

MPW open winch units

Strong performance ... and fully versatile

Our MPW (Multi Purpose Winch) open winch crabs are as variable as the needs that they have to meet. Individually configured from reliable system components, they also satisfy the most demanding quality requirements. Their variable configuration makes it possible to

implement the most efficient technical solution for your application. MPW open winch units can also be used for a wide variety of needs beyond typical crane applications. They feature wear-resistant components and optimum accessibility for service and maintenance.

BENEFITS OF MPW OPEN WINCH UNITS

- True vertical lift reeving arrangements from 2/2 to 24/2
- Compact dimensions:
 - Reduced drum lengths thanks to rope end attachment to side flanges
- Optimised rope drum
 - Minimum drum wear thanks to enlarged rope groove opening angle
 - Long rope service life – also under arduous conditions – thanks to plastic filling between the strands

Handling equipment for storing long material: the lifting motions are provided by MPW open winch units

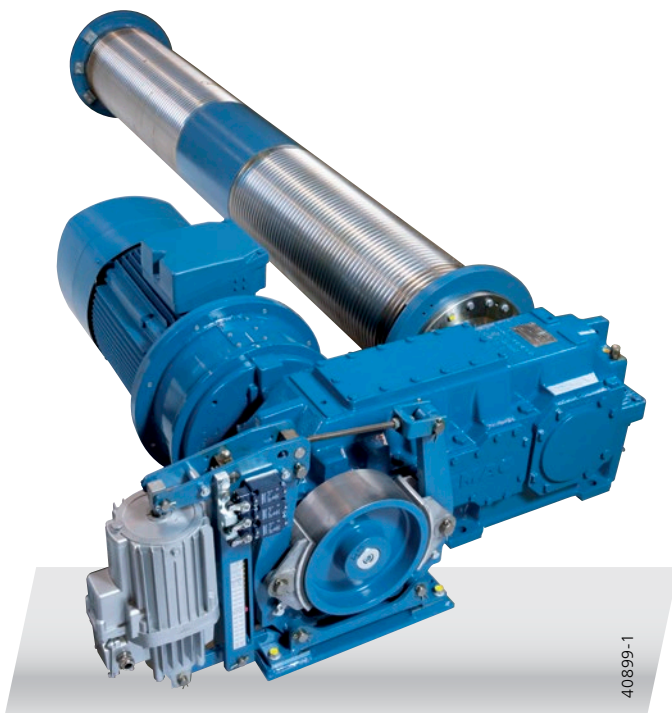


- Optimum crane approach dimensions in combination with high lifting performance: large drum diameters and small crab track gauges can be achieved thanks to hoist gearboxes with a large shaft centre distance
- Safe operation thanks to an optional second hoist brake
- Clear interfaces for ease of assembly and maintenance
- Minimum maintenance requirement and easy to service
- Short installation times thanks to pre-assembled solutions

Europe's largest video module in a multi-purpose arena in Istanbul – safely held by two MPW open winch units



Process crane equipped with a 250-tonne MPW double hoist unit on a crab and a 100-tonne MPW open winch unit

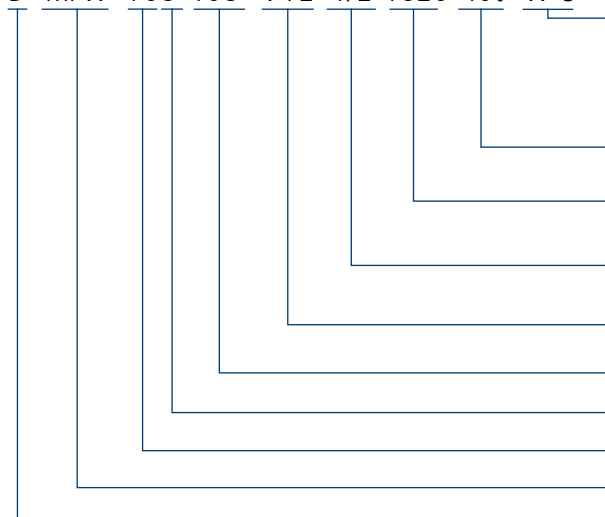


FOR SPECIAL REQUIREMENTS

- Multi-groove rope drums
- Rope lead-offs possible in many directions
- Multiple rope return arrangements
- Double hoist units
- Twin rope guide
- Rope overrun detection
- Disc brake
- Motor-driven rotating bottom blocks
- and much more

