



**E·M·H<sup>®</sup>**  
**Engineered Material Handling**



ENGINEERED MATERIAL HANDLING designs, manufactures and sells a complete line of material handling equipment for loads ranging from 250 kg to 250 tonnes. Our experienced team can now draw on the experience of several thousand delivered hoists. Besides our standard components, which undergo strict qualification, we also excel in the area of custom-made products.

We accept nearly all enquiries, striving to find the best solution for our customers in respect of both price and design.

### We supply multiple industries with the following systems:

- Bridge cranes
- Gantry cranes
- Smooth-running systems
- Jib cranes
- Free standing systems
- Crane kits
- Standard hoists
- Standard endtrucks
- Winches

And user-defined crane components

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### EMH World Wide

ENGINEERED MATERIAL HANDLING has representatives on all 5 continents. Already completed projects are operating under widely varying conditions and are used in all segments.

We have spare parts centres in the United States, India and Germany to provide fast, global service. As a result, we can ensure the quick and reliable supply of spare parts in America, Asia and Europe. In addition, we already cooperate with our EMH partners in over 40 countries. These partners round off our global service.

Thanks to our global alignment, the EMH name stands for quality both in respect of our products and our service.





# MODEL E



## Model E short trolley

- Unique capacity range up to 25 ton
- ABM Greiffenberger hoist motors
- NORD / Bonfiglioli trolley traction motors
- Sturdy, fully welded trolley frame
- EMH quick release connectors
- Electromagnetic safety brake
- Wear-resistant steel rope guide

The EMH Model E single girder hoist is notable for its highly favourable approach and hook dimensions. These are achieved with a compact, fully welded frame adapted to provide the best match for all the components used. The parallel configuration of the rope drum and the hoist motor also contribute to the overall compact size of the Model E short trolley. In addition, this configuration ensures easy servicing and maintenance.

With its unique, wide capacity range from 2.5 to 25 tonnes and the possibility of flexibly adapting the Model E short trolley to different flange sizes, this wire rope hoist is a true all-rounder than will fulfil all your requirements.









# MODEL D



## Model D double girder hoist

- Capacity range up to 40 ton  
(2-step hoisting speed)
- Capacity range up to 63 ton  
(continuously variable hoisting speed)
- ABM Greiffenberger hoist motors
- NORD / Bonfiglioli trolley traction motors
- Sturdy, fully welded trolley frame
- EMH quick release connectors
- Electromagnetic safety brake
- Wear-resistant steel rope guide

The EMH Model D double girder hoist is a compact wire rope hoist for the medium capacity range. The parallel configuration of the rope drum and the hoist motor makes the trolley very easy to maintain. A one-sided articulated running gear carrier connection ensures that all trolley wheels make full contact. In this way, the forces resulting from crane use are optimally distributed to the substructure.

This trolley meets all your wishes over the medium capacity range thanks to its low headroom, cost-effective purchase price and the flexible, standardised trolley rail gauge dimensions.



