

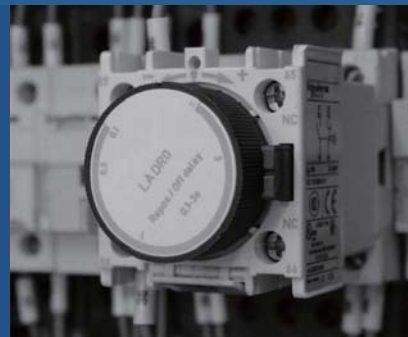


PLANETA
LIFTING WITHOUT LIMITS



PLANETA

Electric wire rope hoist





PLANETA

QUALITY BY TRADITION

Stability and innovation.

In truth, they are two sides of the same coin because continuous readiness for innovation enables sustainable developments.

Sustainability, reliability and responsibility are the basic values that we are committed to here at PLANETA. In all periods of the company's history, these values have been personified by our employees and their quest to always do the good things that little bit better. As a family business, we are particularly proud of this dedication to the product and its development. It forms the basis of our ability to always provide our customers with flexible solutions

because: Your satisfaction is our success.

***German Brand
Time-honored hoists
Lead Industry 4.0***



From 1861

Our goal is not to achieve the greatest growth in the industry but the company is to remain the most satisfied customers. We are working as one of the oldest hoist business in Germany, every day.



1861

In 1861 on February 20th the locksmith master Hermann Wilhelmi opened with a starting capital of 30 Reichstaler his own workshop located in Löh-Street at Mülheim-Ruhr in Western Germany. That was the foundation of the "Hebezeugfabrik Wilhelmi" which changed its name in the year 1936 to "H. Wilhelmi KG", 1979 to Planeta-Hebezeuge Wilhelmi GmbH and finally to Planeta-Hebetechnik GmbH in 2002. The first company built various mechanical instruments by hand craft workmanship and repaired stock winches. A true production plant came up in 1882 by use of a Deutzer gas powered engine.

1900

Lifting equipment also found entry in 1900 in production range and dominated soon caused by increasing requirements of industrialization. Electric hoists, trolleys and cranes were built beside the patented manual chain blocks with worm gearing (see patent left). Engineer Patschke developed and built his rotation steam engine. Now 100 workers were already employed.

The times during and after both world wars did not spare the company. Fire and bombs had closed down the factory for two years. But it was re-built mainly by own co-workers and H. Wilhelmi KG bought in 1939 a large estate near the Mülheim harbour where new factory buildings were erected lately in 1957. The success began with PLANETA®-chain blocks up to 30 tons capacity which included for the first time a planetary gearing instead of spur gears. They were much smaller and stronger than the old fashion types. Many electric chain hoists and special trolleys for industrial oven application with capacities up to 25 tons were made and the halls were enlarged in 1961. Water pump stations and many factories all over the world used WILHELMI-bridge cranes.



1994

New marketing strategies, research and developments were forced by Hans-Richard Wilhelmi, the oldest son of the owner Heinz Wilhelmi. He increased the sales by International co-operations and overcame a competitive thread by integrating hoists products from other countries in the sales program. The market was in a upheaval and the company was rebuilt with smaller staff in 1979 as a Limited corporation (GmbH). Paul H. Klawitter as diploma-engineer took general management and ownership in 1991. The company moved at once from its two locations Mülheim and Witten to Herne where factory buildings were bought. H.-R. Wilhelmi retired in 1994.

PLANETA - Electric rope hoist in the year **1968**



YESTERDAY-TODAY-TOMORROW

The past forms the treasure that holds the germ cell for the future. When Hermann Wilhelmi founded his own workshop in 1861, he could never have imagined that it would become such a successful international company.

This development often required really small steps but also some very ambitious steps from time to time. All were guided by one principle: Manufacturing the best hoists for the most satisfied customers!

Flat hierarchies enable PLANETA to react quickly and appropriately to the requirements of the globalised markets as a family business. Our wealth of experience in the past helps us to shape the future using the opportunities of the present.

BENEFITS



PLANETA Hoists

The combination of many years of experience and the latest technological advances provides the recipe for success for our hoists. Only quality products that have been tested with an appropriate excess load are supplied to our customers. PLANETA hoists have a long service life and high safety standards, as well as the highest level of functionality.



