

## SERIES PRODUCTS

### 系列产品>>

#### 无人起重机 | Unmanned crane

面对“中国制造2025”的国家战略，制造业各个领域的企业都面临着转型升级实际问题，必须要有形成规模的信息化软、硬件整套方案，以建立企业横向贯通与纵向融合的信息化集成管理系统。在信息化建设过程中，企业引入管理信息系统(MIS)、企业资源计划(ERP)、制造执行系统(MES)改善了企业管理者的经营决策，提高了企业经营效率。然而企业在实际的生产制造过程中，物料信息的处理与物料吊运大多采用人工方式来处理，操作人员需反复将物料的变化信息录入到MES系统中，粗放式的人工起重机吊运方式，羁绊了企业的转型升级。为解决生产过程中管理层与生产执行层的信息断层问题，升级新型的智能库区管理系统与起重机无人化系统具有重要的现实意义。当前库区管理中普遍存在作业流程滞后、人工成本高、效率低、操作不标准、信息化程度低、信息孤岛的问题，为了解决这些问题，提出了库区智能无人化行车(起重机)系统方案。

起重机自动控制系统(PLC)，实现从MES下发计划信息、工单任务自动执行、库区高效管理、作业实绩实时反馈、MES高效排产的全流程控制。



Facing the national strategy of "Made in China 2025", enterprises in all fields of the manufacturing industry are faced with the practical problems of transformation and upgrading. They must have a complete set of information software and hardware solutions that form a scale to establish an information integrated management system that integrates enterprises horizontally and vertically. In the process of information construction, enterprises introduce management information systems (MIS), enterprise resource planning (ERP), and manufacturing execution systems (MES). It improves the management decision of the enterprise managers and improves the operation efficiency of the enterprise. However, in the actual production and manufacturing process of enterprises, most of the material information processing and material lifting are handled manually. Operators need to repeatedly input the material change information into the MES system. The extensive manual crane lifting method has hampered the transformation and upgrading of enterprises. In order to solve the problem of information gap between the management and the production executive in the production process, it is of great practical significance to upgrade the new intelligent warehouse management system and the unmanned crane system. At present, there are many problems in the management of the reservoir area, such as lagged operation process, high labor cost, low efficiency, non-standard operation, low information level, and isolated information island. In order to solve these problems, an intelligent unmanned crane (crane) system for the reservoir area is proposed.

The crane automatic control system (PLC) realizes the whole process control of sending plan information from MES, automatic execution of work order tasks, efficient warehouse management, real-time feedback of operation performance, and efficient production scheduling of MES.

## 无人值守仓储起重机 | Unattended storage crane

### — 无人值守仓储起重机系统功能

- \* 1、实时监视起重机运行状态,三维显示起重机的位置
- \* 2、实时显示库存状态,记录出入库信息及库存信息,自动生成多种报表
- \* 3、与仓库管理系统上游设备和下游设备,通过高速总线链接,能实现无人值守的功能
- \* 4、运行路径最优化,三机构联动运行,提高作业效率

#### Functions of unattended storage crane system

- \* 1. Monitor the running status of the crane in real time and display the position of the crane in three dimensions.
- \* 2. Display the inventory status in real time, record the receipt / issue information and inventory information, and automatically generate a variety of reports.
- \* 3. It is connected with the upstream equipment and downstream equipment of the warehouse management system through high-speed bus to realize the unattended function.
- \* 4. The operation path is optimized and the three mechanisms operate in linkage to improve the operation efficiency.

### — 无人值守仓储起重机系统优势

- \* 1、采用闭环防摇摆技术,运行更稳定
- \* 2、位置测量采用绝对值位置传感器,定位更精准
- \* 3、WMS系统技术先进,稳定可靠
- \* 4、采用人性化、和模块化的设计理念,界面友好便捷,维修安全方便

#### Advantages of unattended storage crane system

- \* 1. The closed-loop anti swing technology is adopted for more stable operation.
- \* 2. The absolute value position sensor is used for position measurement, which makes the positioning more accurate.
- \* 3. WMS system is technologically advanced, stable and reliable.
- \* 4. The design concept of humanization, and modularization is adopted, with friendly and convenient interface and safe and convenient maintenance.





## 无人值守散料抓斗起重机 | Unattended bulk grab crane

### — 无人值守散料抓斗起重机系统功能

- \* 1、料池区域的任意划分,料高的实时自动测量
- \* 2、自动抓料,自动撒料,自动移料,自动上料,上料量自动统计等功能
- \* 3、远程监控和运行维护功能

