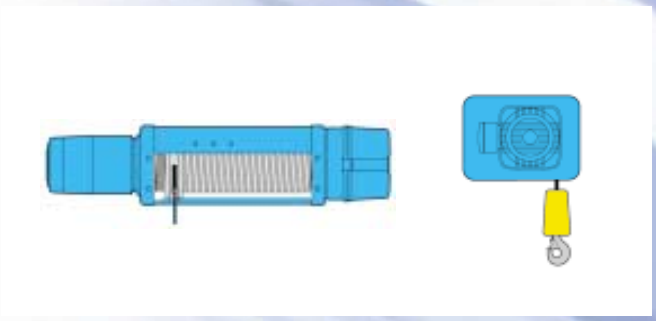
Stationary or travelling hoists – to move your loads

Demag DH hoist units can be integrated into lift stations, towing winches and many other appliances or made up into travelling hoist units with a variety of trolleys.

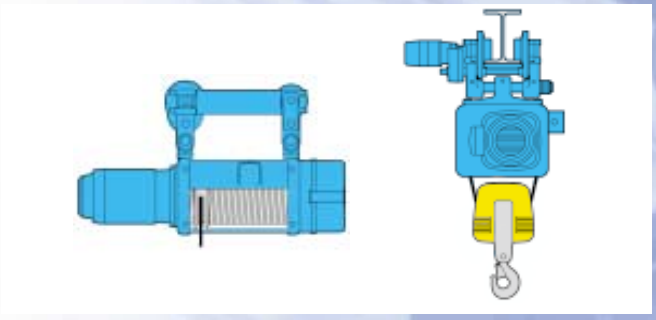
The trolleys are fitted with travel wheels made of spheroidal graphite cast iron (GGG 70). This material has a high inherent vibration damping effect, is particularly gentle on the runway and offers low-noise running characteristics. The self-lubricating effect of the spheroidal graphite incorporated in the wheel material reduces friction and provides high resistance to wear.
Due to the special travel wheel design, the wheel contact forces are transmitted close to the centre of the runway girder for optimum load distribution characteristics.

The wheels feature generously dimensioned anti-friction bearings which guarantee a long service life.

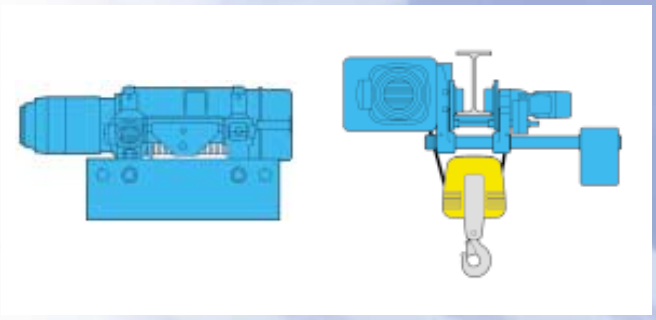
The travel motors are designed for smooth starting and gentle braking, thus allowing loads to be transported with a minimum of sway and the required positions to be approached quickly and exactly.



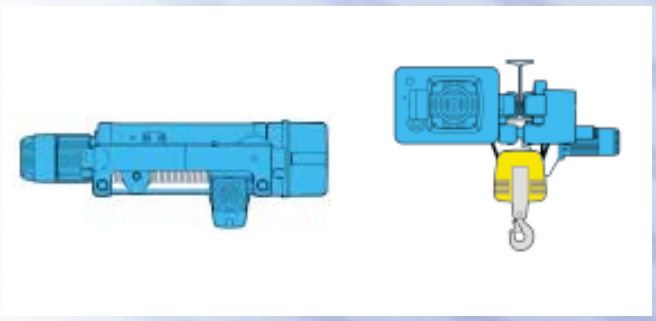
Direct connection for Demag DH hoist units
The two foot-mounting flanges of the square frame design enable DH hoists to be simply mounted on any of the four sides. Rope lead-off in virtually any direction suits all applications.



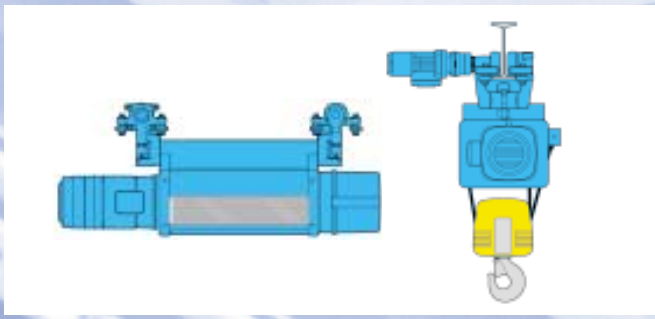
EUDH standard-headroom monorail hoist
The cost-effective solution for monorails and single-girder cranes.
Trolley adjustment is infinitely variable to suit a wide range of flange dimensions.



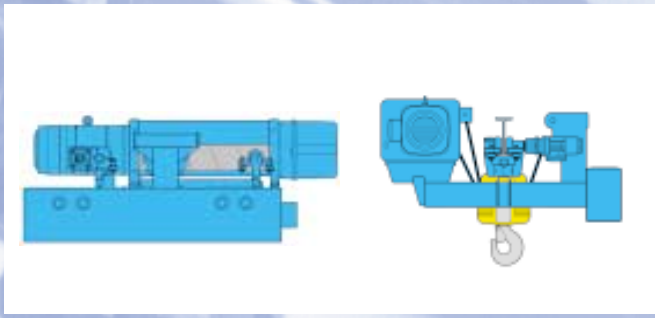
EKDH low-headroom monorail hoist
The ideal solution for optimum utilisation of the available headroom and particularly favourable hook-up dimensions.



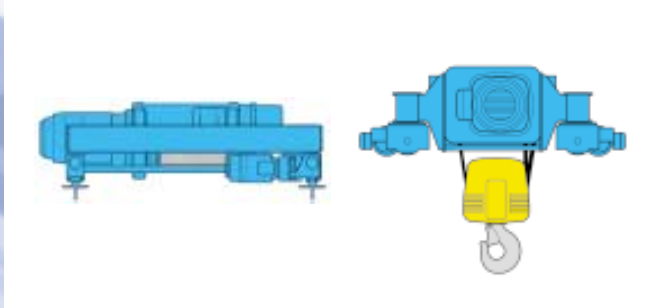
EKDH low-headroom monorail hoist without counterweight
A newly developed travelling hoist featuring a friction wheel travel drive integrated into the trolley which requires no counterweight; suitable for loads up to 5 t.



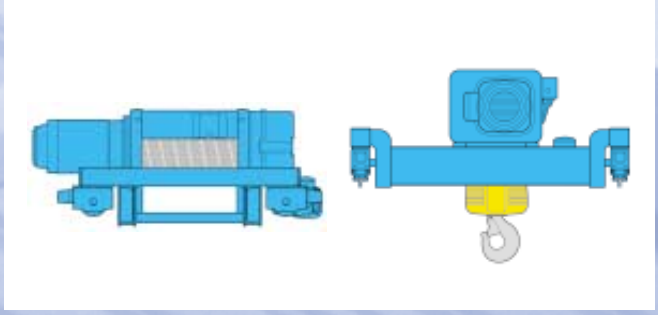
EUDDH standard-headroom articulated monorail hoist
Articulated trolleys enable the travelling hoist to negotiate curves with radii down to 800 mm. Also as double trolleys for loads weighing up to 25 t.



EKDDH low-headroom articulated monorail hoist
Optimum dimensions and outstanding curve-negotiating characteristics make this the ideal solution for suspension monorails. A lowered version can travel through track switches for suspension monorail systems with many branches.



EZDH double-rail crab
For higher loads on double-girder cranes; optimum utilisation of the available space thanks to the low-headroom design and favourable approach dimensions.



EZLDH double-rail crab
Symmetrical load distribution on the crane girders for optimum crane girder dimensions.

Electrical and electronic equipment – connection to state-of-the-art technology

The electrical and electronic equipment featured in Demag DH hoist units meet the most demanding requirements in terms of safety and functionality with numerous standard and optional components.

DGS precision geared limit switch
For reliable motor cut-out at the top and bottom hook positions; with switching elements for additional operating points or as protection against phase reversal.
Infinitely variable adjustment of the switching points with a repeat accuracy of ± 2° of the drum circumference. Optionally with a pulse generator and electronic evaluation unit for automatic angle and path detection and speed measurement for lifting operations; fitting at a later date also possible, pulse wheel as standard.