PLANETA Rope Winches

Our range is as broad as our customers' standards and requirements. In addition to complete standard systems, as an experienced manufacturer of rope winches, we construct special solutions suitable for every application; they are individual and tailor-made thanks to the modular design of our winches. In addition, many options can be added at a later date and this generates the optimum result.



PLANETA Service

Thanks to our membership in the registered quality association for crane service, here at PLANETA, we can guarantee a very high quality standard for our services, which is monitored by external inspectors. Our highly-trained service experts carry out the legal inspections for crane systems, hoists and rope winches reliably. In the wind power sector, our specially trained technical teams competently and reliably maintain, inspect and repair the hoisting gear in wind power plants across Europe.



FEM CLASSIFICATION

According to FEM classification, two fundamental criteria must be taken into account
load spectrum, average daily operating time.

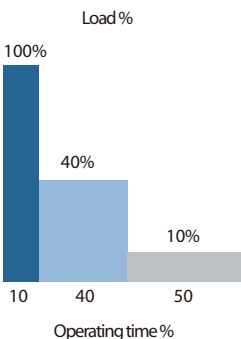
load spectrum

LIGHT

($k < \text{or} = \text{at } 0.5$)

Occasional full load. Usually light load.

Small fixed load.

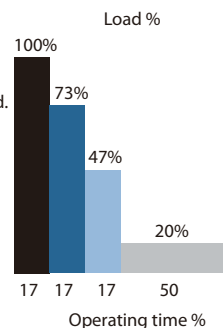


MEDIUM

($0.5 < k < \text{or} = \text{at } 0.63$)

Occasional full load. Usually light load.

Average fixed load.

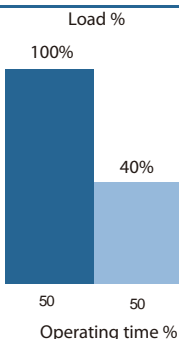


HEAVY

($0.63 < k < \text{or} = \text{at } 0.8$)

Repetitive full load. Usually average load.

Heavy fixed load.

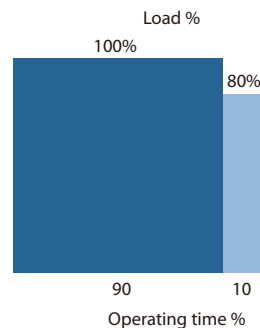


VERY HEAVY

($0.8 < k < \text{or} = \text{at } 1$)

Usually almost full load.

Very heavy fixed load.



2) Daily operating time (T_m): T_m is the daily operating time with load and without load

3) The correct drive group in accordance with

DIN 15020 or FEM 9.755 can be selected using the following table.

Etat de sollicitation		Average daily operating time in hours					
service	k	< 0,5 h	< 1 h	< 2 h	< 4 h	< 8h	< 16h
light	($k < \text{or} = \text{at } 0.5$)	-	1Cm	1Bm	1Am	2m	3m
medium	($0.5 < k < \text{or} = \text{at } 0.63$)	1Cm	1Bm	1Am	2m	3m	4m
heavy	($0.63 < k < \text{or} = \text{at } 0.8$)	1Bm	1Am	2m	3m	4m	5m
very heavy	($0.8 < k < \text{or} = \text{at } 1$)	1Am	2m	3m	4m	5m	-

4) The following table shows the theoretical service lifetime for ISO ratings M3, M4, M5 and M6

