

# ABU Powerline

# A special advantage of the *patented* **ABUPowerline** system compared with other energy chains

## Other systems

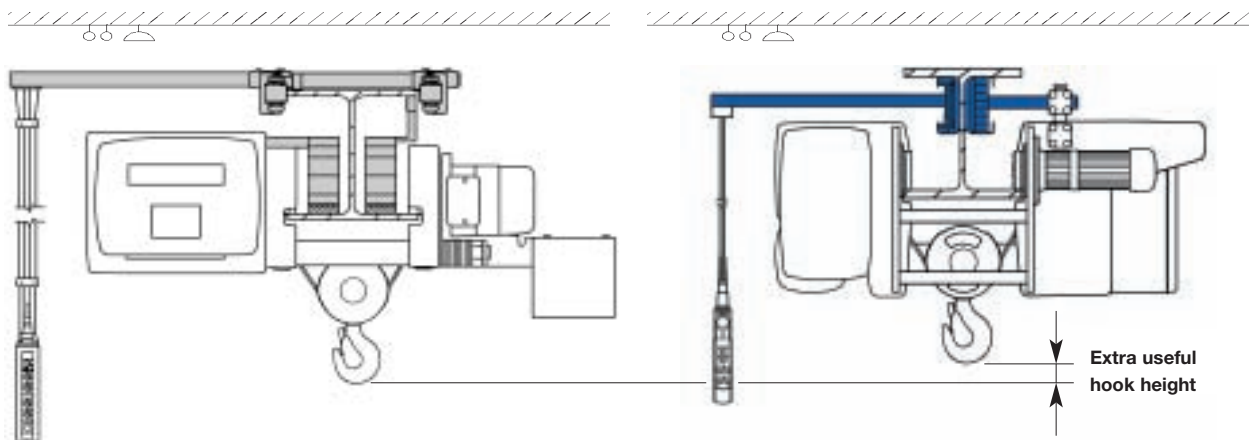
The control carrier for the mobile pendant control moves along the top of the painted main girder, restricting the maximum height of the crane (upper edge of crane unit). Another major disadvantage is that this type of control carrier cannot be used on twin-girder travelling cranes.

Power is supplied and signals are transmitted via contact conductors with exposed contacts which are subject to considerable wear.

## ABUPowerline system

The control carrier for the mobile pendant control runs along a guide rail installed on the side of the crane girder. There is therefore no restriction on the maximum crane height (upper edge of crane).

There is no wear on the power supply and signal transmission systems. No maintenance is required.



**ABUPowerline system.**

**For professional overhead travelling cranes.**

**Now standard equipment.\***

**For the benefit of our customers.**

\* For design reasons, the conventional festoon system is still used on cranes for outdoor operation and on certain special underslung overhead travelling crane versions.

## **ABU**Powerline



This professional power supply system for overhead travelling cranes has proved itself in practice. Thanks to economies of scale, ABUS can now offer the **ABU**Powerline as **standard equipment for ABUS overhead travelling cranes.**

The **ABU**Powerline is an innovative **energy chain system** for power supply and signal transmission to hoists and pendant controls on overhead travelling crane systems.



Signal transmission to pendant control

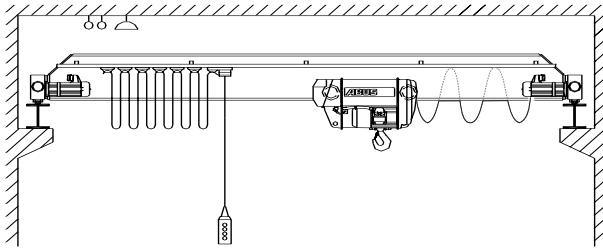


Signal transmission and power supply to hoist

# Advantages compared with conventional festoon systems



## Conventional system



Festoon systems are always inconvenient. Firstly, cable festoons are vulnerable to damage and wear because of their design and installation configuration. Secondly, on low crane bridges, the cable loops fall below the main crane girder and can easily catch and snag on other equipment installed in the plant.

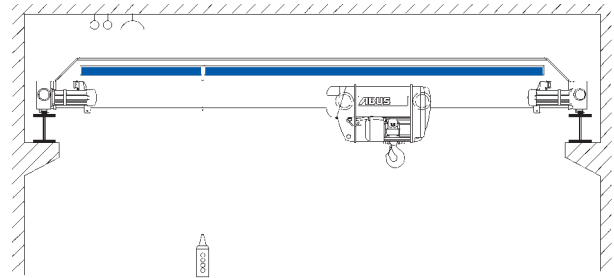
The loops of a cable festoon are pushed together on one side of the crane girder, taking up space and restricting movement of the control carrier.

Festoon systems need a separate brake trolley to prevent the control carrier from rolling back.



Separate brake trolley

## ABUPowerline system



**Compact design, installed directly on crane girder, mechanical protection for cables, no dangling cable loops and no snagging on other equipment.**

**The control carrier of the mobile pendant control can be moved over the full length of the crane girder in both directions.**

**The control carrier stays in position and does not roll back.**

The control carrier of an **ABUPowerline** system requires a defined operating force – **it is therefore automatically held in position.**



Control carrier held in position automatically

# Technical features of **ABU**Powerline system

## Guide rails

for energy chain and control carrier,  
made from cold-rolled galvanized  
steel sheet



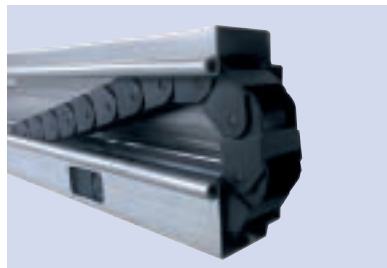
For control line



For hoist unit power supply

## Energy chain

made from glass-fibre-reinforced  
plastic with excellent sliding and  
rolling properties



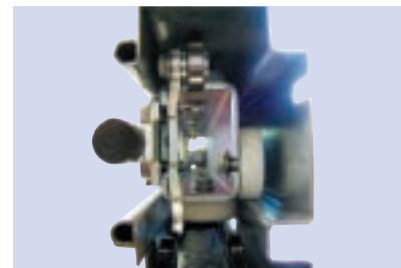
## Control lines

highly flexible special cables  
designed for a large number of  
bending cycles



## Roller blocks

for optimising the operating force  
of the mobile control carrier

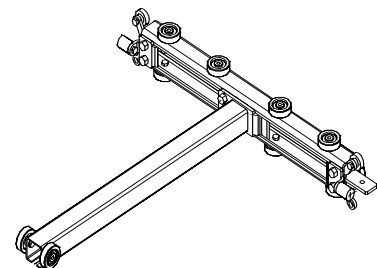


## Control carrier

with 12 ball bearings for smooth  
movement even with long control  
lines or high lifts



Control carrier



Control carrier with cross arm

# The ABUS range at a glance

\* Details of higher load capacities and wider spans on application.

## Overhead travelling cranes:

Load capacity: up to 120 t \*  
Span: up to 40 m \* (depending on load capacity)  
Applications: area coverage  
Features: comprehensive standard equipment and wide range of accessories to suit individual requirements



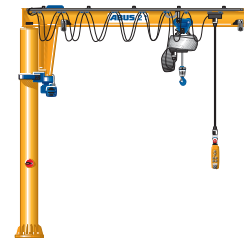
## HB systems:

Load capacity: up to 2 t  
Crane girder length: up to 22 m (depending on load capacity)  
Applications: area coverage and linear handling  
Features: 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



## 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  
Features: slewing range up to 360° depending on model



## Electric wire rope hoists:

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



## Electric chain hoists:

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



## Lightweight portal cranes:

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



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