# MODEL DL

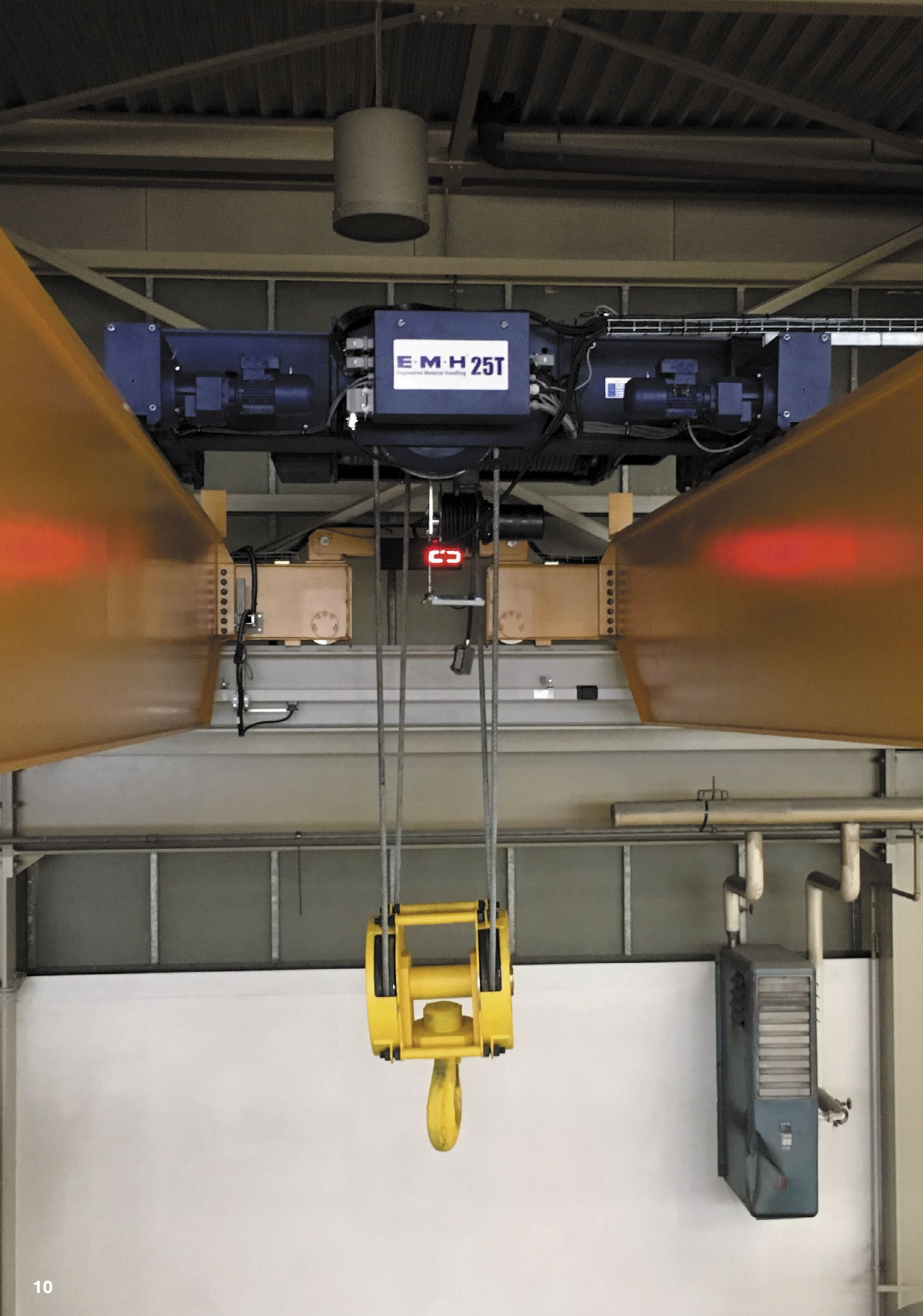


## Model DL double girder hoist

- Capacity range up to 25 ton
- ABM Greiffenberger hoist motors
- NORD / Bonfiglioli trolley traction motors
- Low head room hoist
- Sturdy, fully welded trolley frame
- EMH quick release connectors
- Electromagnetic safety brake
- Wear-resistant steel rope guide

The EMH Model DL double girder hoist is a compact wire rope hoist for the medium capacity range. Due to the lowered design of the height, this model is the optimal solution for low room heights and lack of space above the crane main girder. A one-sided articulated running gear carrier connection ensures that all trolley wheels make full contact. In this way, the forces resulting from crane use are optimally distributed to the substructure.

This trolley meets all your wishes over the medium capacity range thanks to its extrem low headroom, cost-effective purchase price and the flexible, standardised trolley rail gauge dimensions.