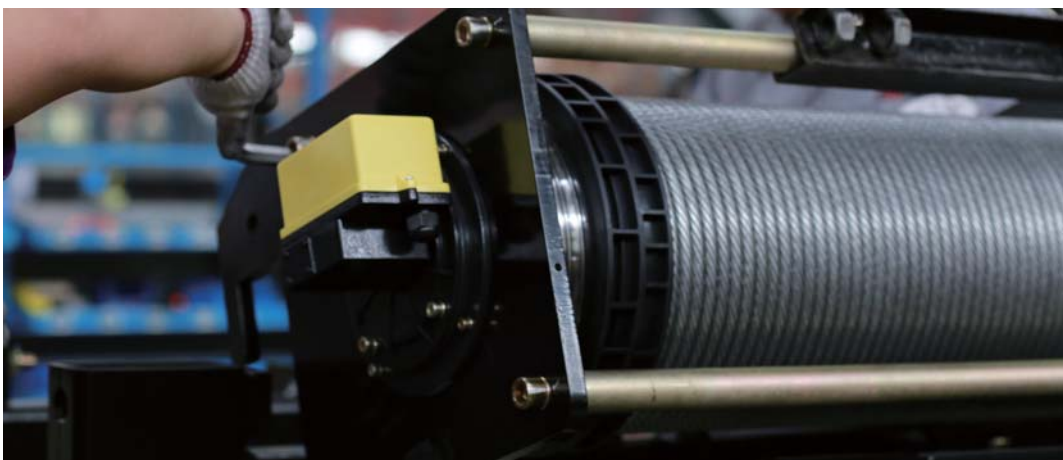
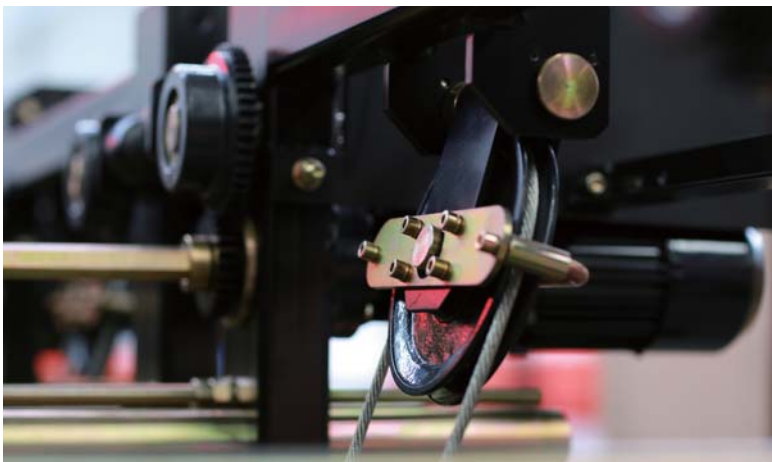
Load spectrum		Theoretical service life [hrs]			
L1	Light	3150	6300	12500	25000
L2	Medium	1600	3200	6300	12500
L3	Heavy	800	1600	3200	6300
L4	Very heavy	400	800	1600	3200
FEM/ISO rating		1Bm/M3	1Am/M3	2m/M5	3m/M6

5) FEM / ISO

FEM group	1Bm	1Am	2m	3m	4m
ISO group	M3	M4	M5	M6	M7

PRODUCTS ARE CONVINCING THANKS TO...

- ... our many years of manufacturing experience for hoists and rope winches
- ... innovative technology
- ... and functional designs



PWH series wire rope electric hoists



Standard configuration:

- Two speed pole-change hoisting motor with bimetal sensor
- Hoist D.C disc brake, maintenance free
- 4 steps gear limit switches (up, down, low speed up approach, phase fault protection)
- Electromechanic overload protection
- Variable speed travelling motor: 3 to 20 m/min (hoist with trolley)
- Standard power supply: 380V/400V/415V/50HZ 440V/460V/60HZ
- Motor protection IP55 / insulation class F
- Without push button box
- Hook with safety latch
- Rubber buffers (for hoist with trolley)
- Test certificate
- Hook certificate
- Wire rope certificate
- Set of electrical diagrams
- EC Certificate of conformity



Options:

- Non-standard power supply
- Intelligent monitoring module
- Hoisting motor for variable speed
- Class H motor
- IP66 motor protection
- Heating for motor/ hoist electrical cubicle
- Stainless steel hoist panel
- External fan for hoisting
- Hook operated upper limit switch (manual reset / low voltage control switching)
- Rain cover for motor
- Ramshorn hook
- Stainless steel wire rope
- Drum brake (overspeed brake / holding / holding+overspeed)
- Explosion proof hoist
- Extra set of documents



Drum

Use seamless steel tube as raw material and process it by numbers of working procedure.

Advanced processing methods to ensure concentricity of the drum.

The depth of rope groove is in compliance with the FEM standard. High-strength pressing plates and bolts are fastened on the end of the wire rope to ensure the safety of lifting.



Electrical system

The easy-to-service control system has the multiple safety protection devices to ensure equipment safe. IP54 protective grade. Quick connector reduces installation and maintenance work to minimum.



