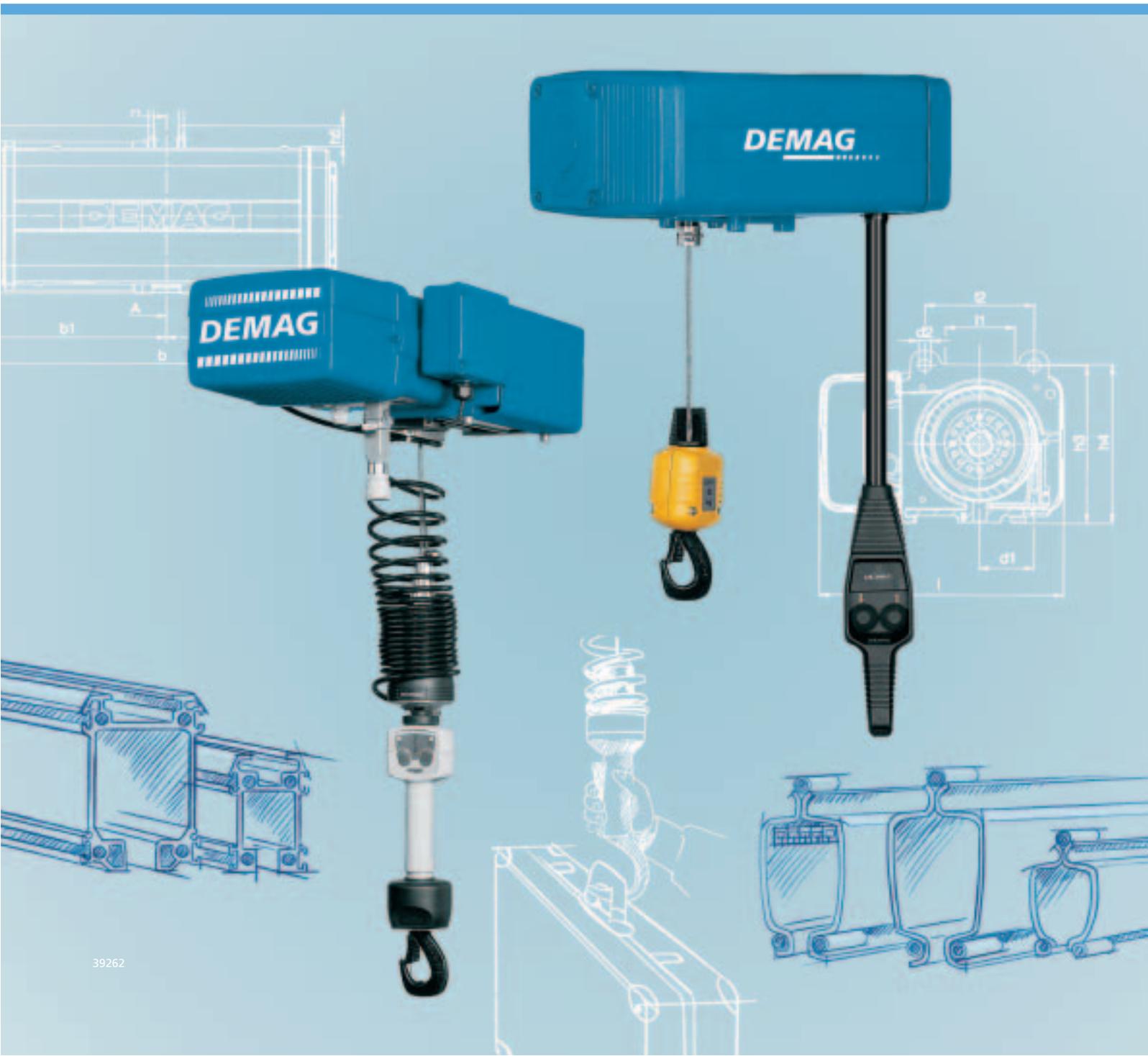


D-SH SpeedHoist electric rope winch | Fast and gentle
D-BP pneumatic rope balancer | load handling



If just lifting and lowering is not enough

Many workplace situations demand more than just the ability to lift and lower loads. Speed is also frequently required, e.g. for handling goods in a logistics centre or handling workpieces in specified cycles in series production.

The new Demag SpeedHoist electric rope winch is particularly suitable for such applications. With a hoist speed of up to 70 m/min, it provides for fast and simple load handling.

Particularly sensitive load handling and precise guidance and positioning may also be required in another part of the workshop.



For serving machinery with sensitive workpieces or at assembly stations where heavy multi-purpose power tools have to be brought into position, for example.