# MODEL Z



## Model Z double girder hoist

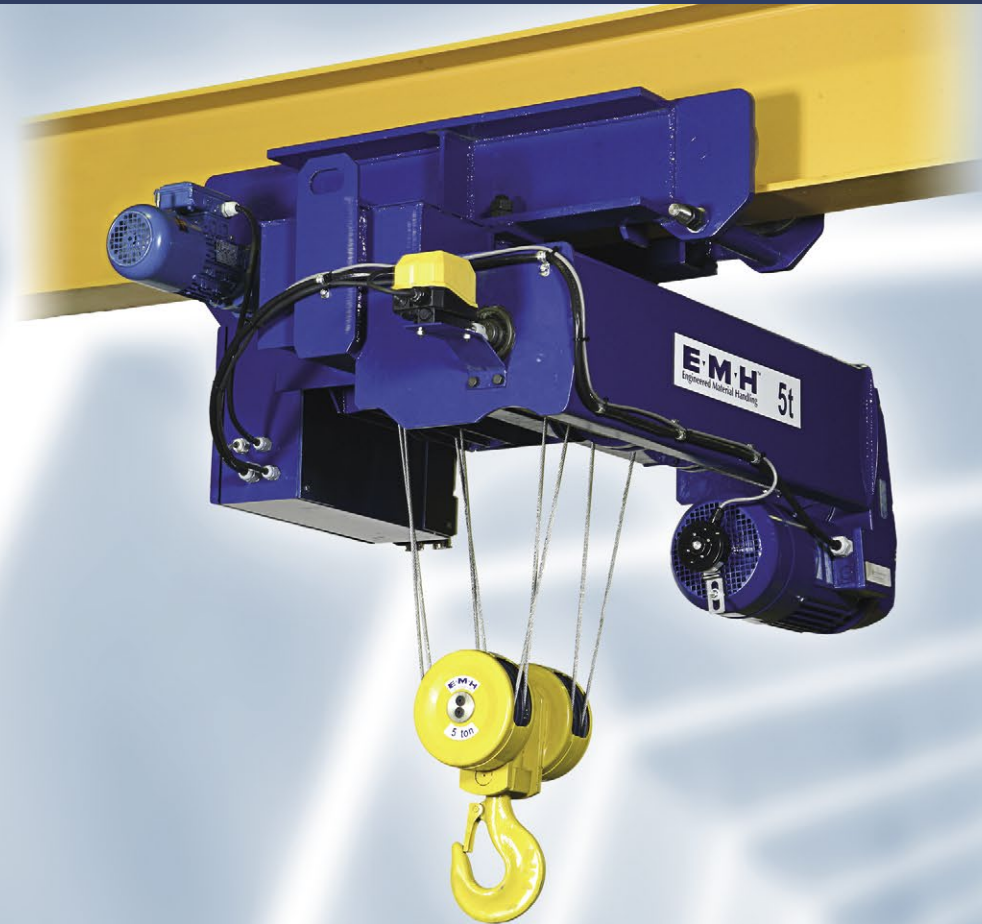
- Capacity range up to 80 ton
- Two ABM Greiffenberger hoist motors
- NORD / Bonfiglioli trolley traction motors
- Sturdy, fully welded trolley frame
- EMH quick release connectors
- Electromagnetic safety brake
- Wear-resistant steel rope guide

The EMH Model Z double girder hoist with twin hoists consists of a fully welded frame whose geometry was optimally matched to the two hoist motors. As this trolley has two hoist motors, the parallel configuration of the rope drum and the hoist motor is particularly beneficial for maintenance and servicing. A one-sided articulated running gear carrier connection ensures that the hoist makes contact with four wheels and optimally distributes the forces resulting from crane use to the substructure.

With its compact design and the option of choosing between different standardised trolley rail gauges, the EMH Model Z double girder hoist is your first choice in tight spaces.



# MODEL CM



## Model CM single girder hoist

- Capacity range up to 25 ton
- Rope reeving codes 4/2 or 8/2
- Rope drum rotated 90°
- ABM Greiffenberger hoist motors
- NORD / Bonfiglioli trolley traction motors
- Sturdy, fully welded trolley frame
- EMH quick release connectors
- Electromagnetic safety brake
- Wear-resistant steel rope guide

Because the rope drum is rotated through 90°, the EHM Model CM single girder hoist is the wire rope hoist of choice where the approach dimensions are overriding. The EHM Model CM single girder hoist is only available with rope reeving codes of 4/2 or 8/2 because of its special construction. This ensures that the load is always carried centrally.

With its special design and wide capacity range of up to 25 t, the EMH single girder hoist is the solution to your problems.

# MODEL SU



## Model SU under running hoist

- Capacity range up to 25 ton
- ABM Greiffenberger hoist motors
- NORD / Bonfiglioli trolley traction motors
- Sturdy, fully welded trolley frame
- EMH quick release connectors
- Electromagnetic safety brake
- Wear-resistant steel rope guide

The EMH Model SU under running hoist is the first choice for curved single girder tracks and curve-encompassing applications. Thanks to its eight wheels, which are hinged at two points, the trolley enables the use of standard commercial rolled section girders, even under large loads. A compact, fully welded frame and the standard parallel configuration of the hoist motor and rope drum provide the low headroom that distinguish this wire rope hoist.

Low trolley wheel load data together with the associated economic advantages and the potential of flexibly adapting this wire rope hoist to different flange sizes go towards making this wire rope hoist very popular with our customers.





**EMH 100 ton**



# MODEL H



## Model H double girder winch

- Capacity range up to 250 ton
- SEW / NORD hoist motors
- SEW / NORD trolley traction motors
- Sturdy, fully welded trolley frame
- Electromagnetic safety brake

The EMH Model H double girder winch is a winch for the very large capacity range. The parallel configuration of the hoist motor and the rope drum enable an extremely compact design despite the high capacity range. Maintenance and servicing are also very easy because of the open design of the winch.