Lifting gear limit switch

The limit switch with 4 cams can be accessed on the gear unit and is used for managing the upper and lower limit switches of the hook, switching from low to high speed, and for managing phase reversals.



Lifting drive unit

Double winding asynchronous motors, aluminum round frame
60 % duty factor and tropicalized as a standard for greater longevity.
IP55 protection, F class Insulation, B class heating, with over temperature protection
Electromagnetic brake, maintenance free
In normal use the brake lining has been designed for the hoist life.
Easy access to the air-gap measuring
The hoisting gearbox comprises multistage gear transmission. Lightweight gear units with silent running and hard tooth-surface gears deliver the torque required



Trolley drive unit

Motors include a F class insulation and a IP55 degree of protection as standard with a special inverter insulation. This motor's ED is 40%.



Rope guide

Light weight
good wear resistance.
Prevent wire rope from skipping and loosing to off-groove.



Wire rope

Wire rope of high-performance with tensile strength up to 2160MPa.
The surface with galvanized processing for corrosion prevention effectively.
With good flexibility to ensure wear resistance of the wire rope and prolong its service life.



Hook block

Concise and sturdy hook block has the outstanding features of DIN standard: protective hook shield, machined pulley and high-strength material of T-grade load hook.

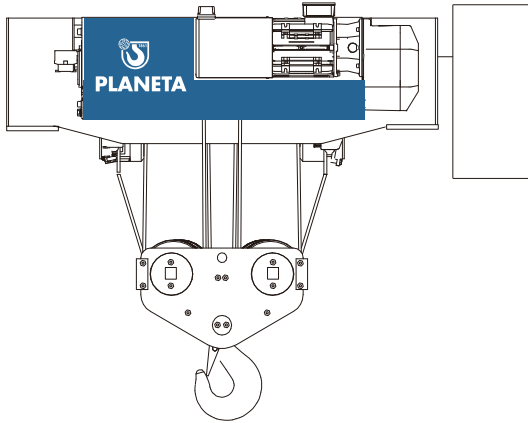


Monitoring unit

The electrical cubicle on the hoist may contain the condition monitoring unit that supervises the safe operation of the hoist. The unit collects data on functions that affects safety and calculates the remaining time in the Safe Working Period (SWP) during which the hoist can operate safely. It has the practical and friendly human-machine interface and easy operation.

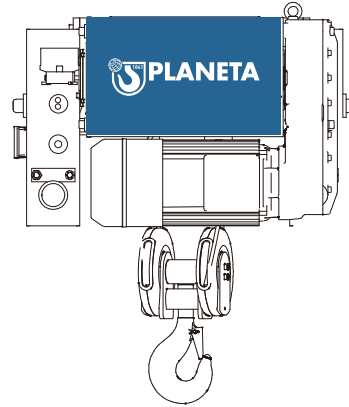


Customized Installation



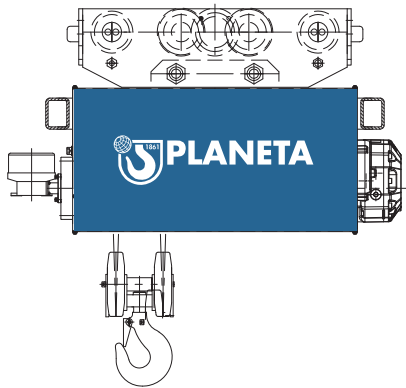
Fixed version

The hoists are not equipped with a trolley and used for applications where horizontal movement is not required.



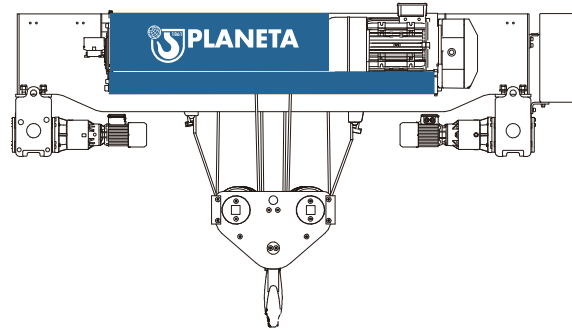
Short headroom trolley version

These hoists are fitted with a trolley for loads and are designed to make optimal use of the height of lift and the limited space available.