The geared limit switch requires no maintenance; simple, exact and infinitely variable setting of all switching points; optional pulse generator.

Various infrared transmitters with up to 8 x 2 single and two-stage buttons can be used depending on the type and quantity of drives to be controlled.

Dematik IR infrared control system
For mobile control of hoist unit lifting and travel drives as well as other drives on machinery, distribution carriages, etc.; signal address coding for simultaneous operation of up to 32 transmitters in an enclosed area without mutual interference. Transmitter range up to approx. 40 m; safety features to BGV D6 (VBG 9) and ZH 1/547.

The transmitter features 10 keys suitable for controlling 3 motion axes with 2 speeds each; 2 special function keys (e.g. for switchover functions) are also available.

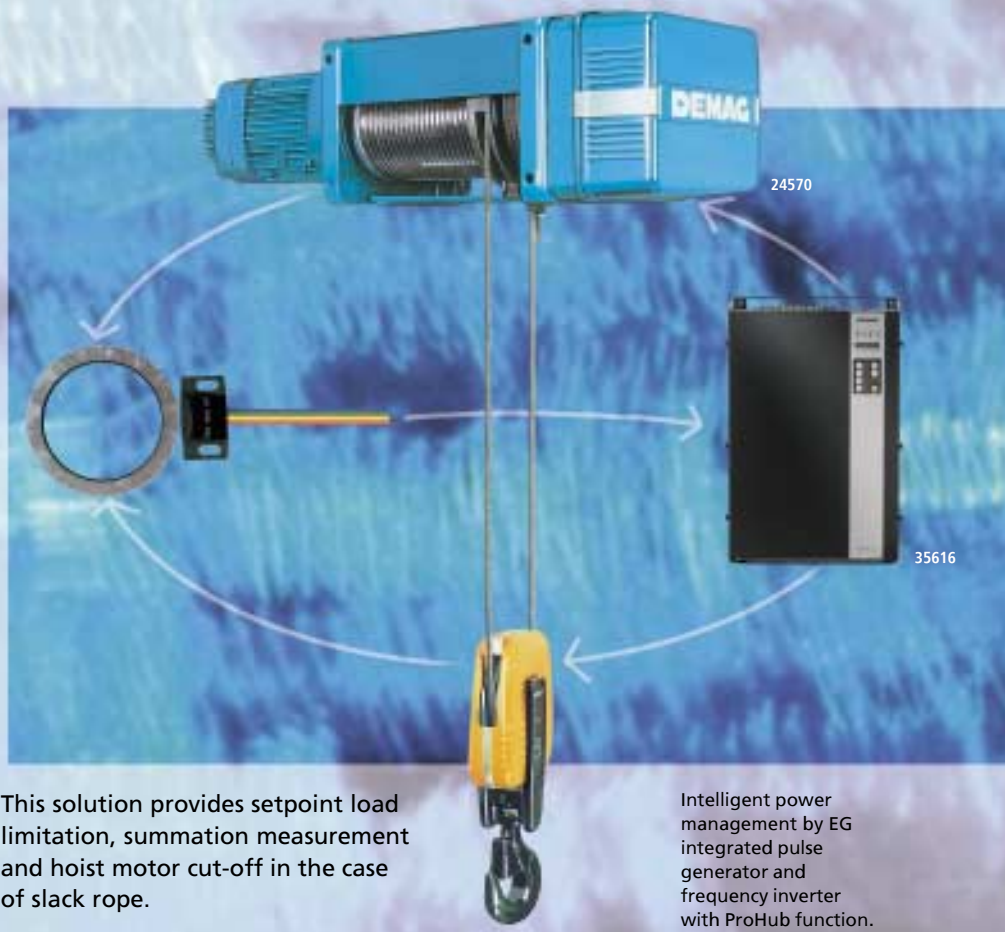
Demag RC-10 radio control
For controlling hoists and cranes as well as machinery, distribution carriages, etc., also at comparatively large distances; reliable oper-ation even when there are large loads, building elements and similar obstructions between the transmitter and receiver; interference-free transmission and receipt of signals even in built-up areas thanks to frequency-variable operation. Range approx. 100 m; VBG 9, ZH 1/547 and prEN 12077-1 compliant.

DSE control pendant switch
Control pendants connected to the hoist unit with strain relief; up to 16 openings for switch elements to control the hoist lifting and travel drives and other drives. Protective insulation to VDE 0100, retention force < 8 N; IP 65 enclosure.

The ergonomic housing design permits operators to work in a natural position, reducing fatigue.

EG integrated pulse generator
Integrated in hoist and travel drive motors, generates 30 rectangular pulse signals per revolution which are passed on to the evaluation electronics in the form of two signal chains with a pulse gap ratio of 1:1 and electrically displaced by 90° for measuring paths and speeds with detection of the direction of rotation. Can be used together with the frequency inverter with ProHub function to provide cost-effective drive solutions which move partial loads at high speed and rated loads at normal speed.

Load detectors
Two load measuring systems are available, depending on requirements:
– mechanical load measurement by an overload protector with microswitches and an electronic comparator for overload protection and overload cut-off;
– electronic load measurement by a carrier link with strain gauge bridge, frequency generator and frequency evaluator for overload protection and overload cut-off.



This solution provides setpoint load limitation, summation measurement and hoist motor cut-off in the case of slack rope.

Load indication via an LED display in the DSE control pendant or cabin, or on a large-format display.

Intelligent power management by EG integrated pulse generator and frequency inverter with ProHub function.

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Load detectors with electronic comparator and load spectrum recorder for load monitoring and to determine the optimum time for preventive maintenance measures.

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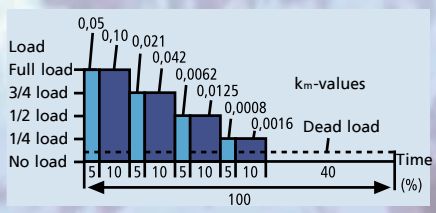

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Rope reeving components

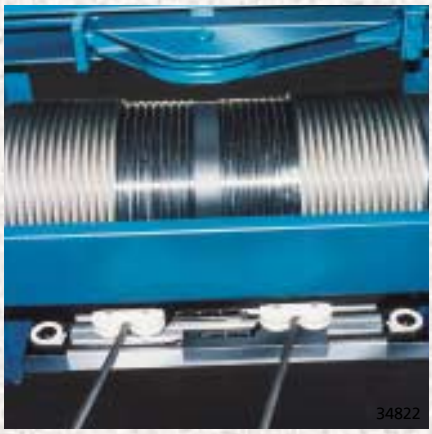
The rope reeving components of Demag DH hoist units can be configured to meet almost any conceivable requirement with a large number of variants and possible arrangements.

Rope guides
Of tough, flexible and wear-resistant plastic, with a friction-minimizing additive. Two-part design, easily replaced without the need for special tools.
Hardened pressure rollers mounted on anti-friction bearings for particularly smooth rope take-up.
Reliable seating of the rope on the drum even in the event of inclined pull; rope guide outlet designed for a fleet angle of ± 4°.
A special rope guide is available for applications in acidic environments, "F" rope guide for outdoor operations all the year round and "S" rope guide for medium inclined pull loading on single-groove drums.

Demag DSZ double rope guide
For hoists used in heavy-duty operation to meet high handling rate requirements.
Reliable protection for double-groove hoist units against extreme loading resulting from inclined pull, swinging loads and rope vibration.
Two interlinked guide elements are automatically positioned directly below the rope lead-off points to ensure the ropes are wound exactly perpendicular to the drum when they are pulled in the same direction.

F type rope guide

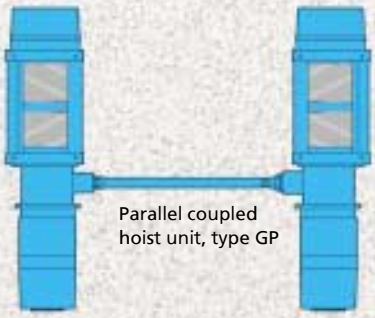
S type rope guide

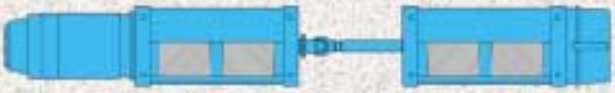


DSZ double rope guide

Coupled hoist units with exact simultaneous operation
Cost-effective solution for spreader operation and handling long materials; exact simultaneous operation also for large distances between ropes. Designed as a modular system for two and four-point rope suspensions; can be combined with all options.
Universal joint shaft connection for simple installation and compensation of any misalignment.