The pneumatic rope balancer is simply the optimum solution for these requirements. It can raise or lower your workpieces or tools to the right height to enable you to position them carefully and precisely by hand.

Both hoists enable you to achieve a particularly ergonomic, labour-saving and fatigue-free workplace and reduce the risk of absenteeism due to accidents and work-related injuries. They can be used to improve assembly precision and therefore enhance the quality of your products.





D-SH SpeedHoist electric rope winch

– fast, convenient and precise load handling

An electric rope winch that performs handling sequences as quickly and as precisely as you wish with loads weighing up to 80 or 160 kg: That is the Demag D-SH SpeedHoist.

It lives up to its name with infinitely variable hoist speeds up to 70 m/min. Because that is often not all that is required, its dynamics (speed and acceleration) can be adjusted to meet individual needs – simply by means of rotary coding switches, programming device or PC.

Two different operating handles are available to meet the particular requirements of your application.

Manual force control

This is always the right choice whenever you want to control the hoist while it is motion without having to press a button. You move the handle up or down or with your hand and the attached load follows at the required speed.

Using this control system, you can also select between two different maximum speeds by pressing a button.

The operating handle of the manual force control system, the so-called D-Grip, is fitted with a quick-change coupling as standard, enabling various load handling attachments to be changed quickly and easily.



The rocker switch

The benefits of this control handle come into play whenever goods have to be picked up quickly and easily from different positions. Slim and without any protruding contours, you can directly guide the integrated hook with great precision.

The infinitely variable hoist speed is controlled by means of the rocker switch.

Thanks to its control ratio of 1:100, the maximum speed setting can be adjusted to meet demanding requirements, with a minimum possible speed of 0.7 m/min for a maximum speed of 70 m/min, for example. Load handling is not only fast, but also particularly gentle when loads are deposited, for example.

This control handle can also be fitted with the quick-change coupling. This enables a variety of load handling attachments to be used to meet changing requirements at the workplace.



Safety for the operator, the load and the workplace is ensured thanks to cut-off by the SpeedHoist at the highest and lowest lifting positions and in the event of an overload.

Components from the proven Demag KBK crane construction kit can, of course, also be combined with the SpeedHoist to create virtually any conceivable monorail or suspension crane design.

Further SpeedHoist features include:

- integrated elapsed operating time counter to help plan maintenance intervals
- diagnostics support in the event of malfunctions – the flashing code in the handle as well as the error memory (can be read out using an operating terminal) indicate possible errors
- free digital output configuration to control external devices



Ideal for handling at airports

SpeedHoist units can be used for significantly improved ergonomics when handling loads, from single items to baggage. The rocker switch is particularly suitable for these applications. Personnel are relieved of arduous work, enabling absenteeism due to illness and injuries to be reduced significantly.



D-BP pneumatic rope balancer

– Easier handling with higher precision

Decisive benefits

Featuring unsurpassed functionality, rope balancers facilitate load handling and offer

- precise and smooth positioning
- effortless handling
- individual guidance

Further typical benefits of rope balancer units are:

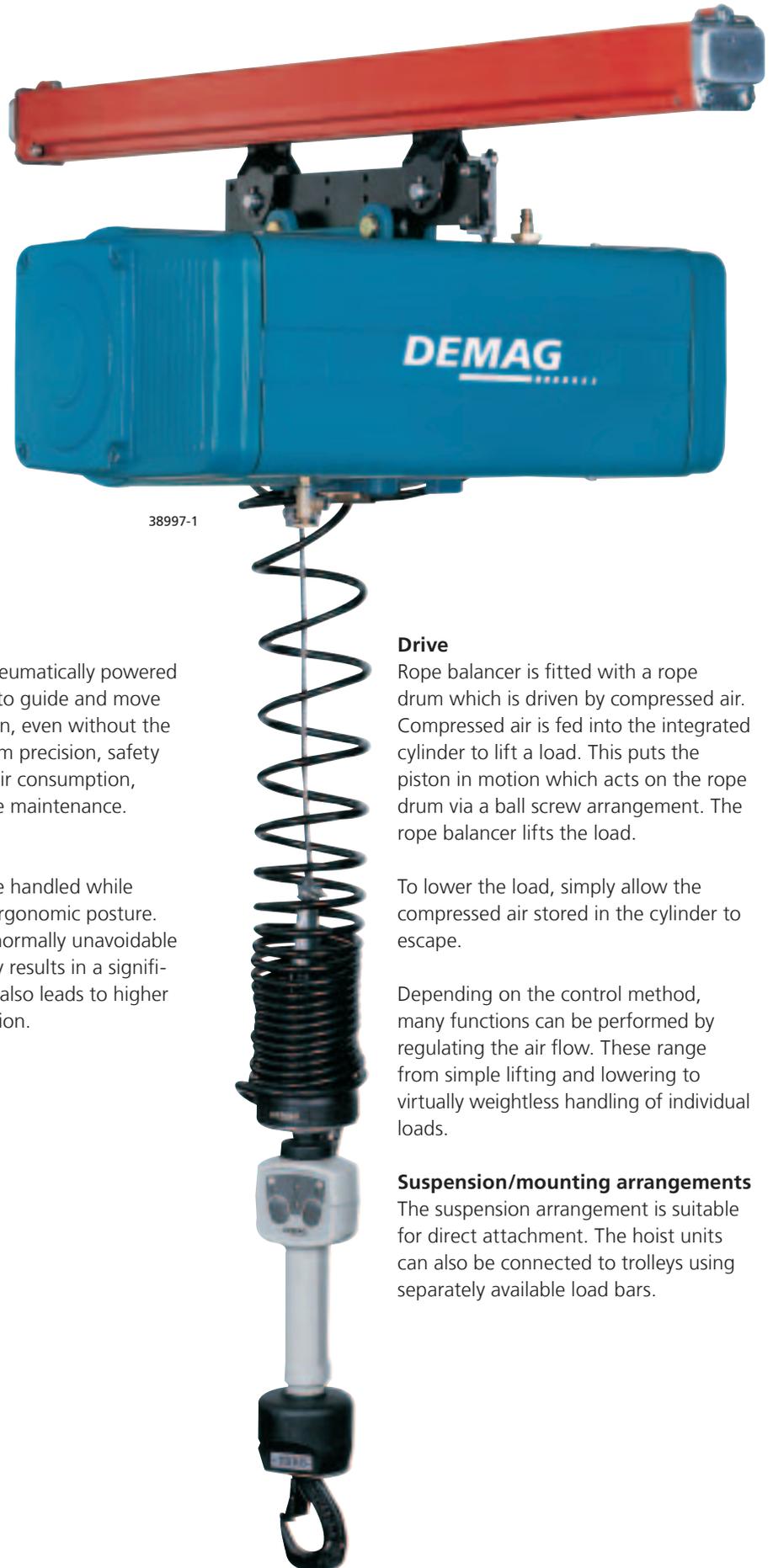
- simple adjustment
- low operating costs
- minimum time requirement
- reliable operation
- short work cycles
- numerous variants
- customer-specific manufacture
- high flexibility
- great versatility

Most advanced balancer system

The rope balancer is the most advanced pneumatically powered balancer system available. Use this system to guide and move your loads effortlessly into an exact position, even without the need for a control pendant – with maximum precision, safety and reliability. With only low compressed air consumption, they are quiet, robust and require very little maintenance.

Outstanding ergonomics

Using a rope balancer unit, any load can be handled while the operator adopts the most favourable ergonomic posture. This prevents back strain and cramps and normally unavoidable muscular and skeletal injuries. This not only results in a significant reduction of the physical burden, but also leads to higher productivity and greater employee motivation.



Drive

Rope balancer is fitted with a rope drum which is driven by compressed air. Compressed air is fed into the integrated cylinder to lift a load. This puts the piston in motion which acts on the rope drum via a ball screw arrangement. The rope balancer lifts the load.

To lower the load, simply allow the compressed air stored in the cylinder to escape.

Depending on the control method, many functions can be performed by regulating the air flow. These range from simple lifting and lowering to virtually weightless handling of individual loads.

Suspension/mounting arrangements

The suspension arrangement is suitable for direct attachment. The hoist units can also be connected to trolleys using separately available load bars.



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The trolleys from the KBK crane construction kit provide for simple and fatigue-free transportation. A further connection point on the underneath of the balancer enables the unit to be permanently attached to a pivot arm, for example, which also facilitates horizontal rope lead-offs.

Cover

The robust cover protects the basic unit and controls from damage.