Normal headroom trolley version

These hoists are fitted with a trolley and used for applications where horizontal movement is required.



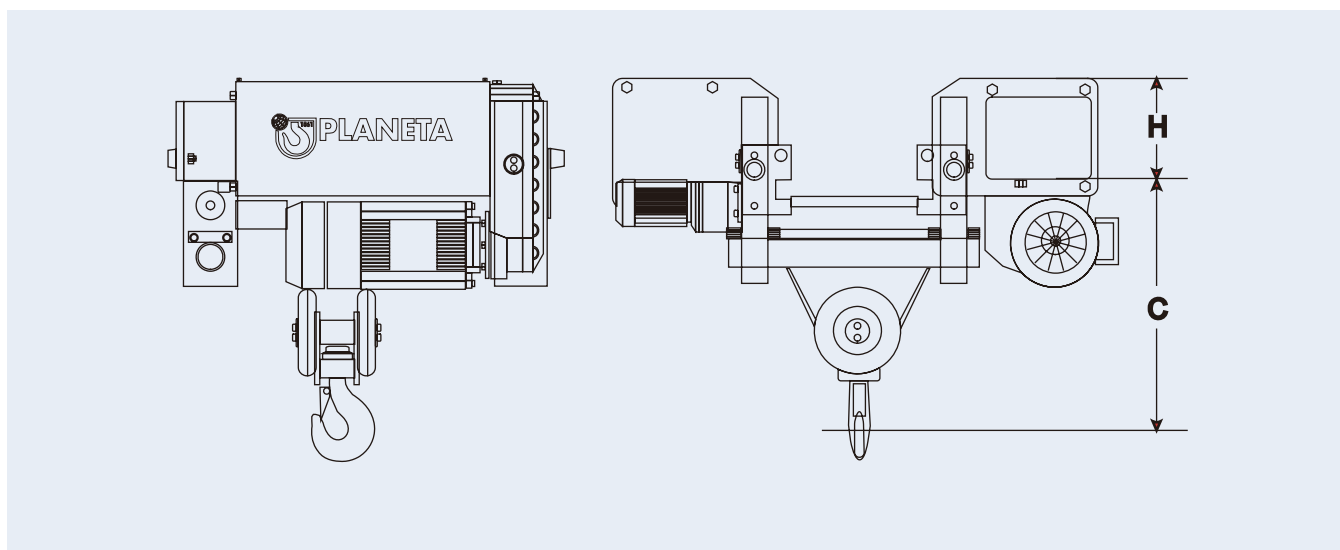
Double girder trolley version

These hoists are fitted with a trolley for horizontal movement of loads and are designed to move particularly large loads.

PWH wire rope hoist dimension table for monorail or single girder crane

Load capacity (Kg)	FEM	ISO	Height (m)	Speed (m/min)	Trolley speed (m/min)	H Size (mm)	C Size (mm)
1000	4m	M7	6/9	0.8/5.0	5~20	232	500
1250	3m	M6	6/9	0.8/5.0	5~20	232	500
1600	3m	M6	6/9	0.8/5.0	5~20	232	500
1600	2m	M5	6/9/12/	1.6/10.0	5~20	254	660
2000	2m	M5	6/9	0.8/5.0	5~20	232	500
2000	3m	M6	6/9/12/18	1.6/10.0	5~20	254	660
2500	3m	M6	6/9	0.8/5.0	5~20	232	500
2500	2m	M5	6/9/12/18	1.6/10.0	5~20	254	660
3200	2m	M5	6/9	0.8/5.0	5~20	232	500
3200	1Am	M4	6/9/12/18	1.6/10.0	5~20	254	660
5000	2m	M5	6/9/12/18	0.8/5.0	5~20	254	590
5000	2m	M5	6/9/12/18	1.6/10	5~20	321	790
6300	1Am	M4	6/9/12/18	0.8/5.0	5~20	254	590
8000	3m	M6	6/9/12/18	0.8/5.0	5~20	321	740
10000	2m	M5	6/9/12/18	0.8/5.0	5~20	321	740
10000	3m	M6	6/9/12/18	0.6/4.0	5~20	364	850
12500	1Am	M4	6/9/12/18	0.8/5.0	5~20	321	740
12500	2m	M5	6/9/12/18	0.6/4.0	5~20	364	850
16000	2m	M5	6/9/12/18	0.6/4.0	5~20	364	850
12500	1Am	M4	6/9/12/18	0.6/4.0	5~20	364	850