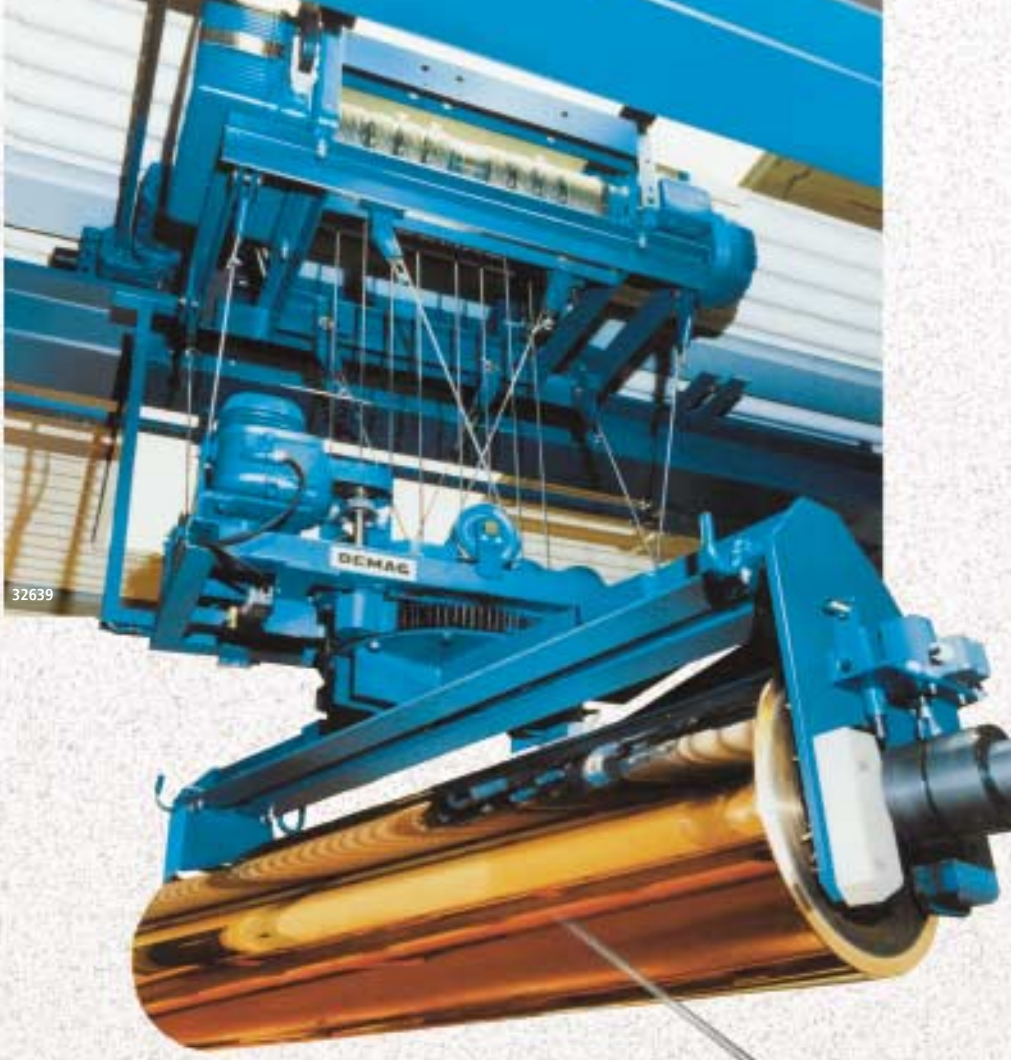

Coaxially coupled hoist unit with angular gearbox, type GW

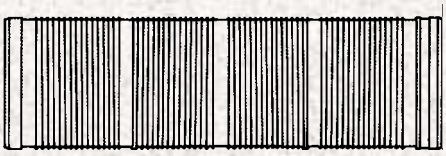

Parallel coupled hoist unit, type GP


Coaxially coupled hoist unit, type GK

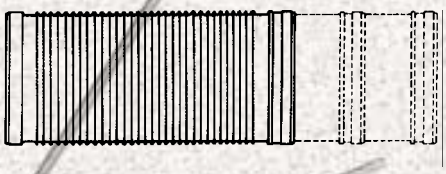
Rope drums
Of high-tensile steel (St 52.3), with up to eight grooves; double-groove design without any hook travel; rope lead-off in any direction.
Centrally driven by a multi-splined connecting shaft. Low-maintenance drum bearing with sealed roller bearings and large patented bearing at the motor end.
Various drum lengths for lifting heights up to 104 m.

Hoist ropes
Long service life and high safety and reliability, ropes dimensioned to FEM.
For special applications: high-strength and high-density ropes to increase hook paths by up to 25 %.





Various drum lengths make it possible to achieve lifting heights up to 104 m.



Rope drums are available with one, two, four, six and eight grooves, …

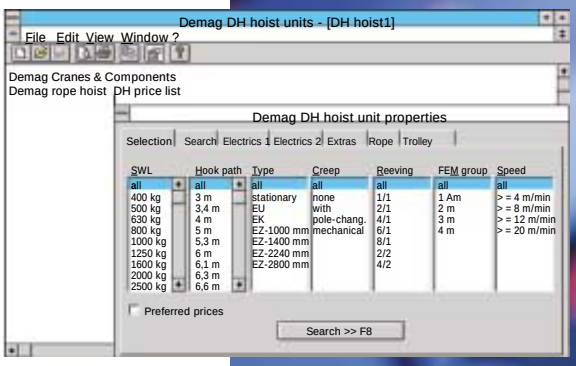
…the rope can lead off in any direction.

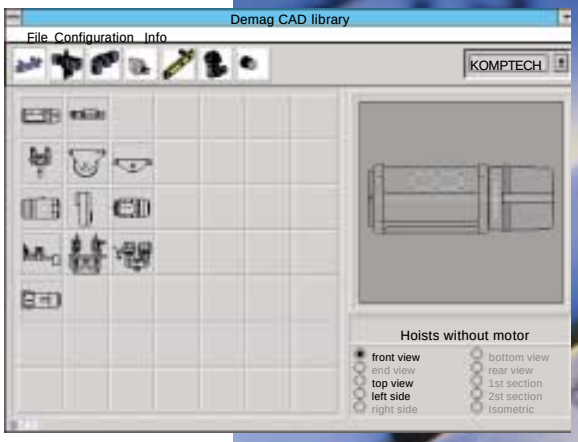
Demag DH hoists at the click of a button

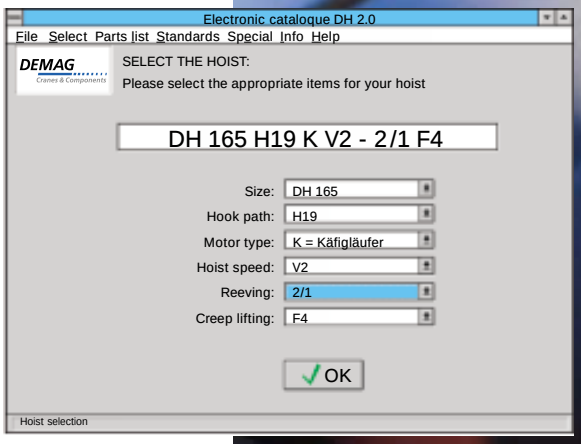
With our design tools, the parts catalogue and the price list on diskette and CD-ROM, we enable you to incorporate our DH hoist units into your designs (AutoCAD) and to select and order hoists or spare parts with all the convenience you can expect today.

