



Flexible modular principle  
for individual solutions

# HB light crane track systems

**ABUS**  
CRANE SYSTEMS

# ADVANTAGES TO MAKE THE MOST OF

## The ABUS HB light crane track system

The design and practical advantages of the ABUS HB light crane track system offer tangible benefits for users and applications:

The modular design enables bespoke yet cost effective application solutions.

Thanks to the diversity of suspension variants, installations are possible under conditions that "one would have hardly thought possible".

The load capacity can be individually selected and is often also expandable: up to 2000 kg.

Limiting components to a minimum simplifies installation, saves time and helps avoid installation faults if installing yourself.

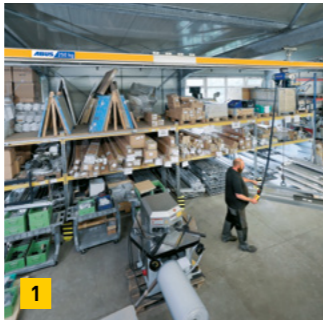
Special tools are not required for the assembly.

The standard, systematic ABUS plug-in connections make the electrical installation quick and safe.

The variety of electrical support offered by ABUS travel drives and hoists provides not only efficiency but also safety.

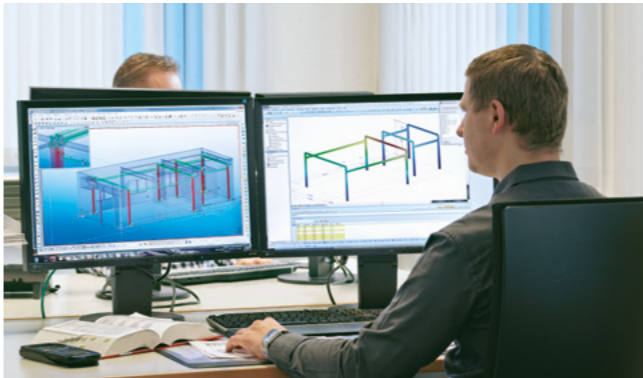
The beneficial interaction of all system components. For example, the especially low headroom design of the ABUS electric chain hoist, in conjunction with the double-rail trolley of the suspended rail system (double-rail system, double-girder crane ZHB, double-girder crane ZHB-X or ZHB-I designs) contributes to an optimal use of space and gain in highest hook position.

The main advantages of the ABUS HB light crane track system also retain their value in the period after the first installation: modifications, modernisations, upgrades and maintenance work are efficiently and cost-effectively achieved.



1 ABUS monorail system  
2 ABUS single-girder crane EHB  
3 ABUS double-girder crane ZHB

# WE SUPPLY THE COMPLETE SOLUTION: CRANE SYSTEM AND SUPPORT STRUCTURE



## Engineering

You tell us your particular application scenario and we'll take care of the rest. => If no standard solutions can be implemented, we will design an individual solution for your specific site application. The support structures are produced in compliance with applicable standards and regulations.

## Manufacturing

Every aspect is right on the mark. The manufacture of the support structures is performed exclusively by qualified operatives. The welding work is carried out by certified welders. ABUS holds the manufacturer's qualifications for welding of steel structures. The delivery is made with CE labelling in compliance with EN 1090-1.



## Delivery

With ABUS you get everything from a single source. Crane track systems and support structures are manufactured in parallel and can thus be delivered together in a single shipment. You are consequently spared any additional coordination effort.

## Installation

You can rely on the experience of our specialist fitters when it comes to installation. Assembly includes prior technical clarification of the crane track system and support structure so that everything fits during assembly and installation periods can be kept to a minimum.





# CRANE SOLUTIONS FROM A SINGLE SOURCE

## Crane installations

The light crane track system is one of the most successful ideas in lifting and hoisting technology. It combines the qualities of a stationary hoist with the mobility of an overhead travelling crane - and in an economical way.

ABUS offers all the elements required for a successful light crane track system: experience with hoists and overhead travelling cranes as well as high-quality manufacturing technology and, last but not least, the commitment to increasing ease of operation and humanity in the workplace. ABUS has always been committed to the task of equipping the HB light crane track system with as many advantages as it possibly can - and as economically as possible. All those seeking assistance with lifting and moving loads in their workplace, warehouse, workshop or production facility should be able to use and afford ABUS light crane track systems.