This winch is used in use across the world thanks to its high capacity and relatively compact design. If you have a really heavy duty application with a high capacity >100 tonnes, the EMH Model H double girder winch is your first choice!

# MODEL HF



## Model HF double girder winch

- Capacity range up to 100 ton
- SEW / NORD hoist motors
- SEW / NORD trolley traction motors
- Sturdy, fully welded trolley frame
- Electromagnetic safety brake

The EMH Model HF double girder winch is a winch made for the large capacity range. The parallel shaft gearbox braking motor connected at the face end offers a favourable alternative to a large winch because the basic structure can be derived from the standard series. The open design of the winch ensures ease of maintenance and servicing.

If you have a heavy duty application of up to 100 tonnes, the EMH Model HF double girder winch is your first choice!



# MODEL CH



## Electric Chain hoist Model CH

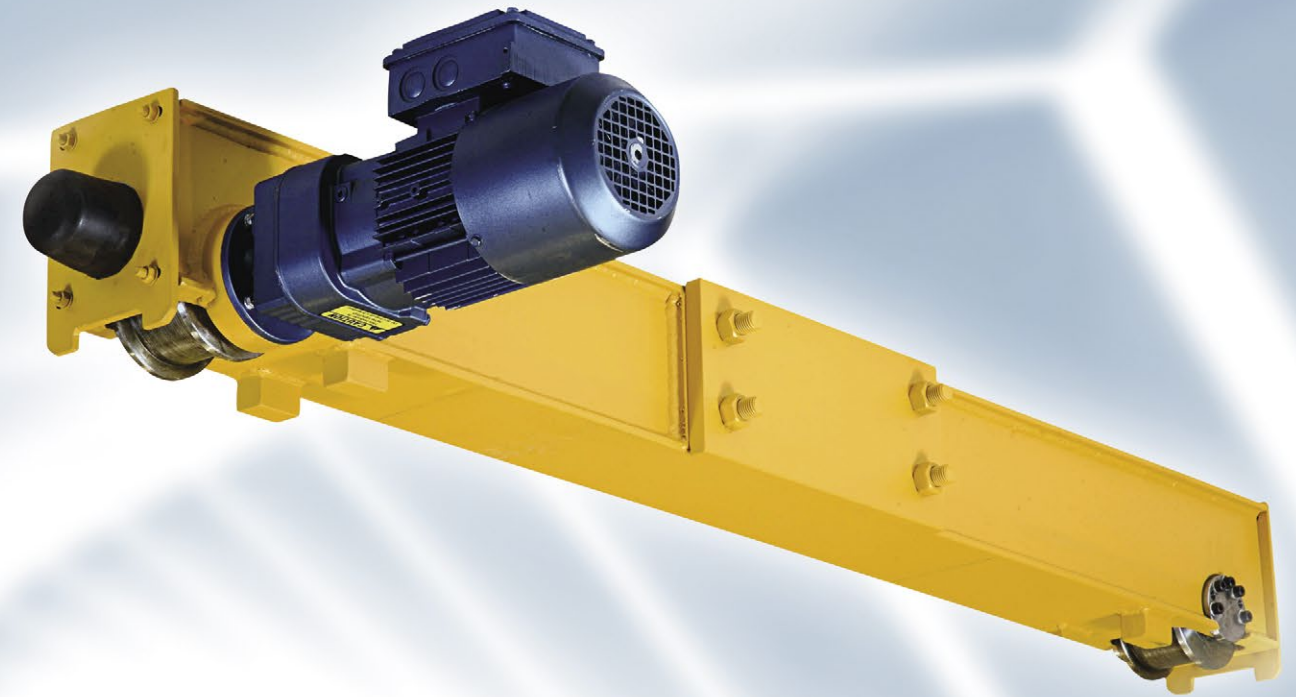
- Capacity up to 2.000 kg
- FEM-duty up to M6
- Hookway up to 10 m
- 2-step lifting speed
- Powerful and dynamic asynchronous motor
- Strong housing due to aluminum alloy
- P-Protection IP55

Due to their modular concept, the EMH electric chain hoists can be adapted to the requirements of the user with the least effort. Therefore, the hoisting industry resellers have a system at their disposal that they can configure individually. This is applicable, for example, for the lifting speed, the power supply voltage, the control and for several options.