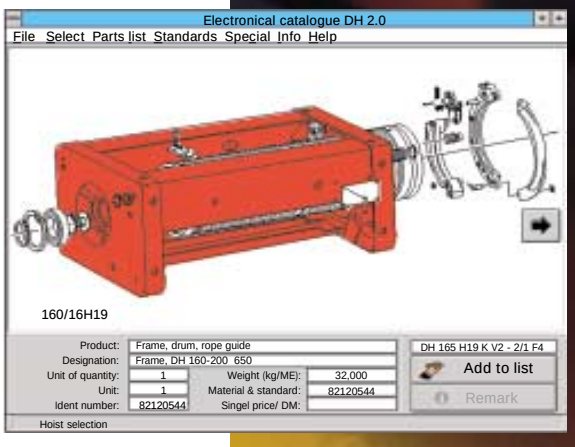
No more lists, no more searching through pages of catalogues – supported by an interactive user interface and an optimum display configuration you can simply "click" to select all the information you require and specify your hoist. And you can call up part numbers and prices just as easily.

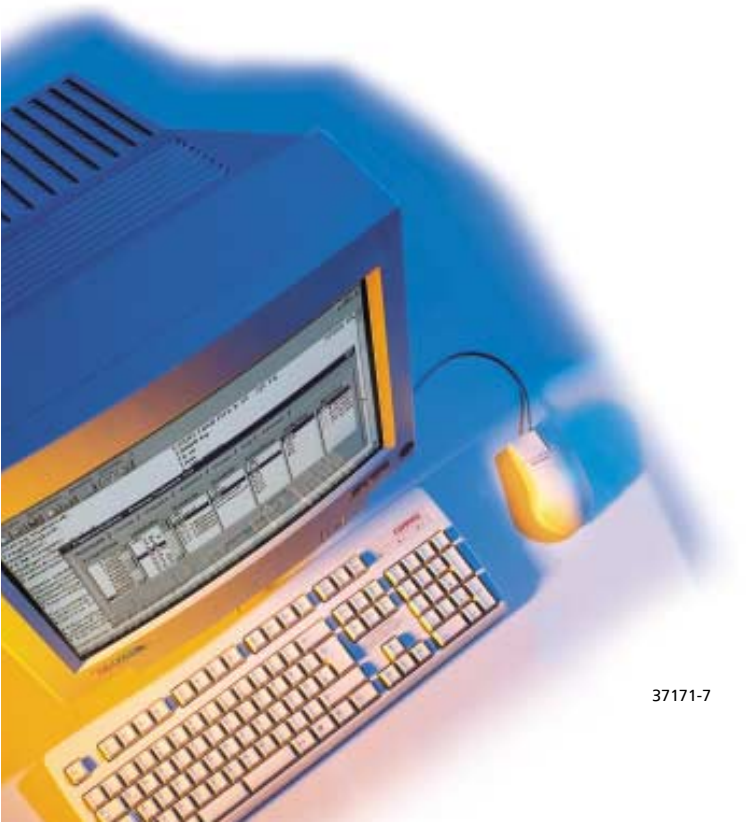
In addition, our SWP safe working period program is a valuable tool to help you meet the provisions of EC Directive 98/37 EC and the related accident prevention regulations which are based on it.











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Demag DH hoist units – you have the choice: from 500 to 100000 kg, from 0.1 to 36 m/min

Selection criteria

The size of the hoist is determined by the load spectrum, average operating time, SWL and reeving.

1. What are the operating conditions?
2. What is the specified safe working load?
3. To what height must the load be lifted?
4. What is the required lifting speed?
5. Do the loads need to be lifted and lowered with great accuracy?
6. Is horizontal load travel necessary?
7. How is the hoist to be controlled?

Important:

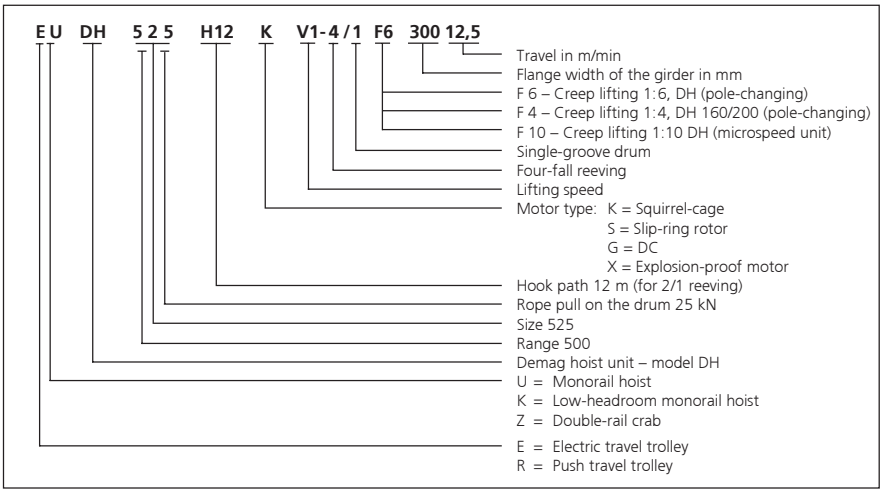
DH hoist unit with pole-changing motor
Main lifting speed = 80 starts per hour
Creep lifting speed = 160 starts per hour

DH hoist unit with mechanical microspeed unit
Main lifting speed = 240 starts per hour
Creep lifting speed = 240 starts per hour

Example (see blue line)

Load capacity	5000 kg
Load spectrum	"light" from table
Main lifting speed	8 m/min
Creep lifting speed	1.3 m/min
Reeving	2/1
Average hook path	4 m
Cycles per hour	20
Working time per day	8 hours

Explanation of size designations



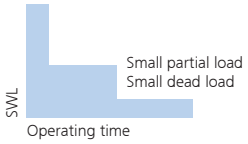
The average operating time per working day is estimated or calculated as follows:

$$\text{Operating time/day} = \frac{2 \cdot \text{av. hook path} \cdot \text{no. of cycles/h} \cdot \text{working time/day}}{60 \cdot \text{lifting speed}} = \frac{2 \cdot 4 \cdot 20 \cdot 8}{60 \cdot 8} = 2.66 \text{ hours}$$

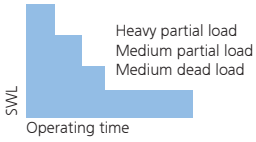
For the "light" load spectrum and an average daily operating time of 2.66 hours, the table shows SAA group M4 (FEM group 1 Am). For a load capacity of 5000 kg and 2/1 rope reeving, the table indicates hoist size DH 525.

The load spectrum
(estimated in most cases) can be ascertained in accordance with the following definitions:

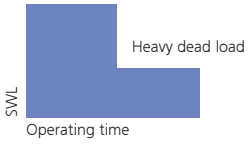
1 Light
Hoist units which are usually subject to very small loads and in exceptional cases only to maximum loads.



2 Medium
Hoist units which are usually subject to small loads but rather often to maximum loads.



3 Heavy
Hoist units which are usually subject to medium loads but frequently to maximum loads.



4 Very heavy
Hoist units which are usually subject to maximum or almost maximum loads.

The group is determined from the operating time and load spectrum

Load spectrum		Average operating time per working day in hours				
1	**Light**	up to 2	2-4	4-8	8-16	over 16
2	**Medium**	up to 1	1-2	2-4	4-8	8-16
3	**Heavy**	up to 0,5	0,5-1	1-2	2-4	4-8
4	**Very heavy**	up to 0,25	0,25-0,5	0,5-1	1-2	2-4
		M3(1Bm)	M4(1Am)	M5(2m)	M6(3m)	M7(4m)