Today, the ABUS HB light crane track system represents a versatility of performance in technology, efficiency, flexibility, quality and workplace-friendliness which enjoys full market recognition. The recipe for this success is the satisfying of individual user requirements.



ABUS single-girder crane EHB



You can find the dimension and data sheets for the ABUS suspended rail range at:

<https://www.abuscranes.com/cranes/hb-systems>

## Steel support structures

The HB light crane track system offers a suitable fastening solution for almost all applications regardless of the design of your ceiling or roof structure or whether a stand-alone support structure is required. Whether as a standardised steel support structure with short delivery times or a bespoke support, you only need one point of contact - ABUS.

Further product details and a quote request available online at:  
<https://www.abuscranes.com/cranes/hb-systems>



ABUS double-girder crane ZHB

## SUCCESSFUL PROFILING - IN A NEW DESIGN



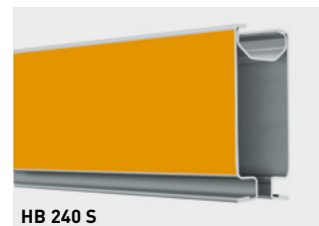
HB 110 S



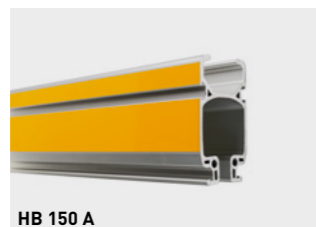
HB 150 S



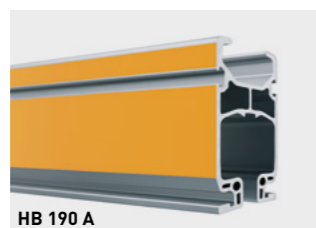
HB 190 S



HB 240 S



HB 150 A



HB 190 A

### Enclosed trolley profiles

The complete load capacity range of the ABUS HB light crane track system up to 2000 kg is covered by six profile types.

The milled steel profiles are made with the highest precision and the aluminium profiles produced in the extrusion moulding procedure ensure the highest quality of the running surfaces and smooth system operation. Even specific operating conditions, such as humidity, mildly aggressive media or clean room requirements, pose no great challenge for the galvanised or anodised profiles. ABUS decided in favour of enclosed trolley profiles, because they offer effective trolley protection and additional maintenance benefits. And they demonstrate two further important advantages: they can achieve large suspension distances – even in the upper load capacity range – thanks to their excellent cross-section properties. The profiles' rigid joints are just as resilient as the profiles themselves. This enables crane tracks with less joints, independent of the statically required suspension positions. Both advantages considerably reduce the effort required for installing the ABUS HB light crane track system and increase its flexibility.

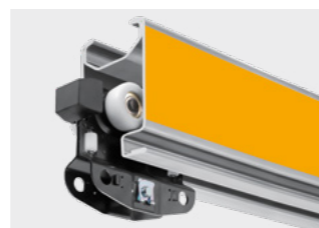
And they make work easier: Little force is required when manually moving the cranes and trolleys.

### Suspension

The engineers at ABUS have devoted a great deal of attention to the suspension. The rubber-mounted suspension can be installed from above into the top of the profile. This minimises the effort required for assembly, especially for extensions and SWL increases of existing systems as well as for servicing. All components for setting the height are secured by clearly visible spring cotter pins. The highly-durable, patented rubber mounting is wear-free, thus making the suspension largely maintenance free as a result. Furthermore, it minimises vibrations and reduces system pendulation. A whole range of different connection options are available for fastening it to the ceiling or other structure elements. The ceiling connection and suspension component jointly enable the ABUS HB light crane track system to solve problems under almost any circumstances.



Suspension can be installed from above



Enclosed trolley profile with trolley



Resilient profile joint



Further product details and a quote request available online at:  
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## LOTS OF POWER PACKED IN



### ABUS electric chain hoists

The ABUCompact electric chain hoists from ABUS are the power source for all ABUS suspension rail systems. The new generation of ABUCompact chain hoists feature a fresh design and convincing technical concept. The 3 phase/400 V GM2, GM4 and GM6 chain hoists are reliable powerhouses for use with light crane track systems for load capacities up to 2000 kg in an especially low headroom design, for optimal usage of space and with precise, smooth lifting and lowering, even for sensitive goods.

The small GMC hoist rounds off the ABUCompact range. With infinitely variable lifting speed and a load capacity of 125 kg or 250 kg, this unit, supplied ready for connection to a 230V power socket, is the ideal hoist for flexible and low capacity applications.