Depending on the lifting speed and capacity, a FEM classification up to M6 can be reached. This demonstrates the high quality and performance level of the EMH electric chain hoists. All components have been optimized or chosen with regard to a long service life. The result: the chain hoists reach a very high service life, even under high operational demands.



# MODEL HSE



## Model HSE endtruck for single girder overhead cranes

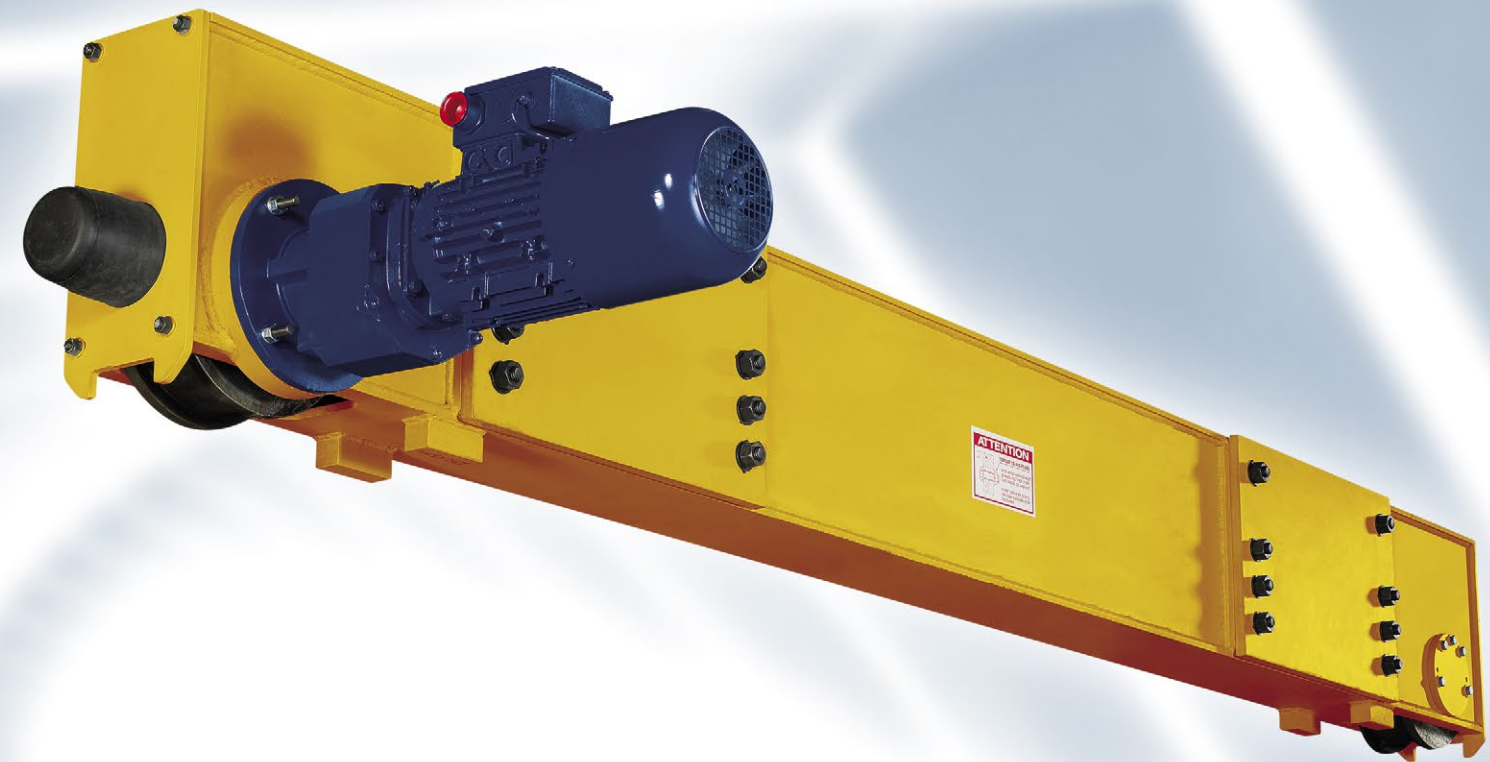
- Wheel diameters from 100 mm to 315 mm
- Wheel bases from 1500 mm to 3800 mm
- Wheel loads up to 170 kN per wheel
- NORD / Bonfiglioli crane traction motors
- Main girder connection using high tension bolts

The EMH Model HSE endtruck is the right endtruck for single girder overhead cranes. The sturdy, fully welded frame, completely machined in one set-up, is very accurate and complies with the strictest quality standards. The surface-hardened wheels are turned from solid and run extremely smoothly because of the roller bearings and the precision manufacturing.