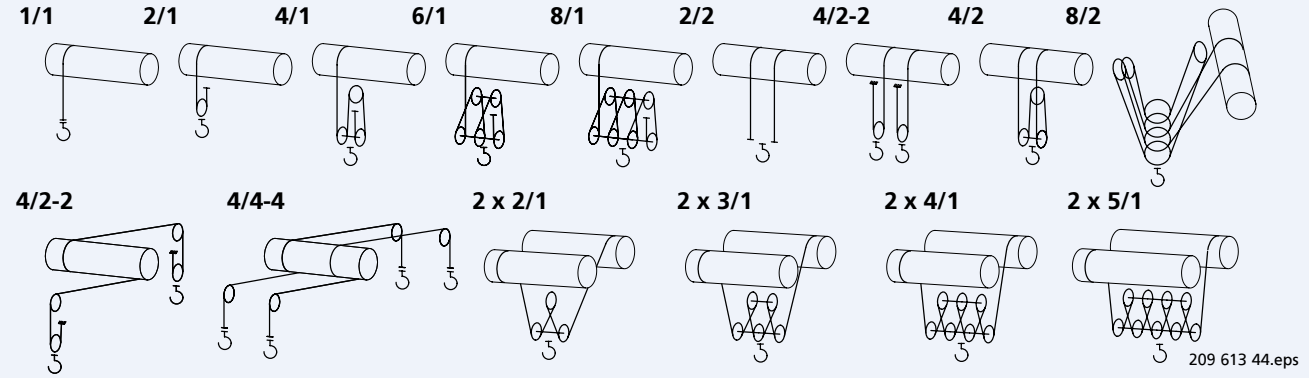
Rope reeving method					Range	Size				
2/2 1/1	4/2 2/1	8/2 4/1	6/1 1)	8/1 1)						
Load capacity in kg										
500	1000	2000	-	-	-	-	-	-	165	-
630	1250	2500	-	-	-	-	-	166	-	-
800	1600	3200	-	-	DH 160	-	168	208	-	308
1000	2000	4000	-	-	-	-	-	210	310	410
1250	2500	5000	-	-	DH 200	-	212	312	412	512
1600	3200	6300	-	-	-	-	316	416	516	616
2000	4000	8000	12500	16000	DH 300	320	420	520	620	-
2500	5000	10000	16000	20000	DH 400	425	525	625	-	1025
3200	6300	12500	20000	25000	DH 500	532	632	-	1032	-
4000	8000	16000	25000	32000	DH 600	640	-	1040	-	-
5000	10000	20000	32000	40000	-	-	1050	-	-	2050
6300	12500	25000	40000	50000	DH 1000	1063	-	-	2063	-
8000	16000	32000	50000	63000	-	-	-	2080	-	-
10000	20000	40000	63000	80000	-	-	2100	-	-	-
12500	25000	50000	80000	100000	DH 2000	2125	-	-	-	-

1) Only available in classifications M3 (1 BM), M4 (1 Am) and M5 (2m)

Selection tables

SWL	Reeving		1/1	2/2	Lifting speed 1) 2)			Reeving		2/1	4/2	Lifting speed 1) 2)		
	Size	SAA	Hook path	Hook path	m/min			Size	SAA	Hook path	Hook path	m/min		
kg		(FEM)	m	m	V1	V2	V3		(FEM)	m	m	V1	V2	V3
500	**DH 165**	M6 (3 m)	24; 38	20,6	18/4,4	28/7; 22,4/3,6	-							
630	**DH 166**	M5 (2 m)	24; 38	20,6	- -	22,4/5,6 18/3	28/7 28/4,6							
800	**DH 168**	M4 (1 Am)	24; 38	20,6	12,5/3,2 -	14,2/2,4; 18/4,4;22,4	28/7 28/4,6							
	DH 208	M5 (2 m)	20; 32	18,2	22,4 18/4,4;18/3	28/7 28/4,6	- -							
	DH 308	M7 (4 m)	24; 40	12,6; 24	16 20/3,4	25 25/4,2	32 3) 32/5,4							
1000	**DH 210**	M5 (2 m)	20; 32	18,2	18 14,2/3,6	22,4/5,6 22,4/3,6	- -	**DH 165**	M6 (3 m)	12; 19	10,3	9/2,2	14/3,5 11,2/1,8	-
	DH 310	M6 (3 m)	24;40	12,6; 24	12,5 16/2,7	20 20/3,4	32 3) 32/5,4							
	DH 410	M7 (4 m)	24;40	12,6; 24	12,5 16/2,7	20 20/3,4	32 3) 32/5,4							
1250	**DH 212**	M4 (1 Am)	20; 32	18,2	14,2 -	18/4,4 18/3	- -	**DH 166**	M5 (2 m)	12; 19	10,3	7,1/1,8	11,2/2,8 9/1,5	14/3,5 14/2,3
	DH 312	M5 (2 m)	24; 40	12,6; 24	16 16/2,7	20 20/3,4	32 3) 32/5,4							
	DH 412	M6 (3 m)	24; 40	12,6; 24	10 12,5/2,1	16 16/2,7	25 25/4,2							
	DH 512	M7 (4 m)	24; 40 80; 104	10,4; 20,4 45,2; 60,4	16 16/2,7	25 25/4,2	32 3) 32/5,4							
1600	**DH 316**	M4 (1 Am)	24; 40	12,6; 24	12,5 12,5/2,1	16 16/2,7	25 25/4,2	**DH 168**	M4 (1 Am)	12; 19	10,3	6,3/1,6 -	7,1/1,2 9/2,2; 11,2	14/3,5 14/2,3
	DH 416	M5 (2 m)	24; 40	12,6; 24	12,5 12,5/2,1	16 16/2,7	25 25/4,2	**DH 208**	M5 (2 m)	10; 16	9,1	11,2 9/2,2; 9/1,5	14/3,5 14/2,3	- -
	DH 516	M6 (3 m)	24; 40 80; 104	10,4; 20,4 45,2; 60,4	12,5 12,5/2,1	20 20/3,4	32 3) 32/5,4	**DH 308**	M7 (4 m)	12; 20	6,3; 12	8 10/1,7	12,5 12,5/2,1	16 16/2,7
	DH 616 4)	M7 (4 m)	24; 40 80; 104	10,4; 20,4 45,2; 60,4	12,5 12,5/2,1	20 20/3,4	32 3) 32/5,4							
2000	**DH 320**	M3 (1 Bm)	24; 40	12,6; 24	10 -	12,5 12,5/2	20 20/3,4	**DH 210**	M5 (2 m)	10; 16	9,1	9 7,1/1,8	11,2/2,8 11,2/1,8	- -
	DH 420	M4 (1 Am)	24; 40	-	10 -	12,5 12,5/2	20 20/3,4	**DH 310**	M6 (3 m)	12; 20	6,3; 12	6,3 8/1,3	10 10/1,7	16 16/2,7
	DH 520	M5 (2 m)	24; 40 80; 104	10,4; 20,4 45,2; 60,4	12,5 12,5/2,1	20 20/3,4	32 3) 32/5,4	**DH 410**	M7 (4 m)	12; 20	6,3; 12	6,3 8/1,3	10 10/1,7	16 16/2,7
	DH 620 4)	M6 (3 m)	24; 40 80; 104	10,4; 20,4 45,2; 60,4	10 10/1,7	16 16/2,7	25 25/4,2							
2500	**DH 525**	M4 (1 Am)	24; 40 80; 104	10,4; 20,4 45,2; 60,4	10 10/1,7	16 16/2,7	25 25/4,2	**DH 212**	M4 (1 Am)	10; 16	9,1	7,1 -	9/2,2 9/1,5	- -
	DH 625 4)	M5 (2 m)	24; 40 80; 104	10,4; 20,4 45,2; 60,4	10 10/1,7	16 16/2,7	25 25/4,2	**DH 312**	M5 (2 m)	12; 20	6,3; 12	8 8/1,3	10 10/1,7	16 16/2,7
	DH 1025	M7 (4 m)	32; 48 80; 102	14,8; 25,8 48,4; 64,8	20 20/3,4	32 3) 32/5,4	50 3) 44,8/7,4	**DH 412**	M6 (3 m)	12; 20	6,3; 12	5 6,3/1	8 8/1,3	12,5 12,5/2,1
								DH 512	M7 (4 m)	12; 20 40; 52	5,2; 10,2 22,6; 30,2	8 8/1,3	12,5 12,5/2,1	16 16/2,7
3200	**DH 532**	M3 (1 Bm)	24; 40 80; 104	10,4; 20,4 45,2; 60,4	8 -	12,5 12,5/2	20 20/3,4	**DH 316**	M4 (1 Am)	12; 20	6,3; 12	6,3 6,3/1	8 8/1,3	12,5 12,5/2,1
	DH 632 4)	M4 (1 Am)	24; 40 80; 104	10,4; 20,4 45,2; 60,4	8 -	12,5 12,5/2	20 20/3,4	**DH 416**	M5 (2 m)	12; 20	6,3; 12	6,3 6,3/1	8 8/1,3	12,5 12,5/2,1
	DH 1032	M6 (3 m)	32; 48 80; 102	16; 27 49,6; 66	16 16/2,7	25 25/4,2	36 3) 36/6	**DH 516**	M6 (3 m)	12; 20 40; 52	5,2; 10,2 22,6; 30,2	6,3 6,3/1	10 10/1,7	16 16/2,7
								DH 616 4)	M7 (4 m)	12; 20 40; 52	5,2; 10,2 22,6; 30,2	6,3 6,3/1	10 10/1,7	16 16/2,7
4000								**DH 320**	M3 (1 Bm)	12; 20	6,3; 12	5 -	6,3 6,3/1	10 10/1,7
	DH 1040	M5 (2 m)	32; 48 80; 102	16; 27 49,6; 66	16 16/2,7	25 25/4,2	36 3) 36/6	**DH 420**	M4 (1 Am)	12; 20	6,3; 12	5 -	6,3 6,3/1	10 10/1,7
								DH 520	M5 (2 m)	12; 20 40; 52	5,2; 10,2 22,6; 30,2	6,3 6,3/1	10 10/1,7	16 16/2,7
								DH 620 4)	M6 (3 m)	12; 20 40; 52	5,2; 10,2 22,6; 30,2	5 5/0,8	8 8/1,3	12,5 12,5/2,1
5000	**DH 1050**	M4 (1 Am)	32; 48 80; 102	16; 27 49,6; 66	12,5 12,5/2,1	20 20/3,4	32 3) 28/4,6	**DH 425**	M3 (1 Bm)	12; 20	6,3; 12	4 -	5 -	8 8/1,3
	DH 2050	M7 (4 m)	- -	13,8; 24,8 48,8	16 16/2,7	25 22,4/3,7	32 -	**DH 525**	M4 (1 Am)	12; 20 40; 52	5,2; 10,2 22,6; 30,2	5 5/0,8	8 8/1,3	12,5 12,5/2,1
								DH 625 4)	M5 (2 m)	12; 20 40; 52	5,2; 10,2 22,6; 30,2	5 5/0,8	8 8/1,3	12,5 12,5/2,1
								DH 1025	M7 (7 m)	16; 24 40; 51	8; 13,5 24,8; 33	10 10/1,7	16 16/2,7	25 22,4/3,7