Controls enclosure and mounting plate

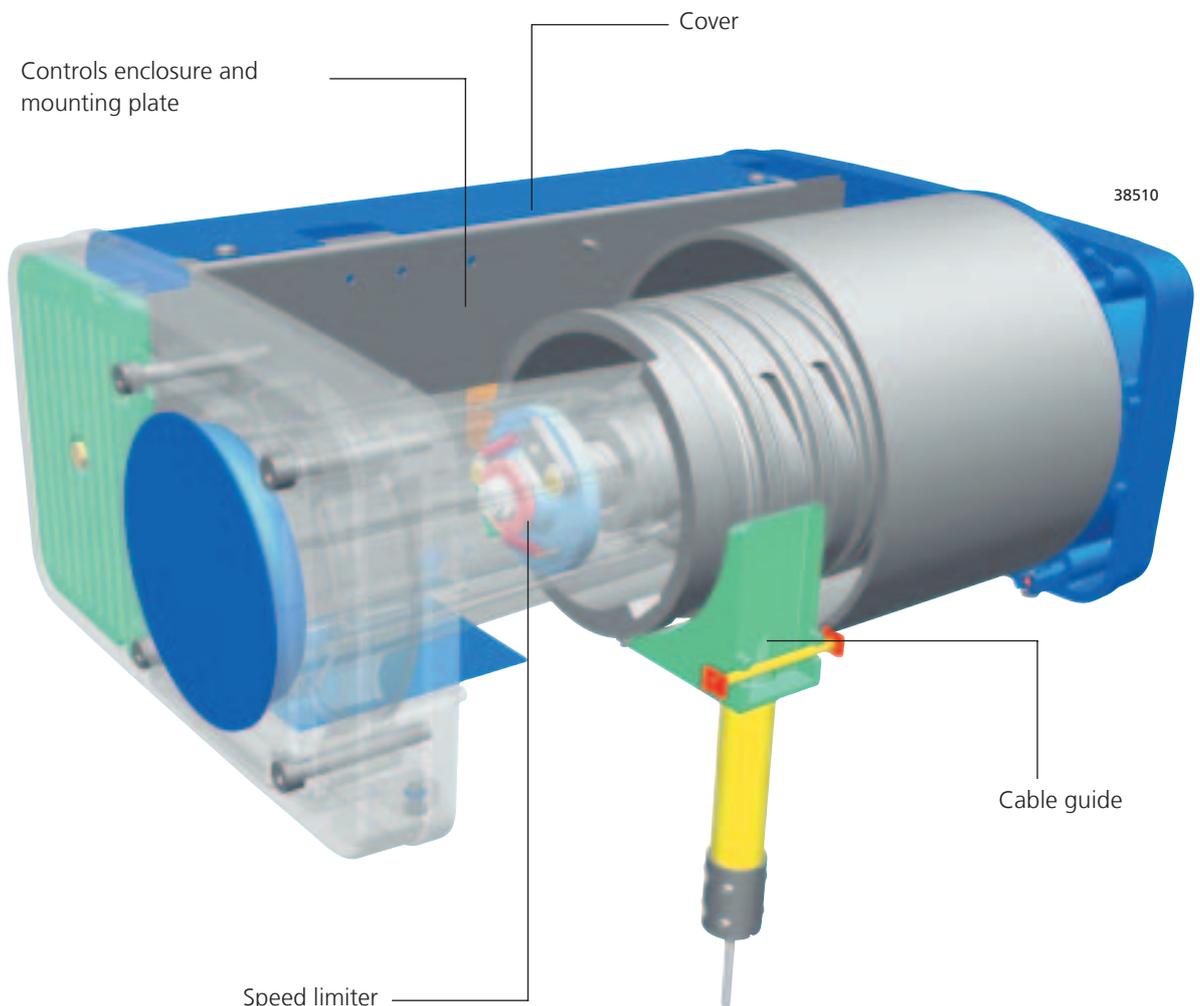
The controls enclosure provides ample space for all available control systems. A mounting plate provides for simple installation.

Cable guide

The cable always enters the unit at exactly the same position through a special cable guide. This prevents any unwanted sideways cable travel.

Speed limiter

The standard speed limiter prevents excessive upward movements if a cable fails and reduces the operating speed.



Fast, accurate and smooth handling with up/down control

Performance to meet your needs

Rope balancer units operate at lifting speeds up to 60 m/min, with a duty factor of 100 %. Depending on the model, they are suitable for loads weighing from 0 to 55 or 0 to 110 kg at 6 bar operating pressure.

Up/down control with DSK pendant

The standard rope balancer control is integrated into the ergonomically designed housing of the proven DSK control pendant. The patented valve block offers unsurpassed sensitivity for infinite control of the lifting and lowering speeds depending on how far the buttons are pressed. The great advantage of the rope balancer over chain hoists is that, when the load has been brought to a standstill, the operator can position it some ± 10 cm by hand thanks to the air cushion.

The required maximum operating speed can be simply adjusted inside the DSK housing. Naturally, this tamper-proof to prevent any manipulation.