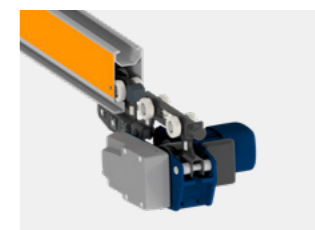
The motor and the gear unit have a modular design, allowing us to produce a wide variety of versions for lifting speeds up to 20 m/min and FEM groups up to 4m at attractive prices. There are additional advantages that experienced users in particular will appreciate: minimised maintenance effort due to brake linings with especially long lifetimes (in normal operation 1 million full load braking actions until first readjustment), lifetime lubrication of the precision gearbox, adjustable friction clutch, specially-hardened low-wear chain, plug-in connections for safe assembly and inspection and lots more. They are safely suspended in the trolley and trolley frame on the light crane track system and are immediately operational via the plug-in connection.

### ABUS drives

The driving force of the HB light crane track system is the ABUS HBF travel drive, where an application requires it. This is characterised by its smooth motor characteristics and its fluid travel and braking movements. It is invariably equipped with both a fast and a precision speed.

It is almost indispensable as a useful and reliable component of the ABUS suspended rail system at load capacities over 1000 kg and crane girder lengths of more than 6 m. Thanks to its compact design, it can be integrated in the trolley itself in conjunction with double-rail trolleys. This does not result in any loss of travel approach dimensions.

ABULiners, which enable infinitely variable lifting and travel speeds, can be used for both ABUS electric chain hoists as well as for ABUS HBF travel drives.



Light crane system travel drive



Further product details and a quote request available online at:  
<https://www.abuscranes.com/cranes/hb-systems>

## VARIATIONS ON A STRONG THEME



### ABUS monorail system

Linear point-to-point transport  
Load capacity: up to 2 t

- Low headroom
- Wide suspension distances
- Optional electric travel drive

### ABUS double-rail system

Linear point-to-point transport  
Load capacity: up to 2 t

- Wide suspension distances
- Chain hoist installed between rails for improved lifting height
- Ultra low headroom
- Optional electric travel drive
- Optional mobile pendant



### ABUS single-girder crane EHB

For area coverage transport  
Load capacity: up to 1.25 t  
Crane girder length: up to 10 m  
(depending on load capacity)

- Very light crane; ideal for use in lightweight buildings
- Easy to move manually
- Low headroom
- Short end approach dimensions
- Wide suspension distances

### ABUS stooped up single-girder crane EHB-X


For area coverage transport  
Load capacity: up to 1 t  
Crane girder length: up to 8 m  
(depending on load capacity)

- Stooped up crane for optimum use of available space
- Easy to move manually
- Ultra low headroom
- Short end approach dimensions
- Wide suspension distances
- Optional electric travel drive
- Optional mobile pendant






# VARIATIONS ON A STRONG THEME



**ABUS double-girder crane ZHB**

For area coverage transport  
Load capacity: up to 2 t  
Crane girder length: up to 12 m  
(depending on load capacity)

- Wide suspension distances
- Ultra low headroom
- Chain hoist installed between crane girders for improved lifting height
- Optional electric travel drive
- Optional mobile pendant



**ABUS single-girder crane EHB-I**


For area coverage transport  
Load capacity: up to 1 t  
Crane girder length: up to 10 m  
(depending on load capacity)

- Very light crane;  
  ideal for use in lightweight buildings
- Easy to move manually
- Crane track made from standard I-beams
- Short end approach dimensions

**ABUS stooped up double-girder crane ZHB-X**

For area coverage transport  
Load capacity: up to 2 t  
Crane girder length: up to 8 m  
(depending on load capacity)

- Stooped up crane for optimum use of available space
- Ultra low headroom
- Wide max. suspension distances
- Optional electric travel drive
- Optional mobile pendant




**ABUS double-girder crane ZHB-I**

For area coverage transport  
Load capacity: up to 2 t  
Crane girder length: up to 12 m  
(depending on load capacity)