Rope reeving arrangements



Optimum arrangement for each application.

In addition to the preferred 4/1 reeving, our standard range includes one, two six and eight-fall reeving.

Tandem hoists cater for heavy loads and extreme lifting heights.

Special designs are available for lifting heights or hook paths over 80 m.

Rope drums with one, two or four grooves.

The hook is centered on the 2 groove variant; rope lead-off in virtually any direction.

SWL	**Reeving**		**4/1**	Lifting speed 1) 2)		
	Size	SAA (FEM)	Hook path	m/min		
kg			m	V1	V2	V3
2000	**DH 165**	M6 (3 m)	6; 9,5	-	7/1,7 5,5/9,9	-
2500	**DH 166**	M5 (2 m)	6; 9,5	-	5,6/1,4 4,5/0,7	7/1,7 7/1,1
3200	**DH 168**	M4 (1 Am)	6; 9,5	- -	5,6 4,5/1,1-3,5/0,6	7/1,7 7/1,1
	DH 208	M5 (2 m)	5; 8	5,6 4,5/1,1	7/1,7 7/1,1	- -
	DH 308	M7 (4 m)	6; 10	4 5/0,8	6,3 6,3/1	8 8/1,3
4000	**DH 210**	M5 (2 m)	5; 8	4,5 3,5/0,9	5,6/1,4 5,6/0,9	- -
	DH 310	M6 (3 m)	6; 10	3,1 4/0,6	5 5/0,8	8 8/1,3
	DH 410	M7 (4 m)	6; 10	3,1 4/0,6	5 5/0,8	8 8/1,3
5000	**DH 212**	M4 (1 Am)	5; 8	3,5 -	4,5/1,1 4,5/0,7	- -
	DH 312	M5 (2 m)	6; 10	4 4/0,6	5 5/0,8	8 8/1,3
	DH 412	M6 (3 m)	6; 10	2,5 3,1/0,5	4 4/0,6	6,3 6,3/1
	DH 512	M7 (4 m)	6; 10 20; 26	4 4/0,6	6,3 6,3/1	8 8/1,3

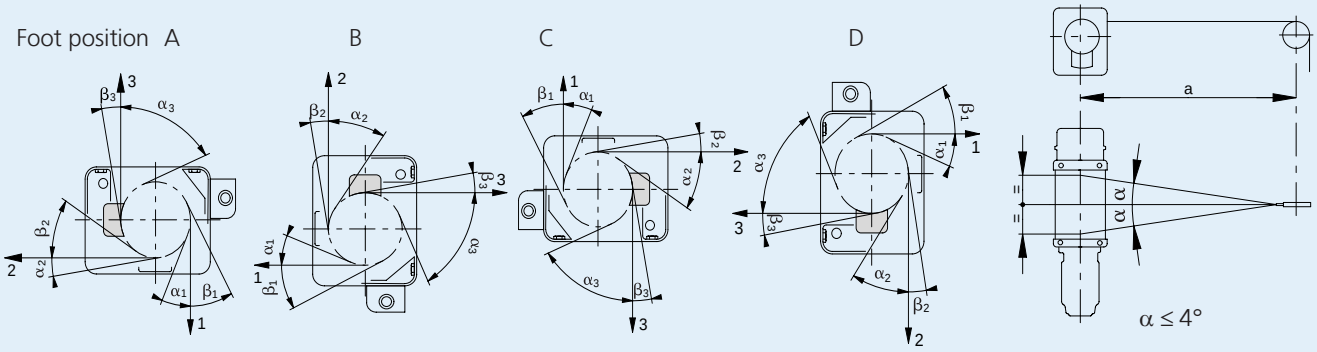
1) The 1:6 main/creep lifting speed given is achieved with a 2/12-pole motor. Creep lifting speed 1:10. Other creep lifting speeds available on request.
2) The 1:4 main/creep lifting speed given for the DH 160/200 is achieved with a pole-changing motor.
3) Lifting speeds 1/1 and 2/2 available on request.
4) DH 600 hoist units with hook paths H40 and H52 are only available in flange-mounted design FDH. EUDH, EKDH monorail travelling hoist units and EZHD, EZLD double-rail crabs on request.

The following information on the DH range is available on request:

Technical data sheets	Volume 1	203 341 44
	Volume 2	203 346 44
Component parts	DH 160	222 567 44
	DH 200	222 706 44
	DH 300	222 302 44
	DH 400	222 726 44
	DH 500	222 307 44
	DH 600	222 731 44
	DH 1000	222 312 44
	DH 2000	222 655 44
Operating instructions		
DH 160 – DH 200		214 391 44
DH 300 – DH 2000		214 286 44