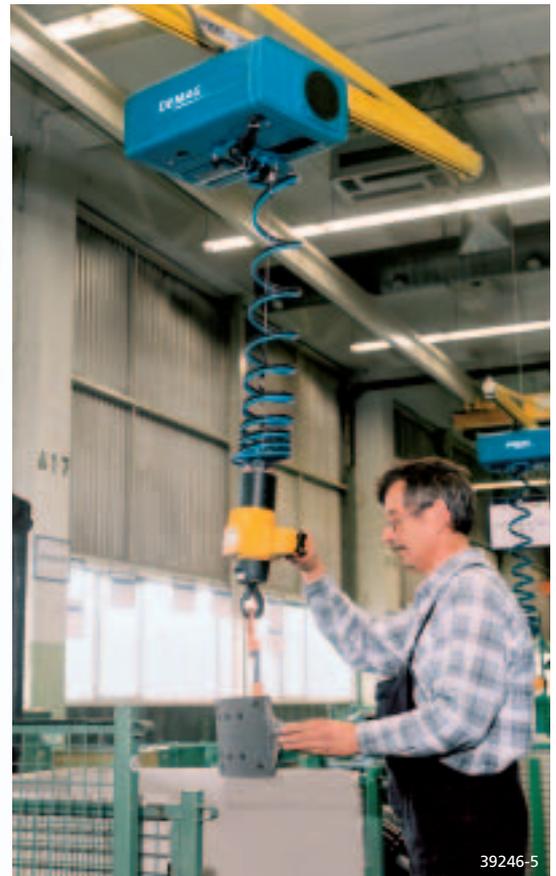
High precision and productivity

As an option together with the up/down control, the patented speed control offers even more enhanced motions. The state-of-the-art valve system smoothly controls the lifting and lowering speeds virtually independent of the load. D Balancer units enable you to achieve the most productive working speeds. Dangerous situations do not occur, neither while raising an empty hook, nor while lowering a heavy load.

Always leave a hand free

The Manulift switch enables you to guide, lift and lower loads with only one hand, leaving one hand free for turning, positioning and assembly or similar jobs.

In addition to all the benefits of the standard up/down control system, this switch can be used to guide and manually position the load on the level without any problems.



Single and dual balance controls – the right solution...

...for a constant load...

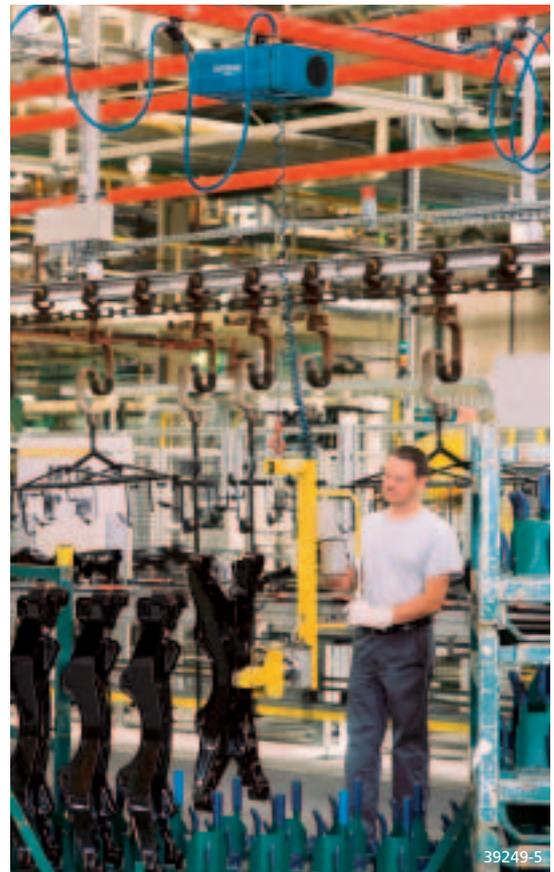
If you always have to lift the same load again and again, a rope balancer fitted with single balance control provides fast and reliable support.

It will hold a permanently attached load, such as a tool or welding gun, in perfect balance. This enables the load to be picked up effortlessly and moved to the desired position. When released after use, the tool will stay in place until needed again.



...for two alternating loads

A dual load control will keep both an empty as well as a loaded end effector or load attachment in balance. The load may be always the same, or there may be different loads that always weigh the same.



Manual force control for safe handling of any load

What is it about?

The most convenient control available for rope balancer units offers you unbeatable advantages for handling, guiding and positioning

- any load
- no adjustment required
- convenient with both hands
- independent of the weight
- minimum resistance
- follows your hand up and down
- effortless
- safe and reliable
- fast or slow
- sensitive and precise
- with intuitive control

Hands on if required

If you need to handle the load direct, manual force control can be switched to floating load control at the push of a button to enable you to guide and position the load. In this way, semi-finished products can be positioned in machinery or machine cells down to the last millimeter, for example. Parts can be positioned and connected with great precision, particularly for assembly operations.