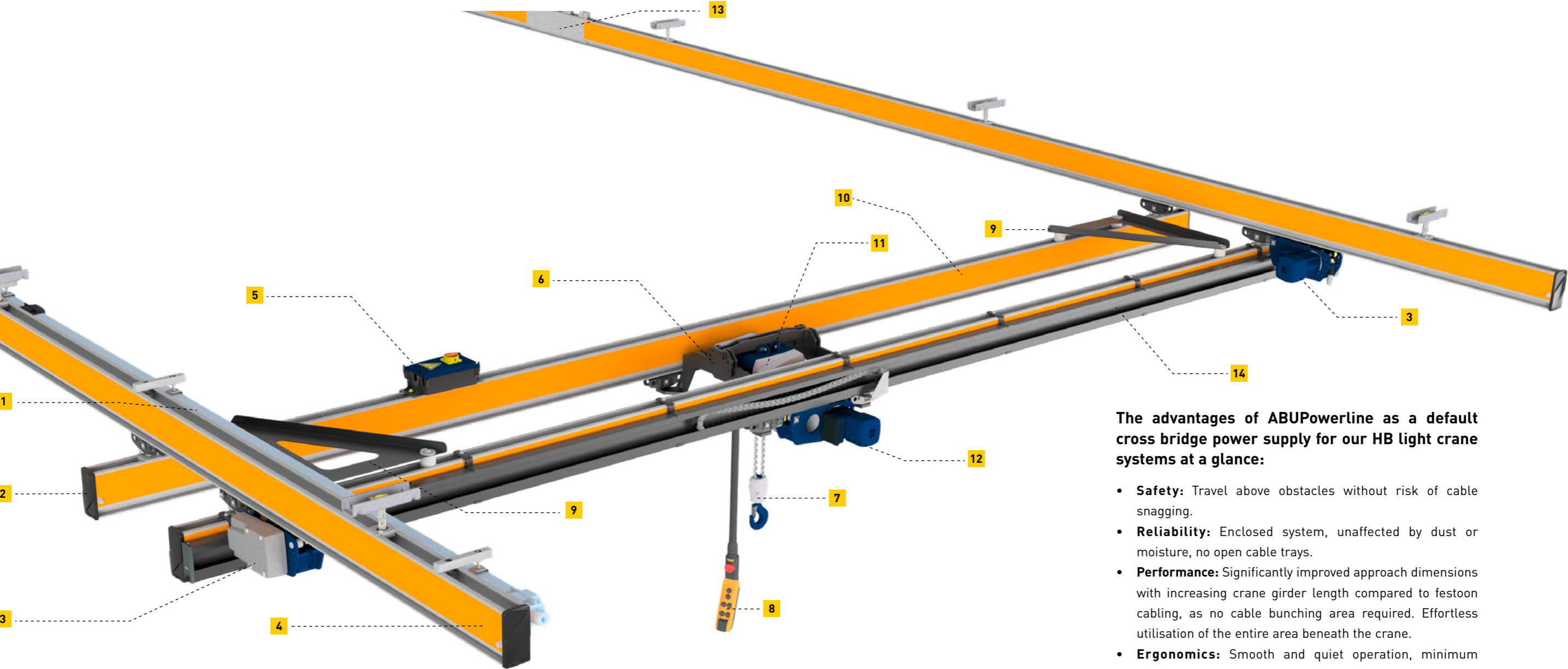
- High load capacity
- Chain hoist installed between crane girders for improved lifting height
- Crane track made from standard I-beams
- Optional electric travel drive
- Optional mobile pendant





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# THE COMPONENTS OF THE ABUS SUSPENDED RAIL SYSTEM



- 1

ABUS safety conductor system KBH
- 2

End stop
- 3

Long travel drive
- 4

Track profile
- 5

Junction box
- 6

Trolley frame
- 7

Bottom block with load hook
- 8

Pendant control
- 9

Track bracing
- 10

Crane profile
- 11

Chain hoist
- 12

Cross travel drive
- 13

Joint connection
- 14

ABUPowerline energy chain

## The advantages of ABUPowerline as a default cross bridge power supply for our HB light crane systems at a glance:

- **Safety:** Travel above obstacles without risk of cable snagging.
- **Reliability:** Enclosed system, unaffected by dust or moisture, no open cable trays.
- **Performance:** Significantly improved approach dimensions with increasing crane girder length compared to festoon cabling, as no cable bunching area required. Effortless utilisation of the entire area beneath the crane.
- **Ergonomics:** Smooth and quiet operation, minimum manual force required to move the chain hoist.
- **Delivery times:** Stocked components enable short delivery times and a rapid availability.