Foot positions and rope lead-offs View of the main hoist motor

Foot position A B C D



SWL	Reeving		1/1	2/2	Lifting speed 1)			Reeving		2/1	4/2	Lifting speed 1)		
	Size	SAA (FEM)	Hook path	Hook path	m/min			Size	SAA (FEM)	Hook path	Hook path	m/min		
kg			m	m	V1	V2	V3			m	m	V1	V2	V3
6300	**DH 1063**	M3 (1 Bm)	32; 48 80; 102	16; 27 49,6; 66	10 -	16 16/2,7	24,2 22,4/3,6	**DH 532**	M3 (1 Bm)	12; 20 40; 52	5,2; 10,2 22,6; 30,2	4 -	6,3 6,3/1	10 10/1,7
	DH 2063	M6 (3 m)	36; 54 94	13,8; 24,8 48,8	12,5 12,5/2,1	20 18/3	25 -	**DH 632** 2)	M4 (1 Am)	12; 20 40; 52	5,2; 10,2 22,6; 30,2	4 -	6,3 6,3/1	10 10/1,7
								DH 1032	M6 (3 m)	16; 24 40; 51	8; 13,5 24,8; 33	8 8/1,3	12,5 12,5/2,1	18 18/3
8000	**DH 2080**	M5 (2 m)	36; 54 94	13,8; 24,8 48,8	12,5 12,5/2,1	20 18/3	25 -	**DH 640** 2)	M3 (1 Bm)	12, 20 40; 52	5,2; 10,2 22,6; 30,2	3,1 -	5 5/0,8	8 8/1,3
								DH 1040	M5 (2 m)	16; 24 40; 51	8; 13,5 24,8; 33	8 8/1,3	12,5 12,5/2,1	18 18/3
10000	**DH 2100**	M4 (1 Am)	36; 54 94	13,8; 24,8 48,8	10 10/1,7	16 14,2/2,4	20 -	**DH 1050**	M4 (1 Am)	16; 24 40; 51	8; 13,5 24,8; 33	6,3 6,3/1	10 10/1,7	16 14/2,3
								DH 2050	M7 (4 m)	18; 27 47	6,9; 12,4 24,4	8 8/1,3	12,5 11,2/1,9	16 -
12500	**DH 2125**	M3 (1 Bm)	36; 54 94	13,8; 24,8 48,8	8 8/1,3	12,5 11,2/1,8	16 -	**DH 1063**	M3 (1 Bm)	16; 24 40; 51	8; 13,5 24,8; 33	5 -	8 8/1,3	12,1 11,2/1,8
								DH 2063	M6 (3 m)	18; 27 47	6,9; 12,4 24,4	6,3 6,3/1	10 9/1,5	12,5 -
16000								**DH 2080**	M5 (2 m)	18; 27 47	6,9; 12,4 24,4	6,3 6,3/1	10 9/1,5	12,5 -
20000								**DH 2100**	M4 (1 Am)	18; 27 47	6,9; 12,4 24,4	5 5/0,8	8 7,1/1,2	10 -
25000	1) The given main/creep lifting speed 1:6 is achieved with a 2/12-pole motor. See pages 13 – 15 for microspeed unit lifting speed 1:10. Other creep lifting speeds on request. 2) DH 600 hoist units with hook paths H40 and H52 are only available in flange-mounted design FDH. EUDH, EKDH monorail travelling hoist units and EZHD, EZLD double-rail crabs on request.							**DH 2125**	M3 (1 Bm)	18; 27 47	6,9; 12,4 24,4	4 4/0,6	6,3 5,6/0,9	8 -
32000														
40000														
50000														

SWL	Reeving		4/1	Lifting speed 1)			Reeving		8/2	Lifting speed 1)		
	Size	SAA (FEM)	Hook path	m/min			Size	SAA (FEM)	Hook path	m/min		
kg			m	V1	V2	V3			m	V1	V2	V3
6300	**DH 316**	M4 (1 Am)	6; 10	3,1 3,1/0,5	4 4/0,6	6,3 6,3/1						
	DH 416	M5 (2 m)	6; 10	3,1 3,1/0,5	4 4/0,6	6,3 6,3/1						
	DH 516	M6 (3 m)	6; 10 20; 26	3,1 3,1/0,5	5 5/0,8	8 8/1,3						
	DH 616 2)	M7 (4 m)	6; 10 20; 26	3,1 3,1/0,5	5 5/0,8	8 8/1,3						
8000	**DH 320**	M3 (1 Bm)	6; 10	2,5 -	3,1 3,1/0,5	5 5/0,8						
	DH 420	M4 (1 Am)	6; 10	2,5 -	3,1 3,1/0,5	5 5/0,8						
	DH 520	M5 (2 m)	6; 10 20; 26	3,1 3,1/0,5	5 5/0,8	8 8/1,3						
	DH 620 2)	M6 (3 m)	6; 10 20; 26	2,5 2,5/0,4	4 4/0,6	6,3 6,3/1						
10000	**DH 425**	M3 (1 Bm)	6; 10	2 -	2,5 -	4 4/0,6	**DH 1025**	M7 (4 m)	4;6,7; 12,4;16,5	5 5/0,8	8 8/1,3	12,5 11,2/1,8
	DH 525	M4 (1 Am)	6; 10 20; 26	2,5 2,5/0,4	4 4/0,6	6,3 6,3/1						
	DH 625 2)	M5 (2 m)	6; 10 20; 26	2,5 2,5/0,4	4 4/0,6	6,3 6,3/1						
	DH 1025	M7 (4 m)	8; 12 20; 25,5	5 5/0,8	8 8/1,3	12,5 11,2/1,8						
12500	**DH 532**	M3 (1 Bm)	6; 10 20; 26	2 -	3,1 3,1/0,5	5 5/0,8	**DH 1032**	M6 (3 m)	4;6,7; 12,4;16,5	4 4/0,6	6,3 6,3/1	9 9/1,5
	DH 632 2)	M4 (1 Am)	6; 10 20; 26	2 -	3,1 3,1/0,5	5 5/0,8						
	DH 1032	M6 (3 m)	8; 12 20; 25,5	4 4/0,6	6,3 6,3/1	9 9/1,5						
16000	**DH 640** 2)	M3 (1 Bm)	6; 10 20; 26	1,6 -	2,5 2,5/0,4	4 4/0,6	**DH 1040**	M5 (2 m)	4;6,7; 12,4;16,5	4 4/0,6	6,3 6,3/1	9 9/1,5
	DH 1040	M5 (2 m)	8; 12 20; 25,5	4 4/0,6	6,3 6,3/1	9 9/1,5						
20000	**DH 1050**	M4 (1 Am)	8; 12 20; 25,5	3,1 3,1/0,5	5 5/0,8	8 7/1,1	**DH 1050**	M4 (1 Am)	4;6,7; 12,4;16,5	3,1 3,1/0,5	5 5/0,8	8 7/1,1
	DH 2050	M7 (4 m)	9; 13,5 23,5	4 4/0,6	6,3 5,6/0,9	8 -	**DH 2050**	M7 (4 m)	3,4;6,1; 12,1	4 4/0,6	6,3 5,6/0,9	8 -
25000	**DH 1063**	M3 (1 Bm)	8; 12 20; 25,5	2,5 -	4 4/0,6	6,3 5,6/0,9	**DH 1063**	M3 (1 Bm)	4;6,7; 12,4;16,5	2,5 -	4 4/0,6	6 5,6/0,9
	DH 2063	M6 (3 m)	9; 13,5 23,5	3,1 3,1/0,5	5 4,5/0,7	6,3 -	**DH 2063**	M6 (3 m)	3,4;6,1; 12,1	3,1 3,1/0,5	5 4,5/0,7	6,3 -
32000	**DH 2080**	M5 (2 m)	9; 13,5 23,5	3,1 3,1/0,5	5 4,5/0,7	6,3 -	**DH 2080**	M5 (2 m)	3,4; 6,1;12,1	3,1 3,1/0,5	5 4,5/0,7	6,3 -
40000	**DH 2100**	M4 (1 Am)	9; 13,5 23,5	2,5 2,5/0,4	4 3,6/0,6	5 -	**DH 2100**	M4 (1 Am)	3,4; 6,1;12,1	2,5 2,5/0,4	4 3,6/0,6	5 -
50000	**DH 2125**	M3 (1 Bm)	9; 13,5 23,5	2 2/0,3	3,1 2,8/0,4	4 -	**DH 2125**	M3 (1 Bm)	3,4; 6,1;12,1	2 2/0,3	3,1 2,8/0,4	4 -

SWL	Reeving		6/1	Lifting speed 1)			Reeving		8/1	Lifting speed 1)		
	Size	SAA (FEM)	Hook path	m/min			Size	SAA (FEM)	Hook path	m/min		
kg			m	V1	V2	V3			m	V1	V2	V3
10000												
12500	**DH 520**	M5 (2 m)	6,6; 13,3; 17,3	2 2/0,3	3,3 3,3/0,5	5,3 5,3/0,9						
16000	**DH 525**	M4 (1 Am)	6,6; 13,3; 17,3	1,6 1,6/0,2	2,6 2,6/0,4	4,1 4,1/0,7	**DH 520**	M5 (2 m)	3; 5; 10; 13	1,5 1,5/0,2	2,5 2,5/0,4	4 4/0,6
20000	**DH 532**	M3 (1 Bm)	6,6; 13,3; 17,3	1,3 -	2 2/0,3	3,3 3,3/0,5	**DH 525**	M4 (1 Am)	3; 5; 10; 13	1,2 1,2/0,2	2 2/0,3	3,1 3,1/0,5
25000	**DH 1040**	M5 (2 m)	5,3; 8; 13,3; 17	2,6 2,6/0,4	4,1 4,1/0,7	6 6/1	**DH 532**	M3 (1 Bm)	3; 5; 10; 13	1 -	1,5 1,5/0,2	2,5 2,5/0,4
32000	**DH 1050**	M4 (1 Am)	5,3; 8; 13,3; 17	2 2/0,3	3,3 3,3/0,5	5,3 4,6/0,8	**DH 1040**	M5 (2 m)	4; 6; 10; 12,7	2 2/0,3	3,1 3,1/0,5	4,5 4,5/0,7
40000	**DH 1063**	M3 (1 Bm)	5,3; 8; 13,3; 17	1,6 -	2,6 2,6/0,4	4 3,7/0,6	**DH 1050**	M4 (1 Am)	4; 6; 10; 12,7	1,5 1,5/0,2	2,5 2,5/0,4	4 3,5/0,6
50000	**DH 2080**	M5 (2 m)	6; 9; 15,7	2 2/0,3	3,3 3/0,5	4,1 -	**DH 1063**	M3 (1 Bm)	4; 6; 10; 12,7	1,2 -	2 2/0,3	3 2,8/0,4
63000	**DH 2100**	M4 (1 Am)	6; 9; 15,7	1,6 1,6/0,2	2,6 2,4/0,4	3,3 -	**DH 2080**	M5 (2 m)	4,5; 6,8; 11,8	1,5 1,5/0,2	2,5 2,3/0,4	3,1 -
80000	**DH 2125**	M3 (1 Bm)	6; 9; 15,7	1,3 1,3/0,2	2 1,9/0,3	2,6 -	**DH 2100**	M4 (1 Am)	4,5; 6,8; 11,8	1,2 1,2/0,2	2 1,8/0,3	2,5 -
100000							**DH 2125**	M3 (1 Bm)	4,5; 6,8; 11,8	1 1/0,1	1,6 1,4/0,2	2 -