Quick disconnect

Standardised load handling attachments can be changed effortlessly using the quick change coupling at any time. In addition, specially designed load handling attachments can be fitted using the appropriate coupling pin.

Additional safety features

Two additional safety features provide maximum safety: safety release interlock and safety lift interlock. The safety release interlock will keep loads locked in the end effector until they have been safely set down. In much the same way, the safety lift interlock will only allow other commands to be carried out when the load to be lifted is safely held.

Standard or individual control

Your rope balancer is of course fully operational when delivered. However, if necessary, a small hand-held terminal can be used to modify the control functions to meet the needs of your application at any time. Using a simple menu, you can change the rope balancer configuration to meet your needs online. Any changes, such as to the safety release, the maximum load setting or device dynamics, can be tested immediately and modified, if required.



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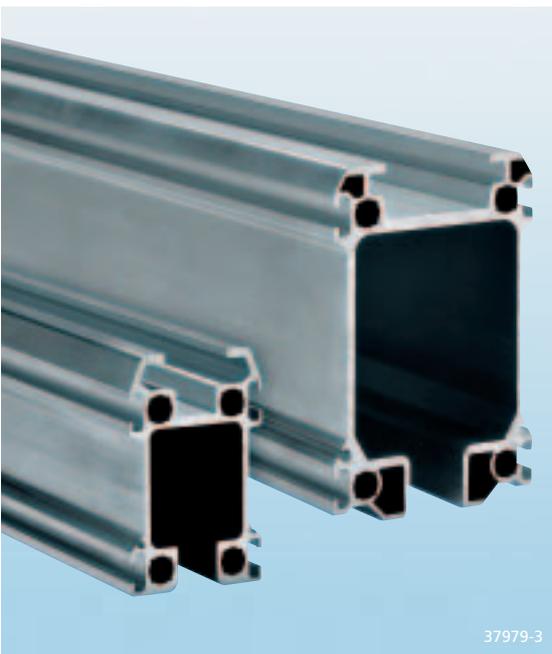


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Rope balancer and SpeedHoist integration

Demag KBK crane construction kit

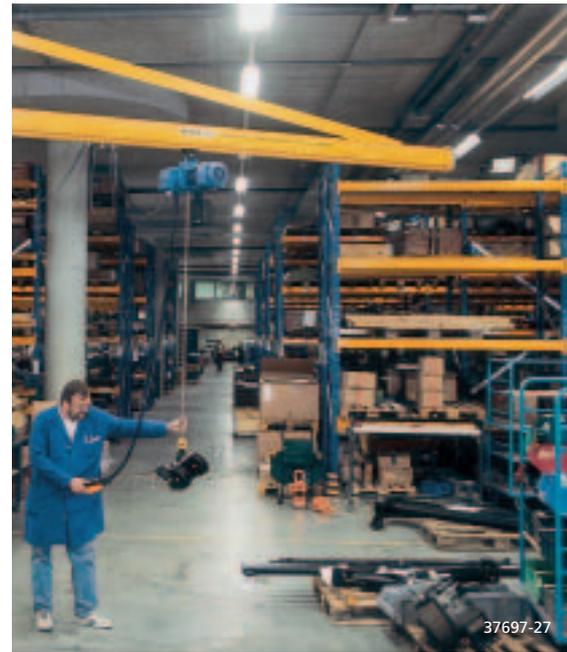
However and wherever you want to use a SpeedHoist or a rope balancer unit – the KBK crane construction kit makes it possible, simple and cost-effective. The rail system includes a wide range of steel and aluminium track sections. The possibilities are infinite: from simple designs to complex monorail systems or single and double girder suspension cranes to pillar and wall-mounted slewing jib cranes.



Trolleys featuring maintenance-free and wear-resistant trolleys ensure outstanding reliability. Special trolleys can be used together with rigid suspensions to



accommodate offset loads when using pneumatic parallelogram arms, pneumatic vertical balancers or other manipulators.