For more options, please contact PLANETA

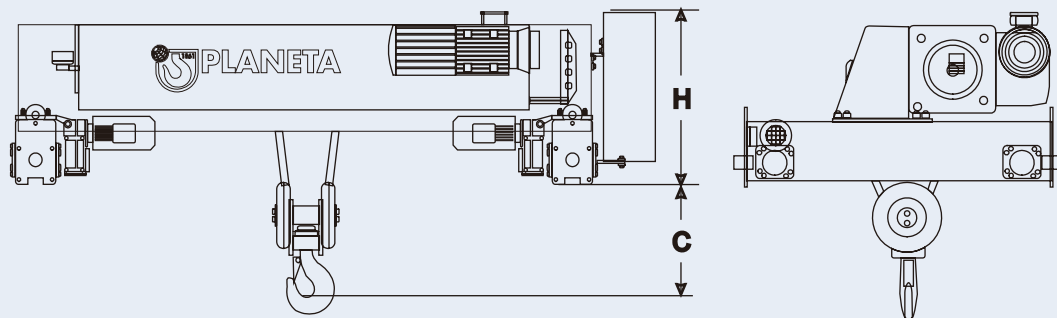




PWH wire rope hoist selection table for double girder crane

Load capacity (Kg)	FEM	ISO	Height (m)	Speed (m/min)	Trolley speed (m/min)	H Size (mm)	C Size (mm)
2000	2m	M5	6/9	0.8/5.0	5~20	531	350
3200	2m	M5	6/9	0.8/5.0	5~20	531	350
5000	2m	M5	6/9/12/18	0.8/5.0	5~20	471	450
6300	1Am	M4	6/9/12/18	0.8/5.0	5~20	471	450
8000	3m	M6	6/9/12/18	0.8/5.0	5~20	542	650
10000	2m	M5	6/9/12/18	0.8/5.0	5~20	542	650
10000	3m	M6	6/9/12/18	0.6/4.0	5~20	679	700
12500	1Am	M4	6/9/12/18	0.8/5.0	5~20	542	650
12500	2m	M5	6/9/12/18	0.6/4.0	5~20	679	700
16000	2m	M5	6/9/12/18	0.6/4.0	5~20	679	700
20000	1Am	M4	6/9/12/18	0.66/4.0	5~20	679	700
20000	2m	M5	6/9/12/18	0.53/3.4	5~20	800	1200
25000	1Am	M4	6/9/12/18	0.53/3.4	5~20	800	1200
25000	2m	M5	6/9/12/18	0.8/3.3	5~20	864	1000
32000	2m	M5	6/9/12/18	0.8/3.3	5~20	864	1000
32000	2m	M5	6/9/12/18	0~4.9	5~20	1025	920
40000	1Am	M4	6/9/12/18	0~4.9	5~20	1025	920
50000	2m	M5	6/9/12/18	0~3.2	5~20	1023	950
63000	1Am	M4	6/9/12/18	0~3.2	5~20	1023	950
80000	1Bm	M3	6/9/12/18	0~3.8	5~20	1025	1525

For more options, please contact PLANETA





R & D Manufacturing

- >> Compact structure, light self-weight, small wheel-pressure
- >> Save operating costs and green energy saving
- >> Selection of high quality of components with safety and reliability and durable in use
- >> Precise positioning and efficient running can improve production efficiency
- >> Safe and reliable, running monitoring and simple and convenient maintenance



Case application

PLANETA PWH wire rope electric hoist products are provided with complete series and have its wide application, to provide customers with comprehensive industrial crane equipment and various types of lifting mechanism. PLANETA PWH wire rope electric hoist is provided with technical characteristics of light self-weight, low headroom and low wheel pressure, to ensure product stability and security in use, and to create long-term value for our customers.