Explanation of the model code

D MPW 105-405- V12-4/2-1820-40t- W-S

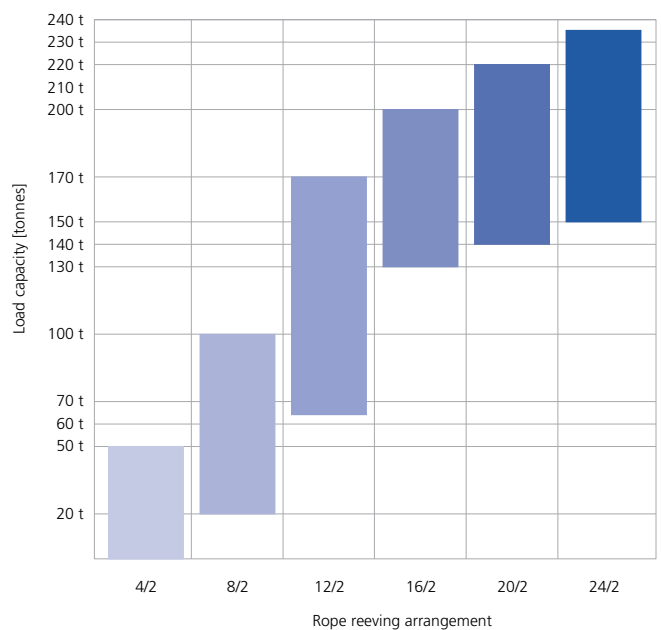


| MPW open winch unit range | |
|--|---|
| W ... open winch unit / C ... crab / S ... special | |
| Hoist output [kW] | 20 - 250 |
| Max. hook path [m] | 160 |
| Load capacity [t] | 5 - 235 470 (as a double hoist unit) |
| Distance between bearings or crab track gauge [mm] | Drum length up to 6,000 |
| Reeving arrangements | 2/2; 4/2; 8/2; 12/2; 16/2; 20/2; 24/2 |
| Max. lifting speeds [m/min] | 80 (full load) 112 (partial load) |
| Max. drum diameter [mm] | 1.200 |
| FEM/ISO classification | 1Bm-5m / M3-M8 |
| Gearbox size | 05 - 14 |
| Multi Purpose Winch | |
| Double Demag open winch | |

MPW crabs

For crab designs ready for installation

Fully equipped and assembled: you can eliminate any delivery time and interface problems with our MPW (Multi Purpose Winch) open winch crabs, which are ready to be installed.

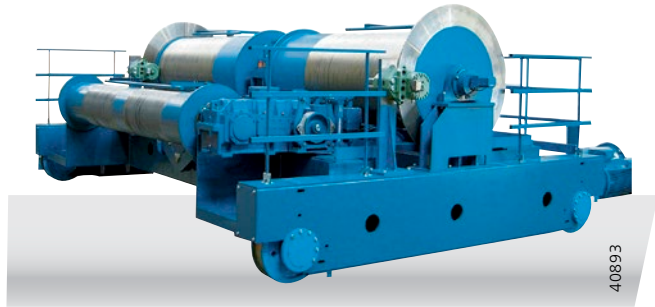


Precisely designed to meet the customer's specific requirements, MPW open winch crabs feature outstanding benefits:

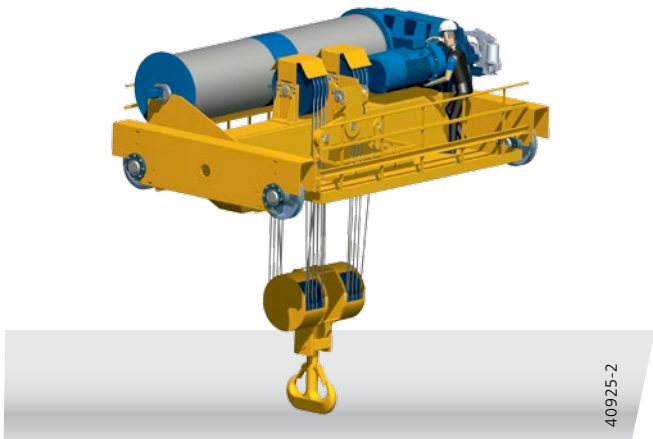
- Few connection interfaces (drum, gearbox, motor and brake and steelwork form a unit)
- Crab frame of welded steel design
- Optimum weight and torsionally rigid design
- Travel wheels largely wear-free
- Proven travel unit design used in our crane and crab end carriages
- Minimised transport costs thanks to modular design
- Bolted crossbeam connection
- Can be shipped as a complete unit by container

SIMPLE ASSEMBLY, CONVENIENT MAINTENANCE

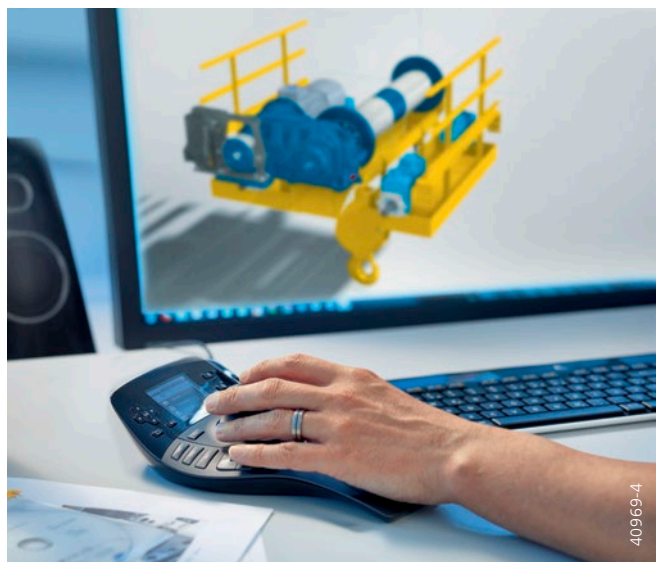
- Mechanically fully pre-assembled for immediate commissioning
- Minimum assembly requirement
- Maintenance-friendly design thanks to good accessibility to the individual components
- Accessible crab frame with foot rails and railing



32-t-MPW auxiliary hoist on a 120-t crab for a casting crane



32-tonne MPW crab with special switchgear cabinet fitting



Order-specific design with 3D CAD tools: a wealth of experience in reliable order processing and project engineering to meet individual requirements

Corner-bearing end carriages

You need more than just wheels ...

Our corner-bearing end carriages are versatile, modular rail-mounted travel units of torsionally rigid box-section design. They can be connected direct to load-bearing superstructures – for cranes or crabs.

FURTHER BENEFITS

- precise single or double-girder design with up to four travel wheels
- can be configured for all load capacity ranges
- optimised design of the entire crane system
- convenient adjustment and maintenance
- save time for handling during assembly

OUTSTANDING PERFORMANCE

- Travel wheels made of high-quality spheroidal-graphite cast iron for low operating noise
- High resistance to wear
- Buffer options (hydraulic, cellular plastic and rubber buffers)
- Tandem end carriages with diaphragm joint