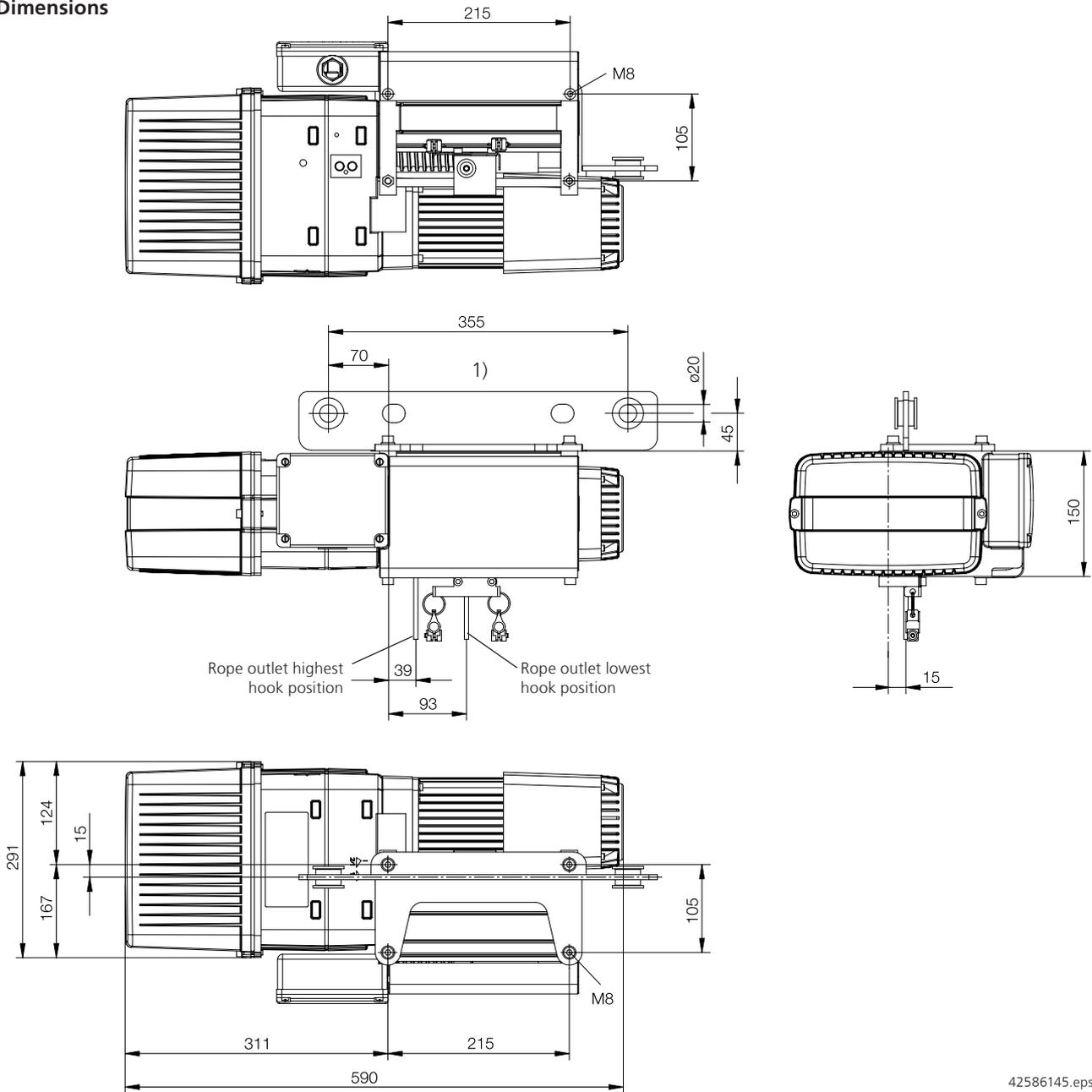
Load handling attachments to meet application requirements

The comprehensive modular system includes end effectors such as parallel and tong grippers, clamps and disc grippers as well various box grippers. All these and specially developed solutions make the SpeedHoist and the rope balancer universal tools.



Technical data – SpeedHoist

Dimensions



1) Optional load bar for KBK trolley, part no. 851 195 44

Technical data D-SH 80/D-SH 160

Load capacity	80 kg	160 kg
FEM-Group	1 Am	1 Bm
Max. lifting speed (infinitely variable)	min. 0 bis max. 70 m/min	min. 0 to max. 35 m/min
Lifting height	2,2 m	
Power supply	400 V	
Frequency	50 Hz	

Technical data – rope balancer

Selection table

Size	SWL ¹⁾ kg	Reeving	Hook path m	cable dia. mm	Weight ²⁾ kg
D-BP 55	55	1/1	2	5	14,7
D-BP 110	110				26,4