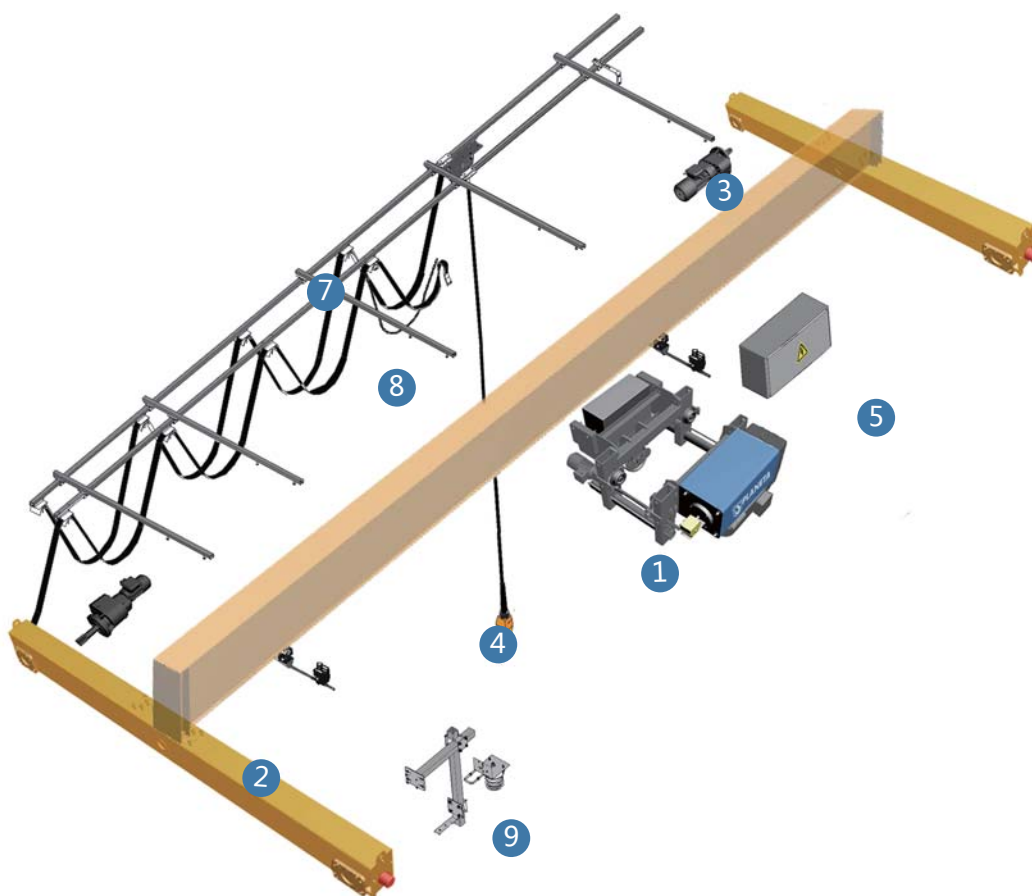


Perfect fit, various applications

PLANETA pays close attention to customers' demands, and the PWH electric rope hoist we designed which can be upgraded to PWH explosion-proofing electric rope hoist series. Our products are widely used in many different fields, such as the food industry, chemical industry, petroleum, natural gas and any other occasions that put safety production in the first place.

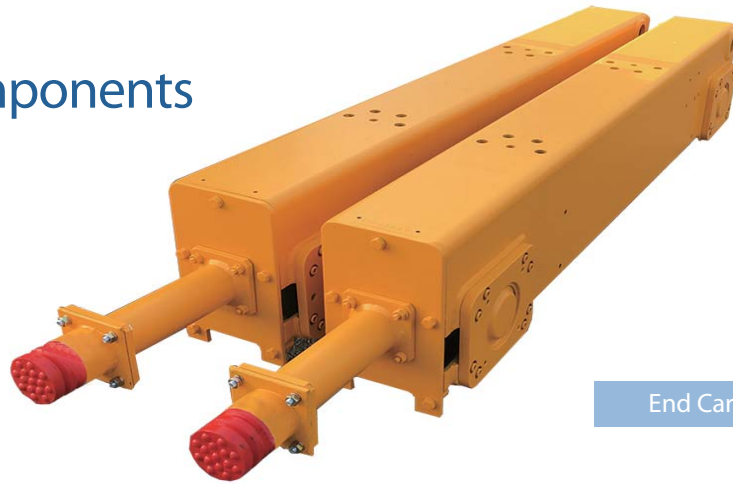


Crane components



- 1 Hoist
- 2 Crane end carriage
- 3 Travel drive
- 4 Control pendant or radio control
- 5 Electric cabinet
- 6 Clamp-fitted buffers
- 7 C-rail assembly
- 8 Power supply with flexible flat cable
- 9 Collector support