INDIVIDUAL SOLUTIONS

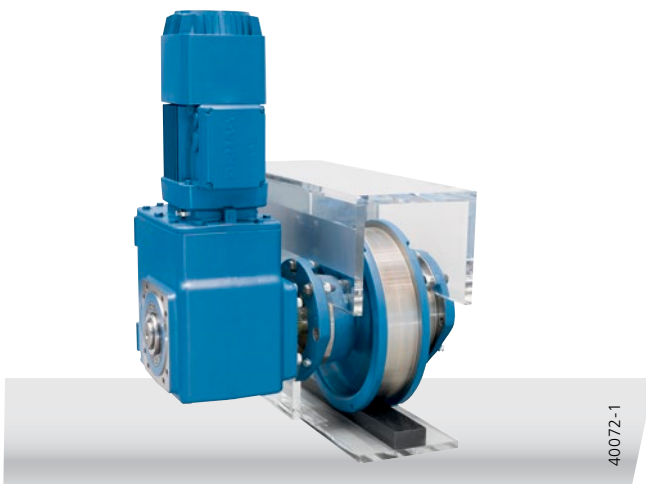
- Drive option with two or four driven travel wheels
- Wheel solutions with diameters from 250 to 630 mm

CONVENIENT ASSEMBLY

- Direct connection to the crane girder – with one or two machined connection surfaces depending on the design
- Simple maintenance and adjustment thanks to corner-bearing wheel sets that can be rolled out of the girder
- No additional components need to be removed and no special tools are needed

LOW-MAINTENANCE DRIVES

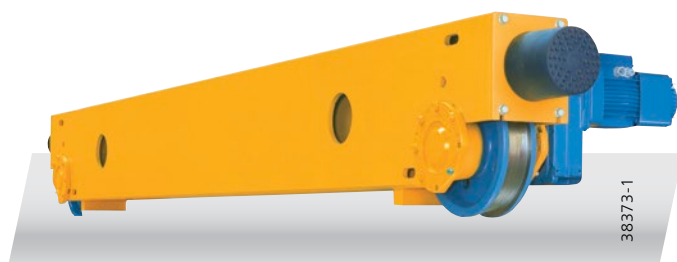
- Compact, matching ZBA motors and A gearboxes
- Direct splined-profile connection to the travel wheel shaft (easy to remove)
- Flexible torque-load connection to the end carriage thanks to elastic torque arm
- Low-noise operation thanks to ground helical gear wheels running in an oil bath



Power and precision: Demag drives to meet the most demanding quality requirements. Space-saving combination of Demag angular geared motor and DWS wheel set

... our KTL end carriages offer you outstanding solutions

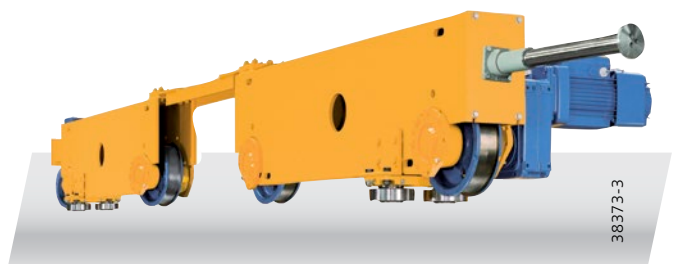
Corner-bearing end carriages provide flexibility. Two or four wheels can be driven, as required. You also have the same flexible choice between cellular foam, rubber or hydraulic buffers.