# FLEXIBLE FIXING CONCEPT

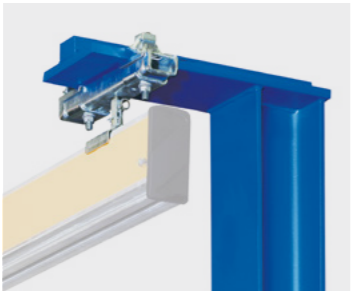
## Gallows supports

Gallows are the inexpensive alternative to portal structures. They are produced to individual height specifications and can be quickly set up with little installation effort. Both single-sided and double-sided (T-support) gallows are available as crane track supports.

Double-sided (T-support) gallows

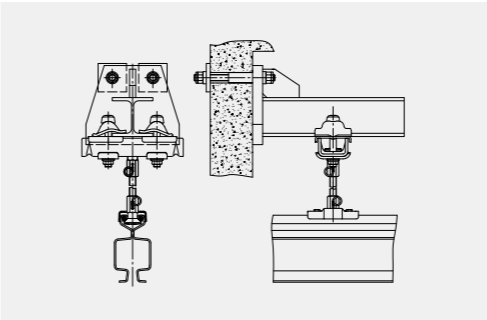


Single-sided gallows support



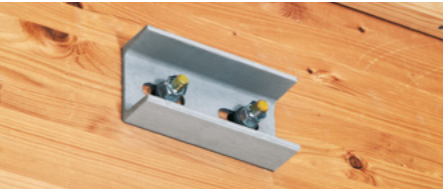
## Auxiliary spine beams

Auxiliary spine beams provide additional hanging positions for the light crane track system. They are attached to existing building supports and enable even large distances to be bridged.