Crane components



End Carriage for Overhead Crane



End Carriage for Suspension Crane



Crane Travel Drive



Electric Control Panel



Travel Limit Switches for Cross and Long Travel



Push-Button Version



Joystick Version



Signal Transmitters



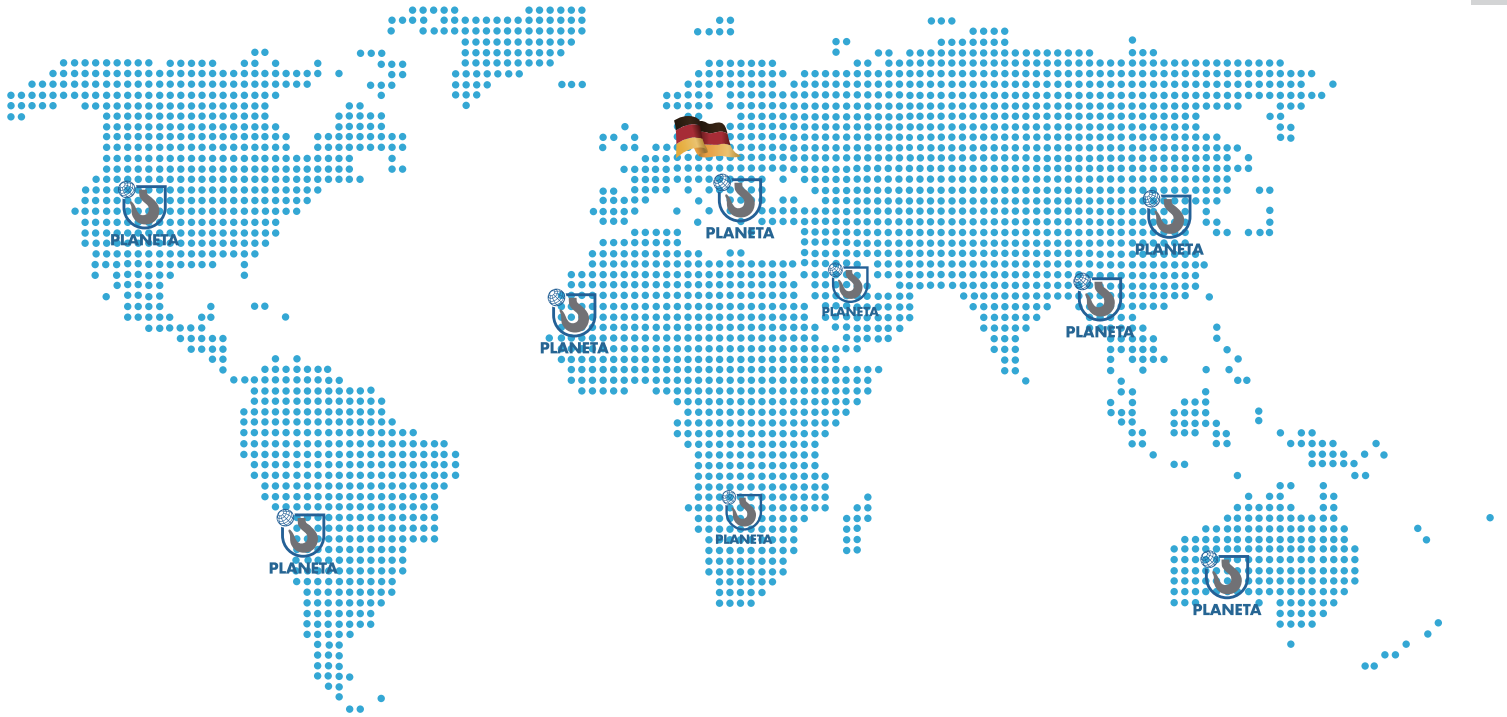
Load Display



Flat Cable and Supports for Cross Travel

If any other requirements, please consult us

The world is our market





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