KTL-EZ end carriage
Double-girder end carriage with two travel wheels



KTL-EE end carriage
Single-girder end carriage with two travel wheels

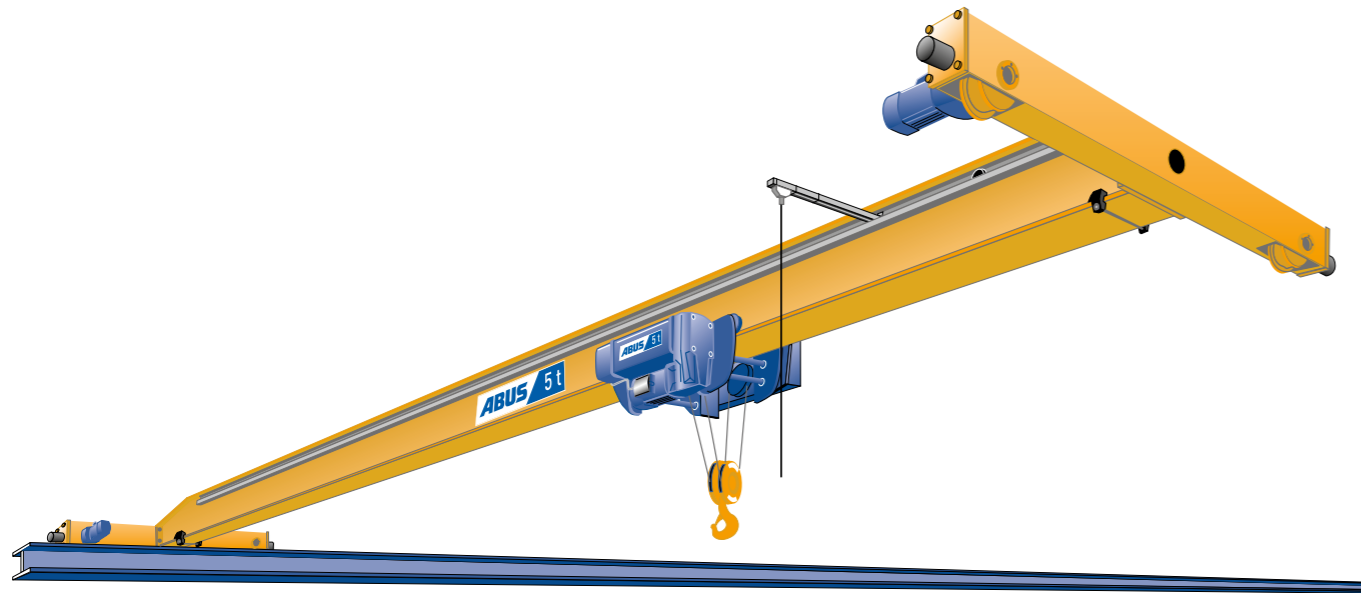


KTL-ET end carriage
Double-girder end carriage with four travel wheels and guide rollers. The two travel units are connected to each other by means of a diaphragm joint.

KTL END CARRIAGES

| End carriage types | Travel wheel type | Travel wheel dia. | Inside wheel base [mm] | | Outside wheel base [mm] | |
|--------------------|-------------------|-------------------|------------------------|-------|-------------------------|--------|
| | | | min. | max. | min. | max. |
| KTL-RE | DRS wheel blocks | 160 | 1.500 | 7.000 | - | - |
| KTL-RZ | | 200 | 2.500 | 7.000 | - | - |
| KTL-RT | | 250 | 690 | 2.500 | 4.345 | 18.000 |
| | | 315 | | | | |
| KTL-EE | DWS wheel sets | 400 | 1.500 | 7.000 | - | - |
| KTL-EZ | | 500 | 2.500 | 7.000 | - | - |
| KTL-ET | | 630 | 4.000 | 4.800 | 18.000 | |
| | | | | | | |

A HIGH-PROFILE SOLUTION FOR LOW BUILDINGS

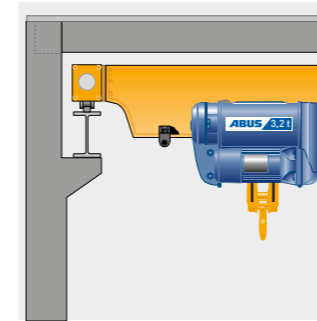


| Model | Load capacity [t] | Max. span [m] |
|---|-------------------|---------------|
| ELV single girder overhead travelling crane with rolled section girder | up to 5 | 18,5 |
| | up to 6,3 | 17,5 |
| | up to 8 | 17 |
| | up to 10 | 15 |
| ELK single girder overhead travelling crane with welded box girder | up to 5 | 29,5 |
| | up to 10 | 27,5 |
| | up to 16 | 22 |
| ELS single girder torsion box crane with side-mounted hoist unit | up to 6,3 | 39 |
| | up to 8 | 35 |
| | up to 10 | 34 |