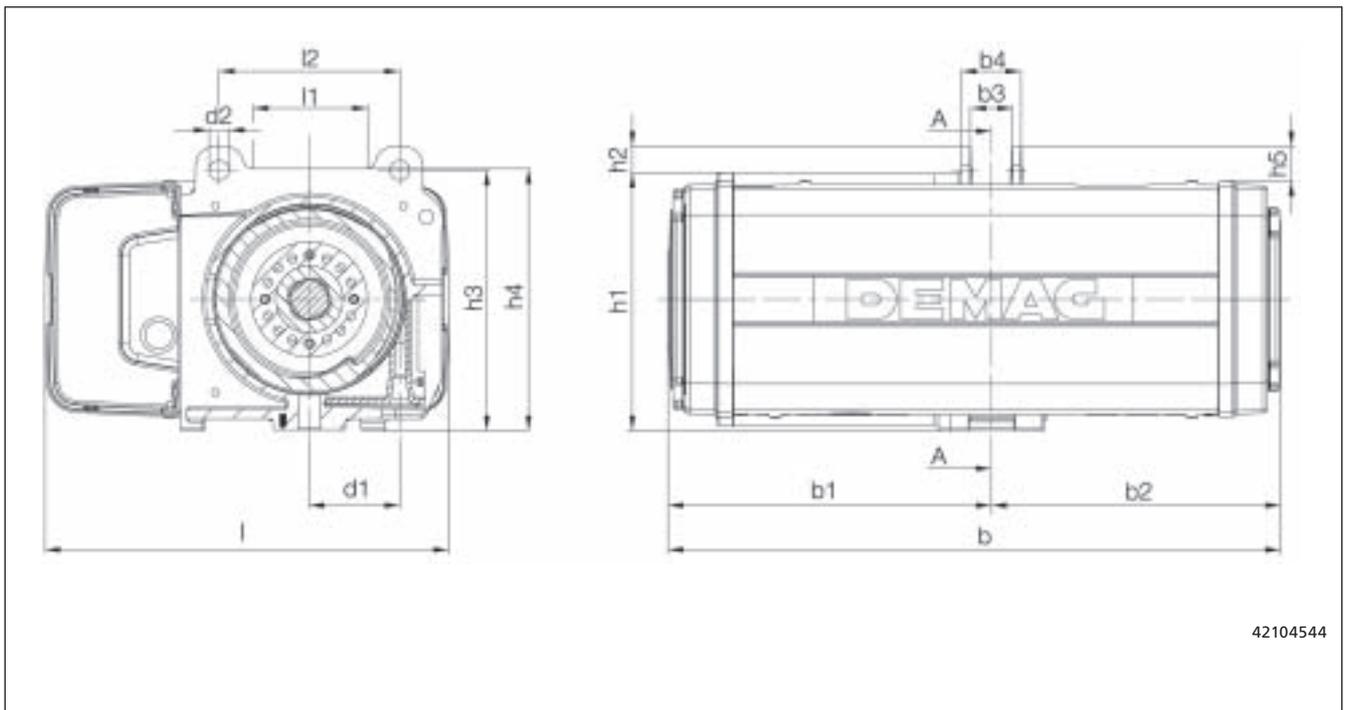
¹⁾ Rated value at 6 bar working pressure.

²⁾ with 6 m cable without pneumatic or electrical equipment

Air consumption

For one lifting motion, 1/1 reeving, 2 m lifting height and a rated pressure of 6 bar: size 55 -> 12.8 litres, size 110 -> 25.6 litres

Dimensions



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Size	b	b1	b2	b3	b4	d1	d2	h1	h2	h3	h4	h5	l	l1	l2
D-BP 55	420	205	215	35	50	75	16,5	194	25	197	199	25	305	104	150
D-BP 110	508	240	268	35	50	75	16,5	216	22	219	218	29	335	105	150

Fax-Service

+49 (0) 2335 922406

The fast way to your SpeedHoist / rope balancer and all the options

Demag Cranes & Components GmbH
Dept. 1302
P.O. Box 67

D-58286 Wetter

Please reply to:

Company

Attention of

Department

Street/P.O. Box

Town/post code

Telephone/Telefax

E-mail

Demag Cranes & Components has the right hoist for every business and every load. In order to select the best product for your individual needs from the wide variety of sizes and versions, just fill in the following fax form and send it to us or your dealer. You will promptly receive a recommended solution with the corresponding offer.

Load capacity _____ kg

- Up/down control
- Up/down control system with speed controller
- Manulift up/down control
- Single-load control
- Dual-load control
- Manual force control
- Stationary
- Mobile

SpeedHoist
Load capacity _____ kg

- Rocker switch

Planning stage

- Advance information Enquiry
- Detailed planning Order placed by _____

I require

- Consulting (Telephone _____)
- Budget offer
- Detailed quotation
- Brochures on
 - KBK classic and KBK ergo crane construction kit
 - KBK Aluline crane construction kit
 - Pillar and wall-mounted slewing jib cranes

If possible, please provide the following information:

Dimensions of the girder _____

or KBK section _____

Operating voltage _____

System pressure in bar _____

Demag – Ideas, to take your load.

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