The Model HSE endtruck is equipped with flanged wheels and wheel-break supports as standard. Alternatively, it can be equipped with extensive accessories such as guide rollers, track sweepers or bumper extenders. With versatile connection options, we have the right endtruck for your application, too!



# MODEL HSZ



## Model HSZ endtruck for double girder overhead cranes

- Wheel diameters from 130 mm to 500 mm
- Wheel bases from 2700 mm to 4600 mm
- Wheel loads up to 340 kN per wheel
- NORD / Bonfiglioli crane traction motors
- Main girder connection using high tension bolts

The EMH Model HSZ endtruck for double girder overhead cranes is our endtruck for double girder overhead cranes. The sturdy, fully welded frame, completely machined in one set-up, complies with the strictest quality standards. The surface-hardened wheels are turned from solid and run extremely smoothly because of the roller bearings and the precision manufacturing.

The Model HSZ endtruck is equipped with flanged wheels and wheel-break supports as standard. Alternatively, it can be equipped with extensive accessories such as guide rollers, track sweepers or bumper extenders. With versatile connection options, we have the right endtruck for your application, too!



# MODEL UHB



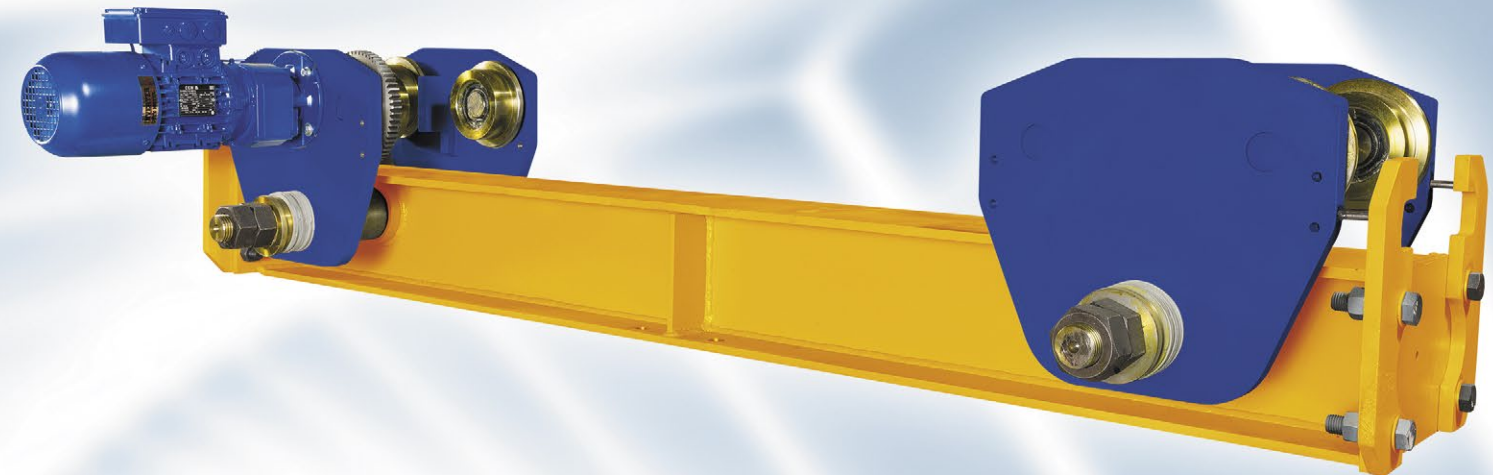
## Model UHB endtruck for double girder overhead cranes

- Wheel diameters from 200 mm to 800 mm
- Wheel bases from 4080 mm to 6795 mm
- Wheel loads up to 1430 kN per bogie
- NORD / Bonfiglioli crane traction motors
- Main girder connection using high tension bolts

The EMH Model UHB endtruck for double girder overhead cranes is our endtruck for the heavy lifting range. The sturdy, fully welded frame, completely machined in one set-up, complies with the strictest quality standards. The surface-hardened wheels are turned from solid, have a diameter up to 800 mm and are the go-to choice for heavy duty use. You can reduce your wheel loads considerably by using the EMH Model UHB endtruck which symmetrically distributes the load over four wheels on each crane track side instead of just two.

The endtruck is equipped with flanged wheels and wheel-break supports as standard. Alternatively, it can be equipped with extensive accessories such as guide rollers, track sweepers or bumper extenders.