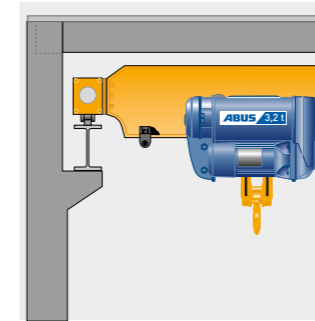
MAIN GIRDER CONNECTION VERSIONS TO SUIT FACTORY CONDITIONS



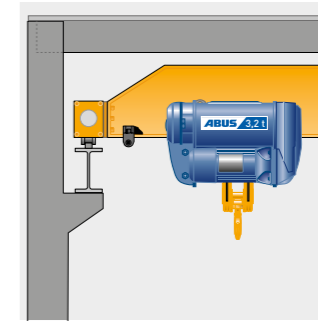
for ELV and ELK



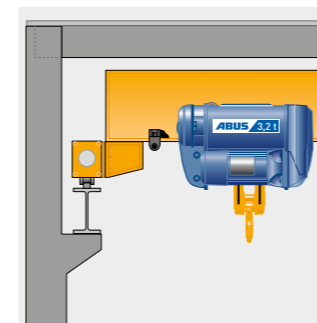
Stooled down configuration Version 1



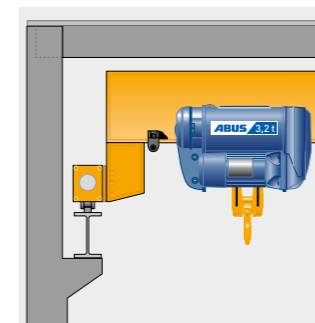
Stooled down configuration Version 2



Standard main girder connection configuration Version 3

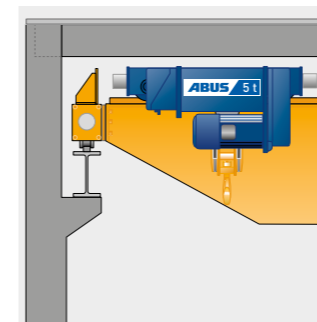


Stooled up configuration Version 4

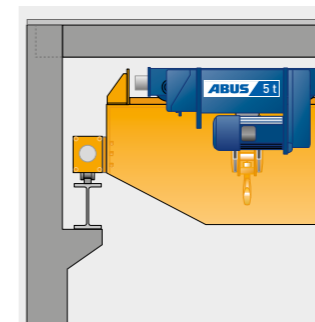


Stooled up configuration Version 5

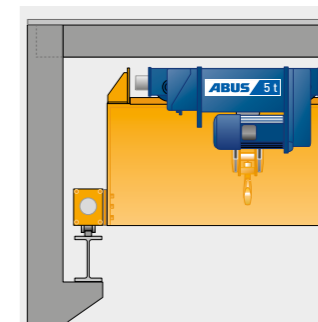
for ELS



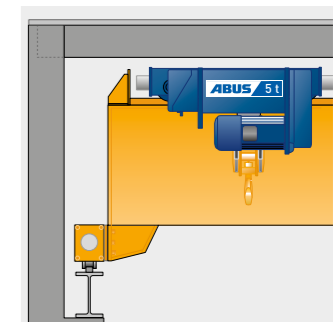
Stooled down configuration Version 1



Stooled down configuration Version 2



Standard main girder connection configuration Version 3



Stooled up configuration Version 4

ABUS ACCESSORIES: JUST WHAT YOU NEED FOR INDIVIDUAL SOLUTIONS

With the comprehensive range of accessories offered by ABUS, every ABUS overhead travelling crane can be precisely adapted to the customer's requirements, ensuring optimum performance. The range includes additional safety devices and equipment for additional functions such as electric limit switches, integrated load analysis systems, crane lighting and maintenance walkways.