For innovative solutions and unusual requirements

Demag DH hoist units are not designed for conventional lifting operations for cranes and monorails alone, but are also ideal for special applications.
Whether high up in the mountains or just above sea level, in the rough environment of a casting shop or in the refined surroundings of a concert hall, for rugged power-lifting or for sensitive handling – you can always rely on Demag DH hoist units.

31956


46939


34473


32345


28810


28522


28149


32328


26980

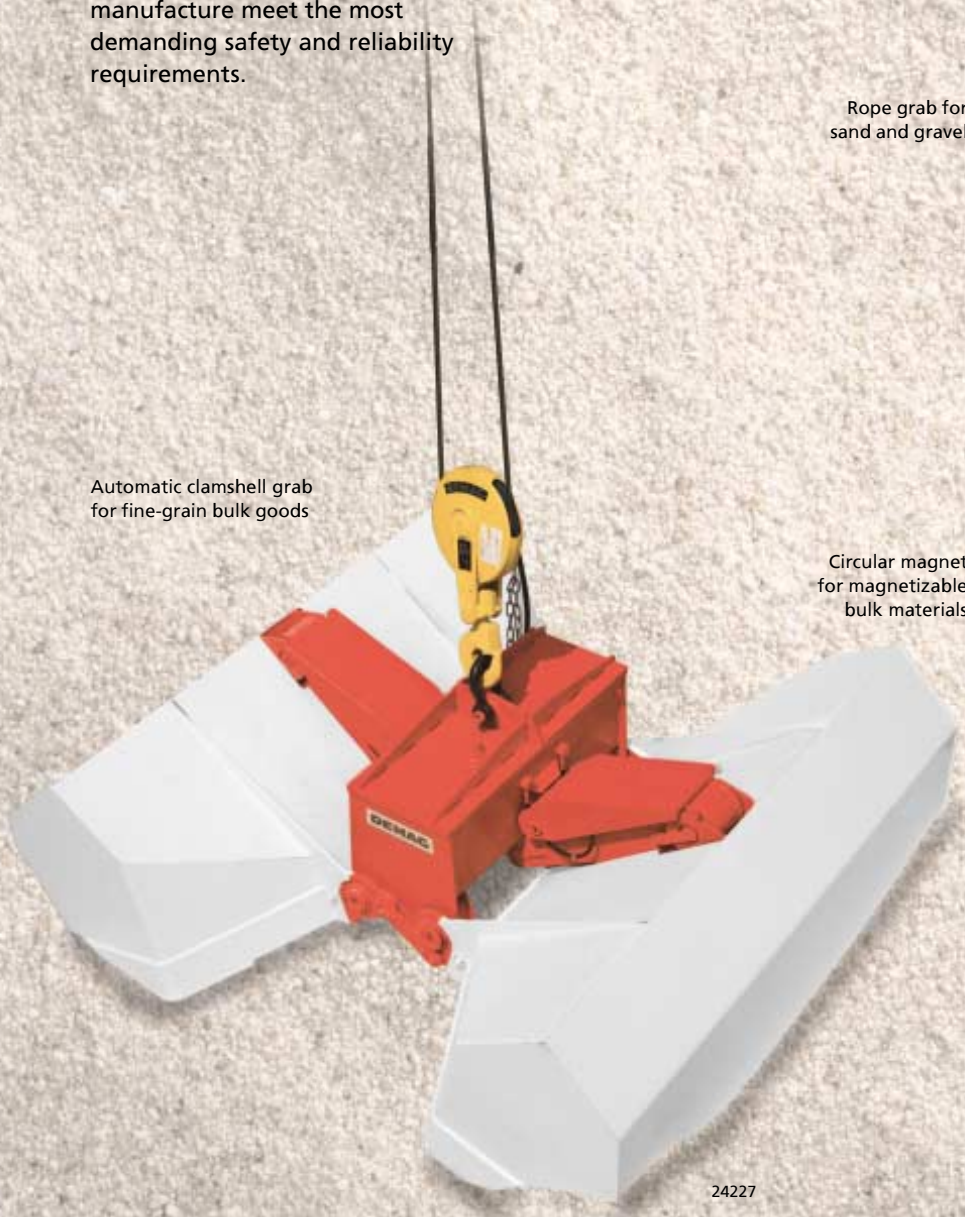
The right load handling attachment for every load

With a comprehensive range of load handling attachments, we can supply you with exactly the right solution for a wide variety of bulk materials and unit loads. Our load handling attachments not only help to increase process efficiency, they also improve the working conditions.
Our load handling attachments require a minimum of maintenance and their design and quality of manufacture meet the most demanding safety and reliability requirements.

Powered multiple shell grab for awkward and bulky loads

Rope grab for sand and gravel

Automatic clamshell grab for fine-grain bulk goods



Circular magnet for magnetizable bulk materials

Telescoping magnet spreader for sheet and plate metal

After-sales service all over the world

In more than 100 subsidiaries and agencies and several hundred service stations, our specialists can offer you help and advice in any situation. As qualified technicians, they can carry out the prescribed inspections and any repairs which may be necessary, as required.

Spare parts kept in stock all over the world can be called up via our data network at any time and shipped at short notice.

With a comprehensive training program, we offer product familiarisation courses and workshops for our customers' employees tailored to their specific needs.

DEMAG Service

Fax service

+49 2335/922655

Project engineering sheet Demag DH hoists

Please send a quote to

Company

P.O. Box/Road

Town or city/Post code

Contact

Telephone/extension

Telefax

Demag Cranes & Components GmbH
Dept. 1216 DH Product Promotion
P.O. Box 67

D-58286 Wetter

Load capacity _____ kg

FEM Group (if known) FEM _____

If you do not know the FEM Group, please specify the type of application (e.g. workshop, production or similar)

Actual operating time of the hoist per day _____ hours

Lifting height _____ m

Hoist speed _____ m/min

Creep lifting by means of a pole-changing hoist motor ☐ Yes ☐ No

Creep lifting by means of a separate hoist motor ☐ Yes ☐ No

Infinitely variable lifting speed by means of an inverter ☐ Yes ☐ No

Hoist and trolley design

Stationary hoist unit ☐ Yes ☐ No

Standard-headroom monorail hoist ☐ Yes ☐ No

Low-headroom monorail hoist ☐ Yes ☐ No

Travel girder profile (flange width) _____

Double-rail crab: Track gauge _____ mm

Travel speed _____ m/min

Creep travel speed ☐ Yes ☐ No

Electrical equipment

Operating voltage _____ V _____ Hz

Contactor control _____ Yes _____ No

Control voltage _____ V _____ Hz

Options: Remote control ☐ Yes ☐ No

Cabin control ☐ Yes ☐ No

Special ambient operating conditions
(e.g. operation indoors or outdoors, ambient temperatures, operation in a galvanizing facility or similar)

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