# MODEL DLVM



## Model DLVM endtruck for under running cranes

- Wheel diameters from 100 mm to 160 mm
- NORD / Bonfiglioli crane traction motors
- Main girder connection using high tension bolts

The EMH Model DLVM endtruck is our endtruck for under running cranes. The sturdy, fully welded frame, completely machined in one set-up, is very accurate and complies with the strictest quality standards. The surface-hardened wheels are machined from solid and run extremely smoothly because of the roller bearings. This endtruck allows the use of commercially available rolled section girders, even under large loads, because the eight wheels better distribute the load.

The possibility of flexibly adapting this endtruck to different flange sizes and the economic advantages when designing the crane runway girder are just two advantages of this endtruck.



# System 2000 crane kits

The System 2000 crane kit is available for the following crane types:

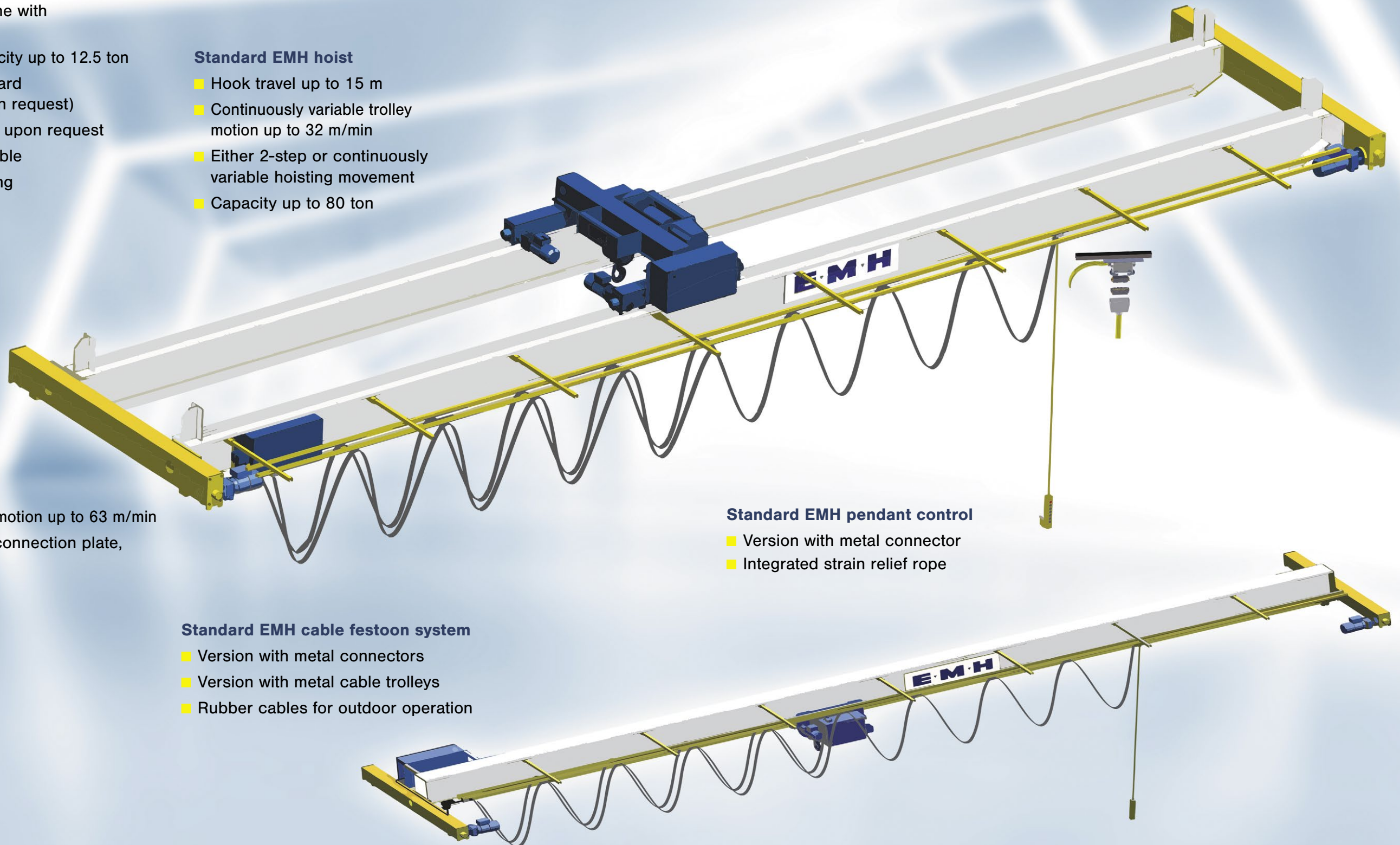
- Double girder overhead crane with a capacity up to 80 ton
- Single girder overhead crane with a capacity up to 25 ton
- Overhead crane with a capacity up to 12.5 ton
- Spans up to 30 m as standard (larger spans available upon request)
- Special crane kits available upon request
- Additional equipment available
- Main girder connection using high tension bolts