The ABUS tandem control system

allows the crane operator to control two electrically coupled overhead travelling cranes at the same time. Ideally, the ABUS radio remote control system should be used in combination with the tandem control system. With this control configuration, two crane operators can control the two cranes separately, or one operator can control both cranes, either separately or together. A real safety advantage when transporting long goods with 2 cranes.



ABUS maintenance walkways

allow access to the entire length of the crane girder, bringing all the main components of the crane system within easy reach, a major prerequisite for safe and efficient maintenance work.



Load suspension devices

can be used with ABUS cranes for special material handling tasks. For example, ABUS cranes can be equipped with vacuum lifting units for lifting plates or with C-hooks for handling coils.



The ABULiner

is an effective solution when precise positioning is required with variable speed hoists. This frequency converter also allows the maximum speed to be increased above the rated speed when lifting part / reduced loads. ABULiners are also available for long and cross travel.



LED Matrix display

with three different digit sizes from 60mm to 180mm, digits, letters as well as special characters can be seen up to a reading distance of approx. 80m. Due to the small space requirement, it can be fitted to the crane in a variety of positions. Crane status displays as well as scrolling text can also be implemented.



ABUS crane lighting systems

effectively illuminate the working space under a crane, avoiding the shadows normally cast by crane girders working beneath normal factory lighting. ABUS uses highly efficient energy-saving LED lights. The number of lights, as well as their light intensity reflect customer requirements.



ABUS cross-type limit switches

limit long travel and cross travel, automatically slowing or stopping the crane or the hoist at the end of the track. These limit switches may also be applied for crane zoning if it is necessary to divert a hoist on a crane around a prohibited area. The switch is operated by a switching lug installed on the crane track or on the crane bridge.



THE ABUS RANGE AT A GLANCE



ABUS overhead travelling cranes

- Load capacity: up to 120 t
- Span: up to 42 m (depending on load capacity)
- Applications: area coverage
- Characteristics: comprehensive standard equipment and wide range of accessories to suit individual requirements



ABUS electric wire rope hoists

- Load capacity: up to 120 t
- Characteristics: compact dimensions, two lifting and travel speeds as standard feature, comprehensive standard equipment and wide range of accessories

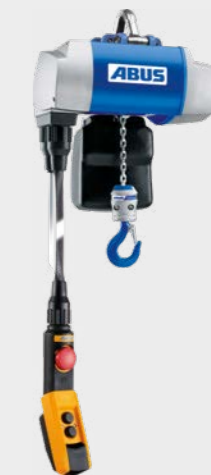
ABUS HB systems

- Load capacity: up to 2 t
- Crane girder length: up to 22 m (depending on load capacity)
- Applications: area coverage and linear handling
- Characteristics: highly versatile for adaptation to individual requirements, designed for modular extension, wide range of suspension hangers, low headroom options, comprehensive standard equipment and wide range of accessories



ABUS electric chain hoists

- Load capacity: up to 4 t
- Characteristics: low headroom configuration, two lifting speeds as standard feature, comprehensive standard equipment, ready for installation, wide range of accessories



ABUS jib cranes

- Load capacity: up to 6.3 t
- Jib length: up to 10 m (depending on load capacity)
- Applications: swept area coverage, mainly for use in loading or workbench applications
- Characteristics: slewing range up to 360° depending on model



ABUS lightweight portal cranes:

- Load capacity: up to 2 t
- Characteristics: with four stop rollers, easy to move, height and width individually adaptable