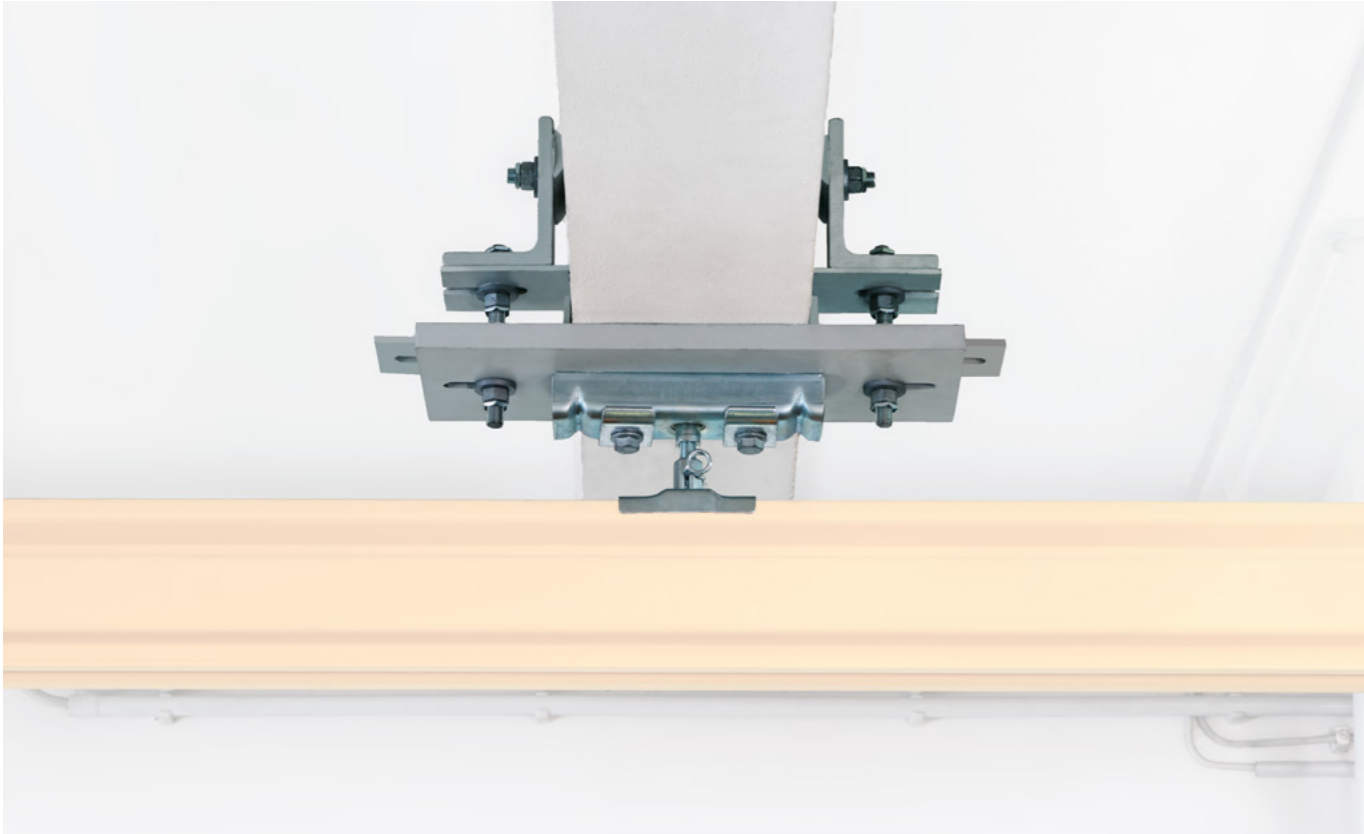
## Support consoles

Support consoles are attached laterally to the building supports. Heavy-duty anchor bolts are used in the fastening. There are anchor bolts for concrete as well as wooden trusses, with varying projection lengths.



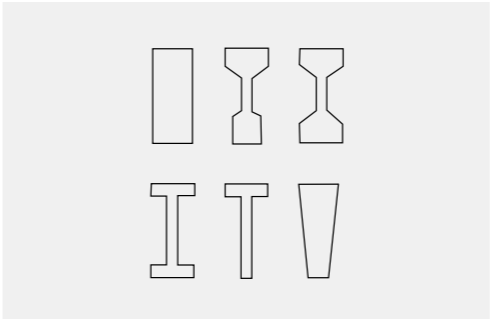
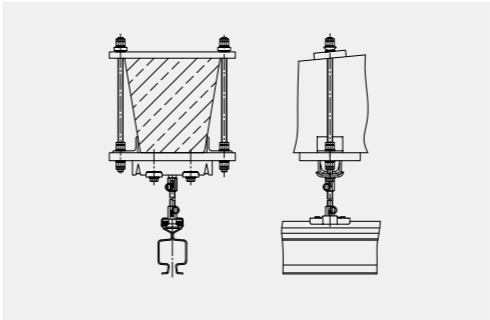
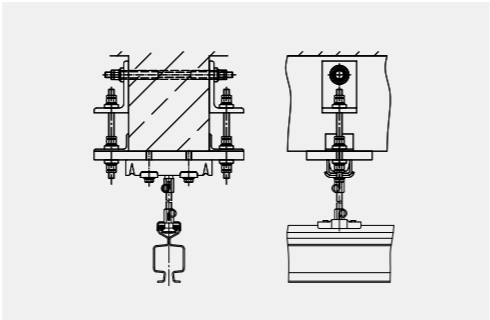
Rear view of support console fixing

# FLEXIBLE FASTENING CONCEPT



## Tie consoles

Tie consoles enable the HB crane system to be connected directly beneath the supporting structures of building ceilings. The tie hole is drilled from the side and therefore does not need to be accessible from above for the installation. Tie consoles are available for wooden and various types of reinforced concrete trusses.



These girder shapes can be clamped around.

## Embracing brackets

Embracing brackets clamp around the building trusses so that drilling completely through them is not necessary. The threaded rods at the side are variable in length and enable even large truss heights to be used. Depending on the ceiling construction, embracing brackets can also be mounted on the ceilings on top of the building trusses.



## FLEXIBLE FASTENING CONCEPT



### Portal structures

Individually tailored portal structures offer solutions, for instance, when the ceiling structure is unsuitable for supporting an HB light crane track system. There are free-standing versions as well as those with lateral connections to the building structure.

In order that the operating areas under the HB light crane track systems remain easily accessible, any required stiffeners are attached as high as possible and the distances between the portal supports are optimised.



**Rigid portal structures**  
allow small pillar bases,  
which are secured using dowels.



### Roof stools

Roof stools are used if large suspension heights exist between ceiling and crane system. These are fastened with dowels, by clamping or bolting onto the existing supporting structures. Roof stools are an alternative to a suspension with very long threaded rods. They reduce the pendular movement considerably. Additional stiffeners against swinging are therefore no longer necessary.

## Complete solutions from ABUS



You can find further product information on our entire product portfolio at:  
<https://www.abuscranes.com/downloads>

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