## Standard EMH hoist

- Hook travel up to 15 m
- Continuously variable trolley motion up to 32 m/min
- Either 2-step or continuously variable hoisting movement
- Capacity up to 80 ton

## Standard EMH bridge panel

- IP54 or IP65 design
- Schneider electrical components
- Complete with metal connectors
- Voltage 2 (control): 230 V



## Standard EMH endtruck

- Continuously variable crane motion up to 63 m/min
- Complete with main girder connection plate, bolts and crane bumper

## Standard EMH pendant control

- Version with metal connector
- Integrated strain relief rope

## Standard EMH cable festoon system

- Version with metal connectors
- Version with metal cable trolleys
- Rubber cables for outdoor operation



# Electronic overload protector and SWP with i-c4c (intelligent control for cranes)



## Basic system

- Overload protector
- SWP (Save Working Period)
- Up to 4 additional options possible
- 1 analogue output (0-10 V) for ESR or display
- Protected by PIN code



Direct monitoring on a PC, tablet or smartphone. Simple, fast and service-friendly.



## Wi-Fi system

- Overload protector
- SWP (Save Working Period)
- Up to 4 additional options possible
- 1 analogue output (0-10 V) for ESR or display
- Protected by PIN code
- Direct programming via a PC, tablet or smartphone
- Direct data download to a PC, tablet or smartphone



Large display available in numbers 150 mm or 300 mm tall.

# Crane electrical system and variable frequency drive technology from Schneider Electric



## Variable frequency drive technology from Schneider Electric

- All variable frequency drives use Schneider Electric equipment as standard. In the crane kits, both the trolley and crane motion systems are continuously variable as standard. Continuously variable hoisting movement is available for virtually all capacities.

## Electrical / control cabinet

- Cable designation
- Schneider electrical components
- Metal connectors
- IP54 as standard
- IP65 for outdoor operation upon request

## Additional available options:

- Slack rope protection
- Shock load protection
- Restricted load areas
- Overdrive protection
- Hoist tandem control
- Crane tandem control
- Load summing
- Data logging
- Tare function\*  
\* Only possible with display

# EMH remote radio control

The “small” member of the micron family. Ideal for the control of standard industrial cranes and machines. Clever merlin® technology included.



## merlin®

merlin® stands for an innovative HBC concept that offers more options for the use of your HBC radio controls.

**micron M with merlin® technology**  
**The fastest customer service!**

- Transmitter and receiver are not a fixed pair**  
= easy transmitter warehousing
- Fast exchange of damaged transmitters**  
= same-day service
- No expensive downtime for the customer**
- No repair times**
- Minimum spare parts warehousing**
- Cut down on valuable repair capacity**



## 2.4 GHz Technology

## 2.4 GHz technology

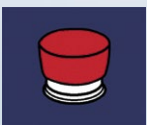
2.4 GHz technology offers fully automatic frequency management.

## How it works

Frequency management is already included in the radio system and works automatically.



Operating elements  
& control functions



E-STOP



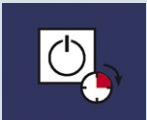
Battery technology



Indicator



Protection from  
unauthorized use

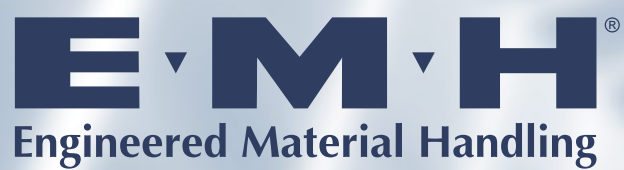


Auto Power Off

## Your advantages:

- A manual frequency coordination with other radio users is not necessary.
- The operator can work without interruption, even in areas with many radio users. This saves valuable time.
- This technology is approved almost worldwide, which makes warehousing much easier: instead of different country-specific high frequency modules in most cases, just a single 2.4 GHz module can be used.
- In countries where HBC radio systems are approved, the 2.4 GHz technology is available without registration or license fees. This saves costs and effort.





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