#### The functions of unattended bulk grab crane

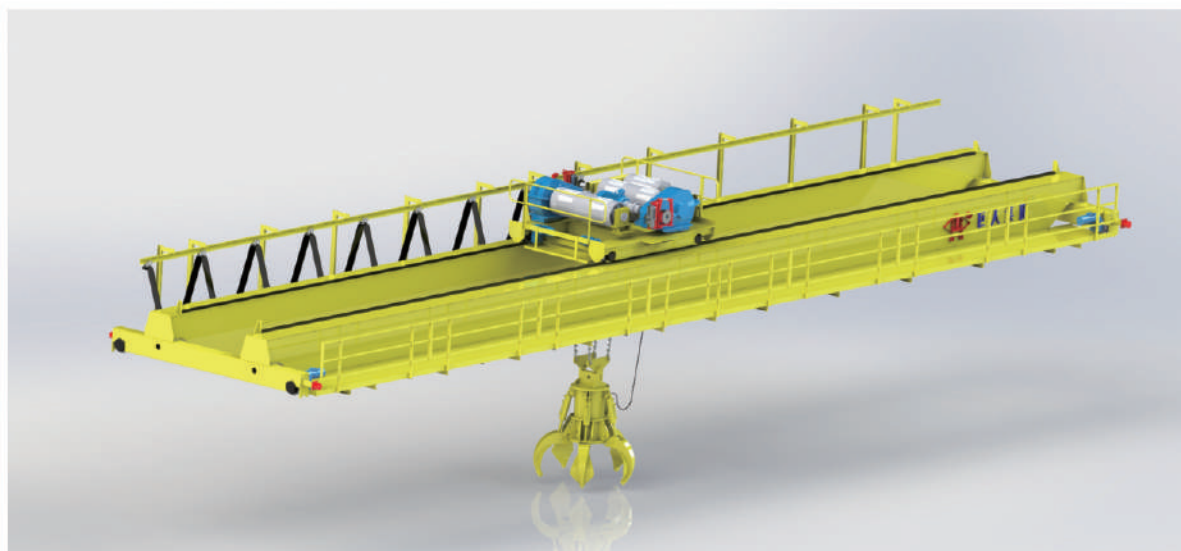
- \* 1. Arbitrary division of material pool area, real-time automatic measurement of material height
- \* 2. Automatic material grabbing, automatic material withdrawal, automatic material transfer, automatic material loading, automatic statistics of material loading amount and other functions
- \* 3. Remote monitoring and operation maintenance function

### — 无人值守散料抓斗起重机系统核心技术

- \* 1、料池区域的任意划分功能
- \* 2、料位高低的实时监测和显示技术
- \* 3、防钢丝绳缠绕技术
- \* 4、轻载超高速运行技术
- \* 5、电气防摇摆和精确定位技术
- \* 6、与其他设备信号通信的OPC技术

#### Advantages of unattended storage crane system

- \* 1. Arbitrary division function of material pool area
- \* 2. Real time monitoring and display technology of material level
- \* 3. Anti winding technology of steel wire rope
- \* 4. Light load ultra high speed operation technology
- \* 5. Electrical anti sway and precise positioning technology
- \* 6. OPC Technology for signal communication with other equipment



## 欧式系列产品

### EUROPEAN SERIES PRODUCTS >>

采用德国进口的起升电机, 减速器。起升电机, 减速器、卷筒和起升限位开关的一体化紧凑型设计节约了用户的使用空间。模块化设计在增强了机构的可靠性的同时有效的降低了维护时间和成本。具有更快更多的起吊速度和多种滑轮倍率可供选择。标准小车运行机构采用变频器控制, 速度达到20米/分, 使小车行走时吊运物品摆动小, 定位精确, 可安全可靠地吊运精密贵重物品。



单梁欧式电动葫芦



双梁小车欧式电动葫芦

The lifting motor and reducer imported from Germany are adopted. The integrated compact design of lifting motor, reducer, drum and lifting limit switch saves the user's use space. Modular design not only enhances the reliability of the mechanism, but also effectively reduces the maintenance time and cost. It has faster and more lifting speeds and a variety of pulley ratios to choose from. The standard trolley running mechanism is controlled by frequency converter, and the speed reaches 20m / min, so that the trolley can lift precision valuables safely and reliably with small swing and accurate positioning

- \* 低净空设计
- \* 柔性驱动, 内应力小, 传动效率高
- \* 变频无级小车, 运行平稳
- \* 硬齿面减速机, 自重轻
- \* 防护等级IP55, H级绝缘
- \* 重级制电机, 持续率60%ED
- \* 过热、过载保护
- \* 电磁盘式制动器, 可靠, 防尘
- \* 免维护

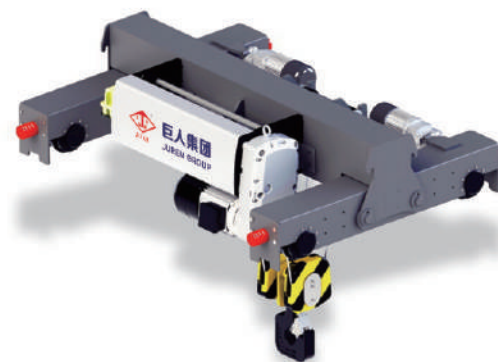
- \* Low clearance design
- \* Flexible drive, small internal stress and high transmission efficiency
- \* Variable frequency stepless trolley, stable operation
- \* Hard tooth surface reducer, self-examination light
- \* Protection grade IP55, insulation class H
- \* Heavy duty motor, duration 60% ed
- \* Overheating and overload protection
- \* Electromagnetic disc brake, reliable and dustproof
- \* Maintenance free





## 欧式系列产品

### EUROPEAN SERIES PRODUCTS >>



低净空葫芦



欧式端梁



三合一驱动



- \* 低净空，自重轻。节省建筑成本
- \* 重级制，满足持续重载作业
- \* 柔性驱动。内应力小。传动效率高
- \* 变频无级调速。运行平稳
- \* 硬齿面减速机。自重轻
- \* 防护等级IP55，H级绝缘
- \* 重级制电机，持续60%ED
- \* 过热、过载保护
- \* 免维护

- \* Low headroom and light deadweight. Save construction costs
- \* Heavy duty system to meet continuous heavy duty operation
- \* Flexible drive. The internal stress is small. High transmission efficiency
- \* Variable frequency stepless speed regulation. Stable operation
- \* Hardened reducer. Light deadweight
- \* Protection grade: IP55, Class H insulation
- \* Heavy duty motor, continuous 60% ED
- \* Overheating and overload protection
- \* Maintenance free



主起升运行机构



小车端梁



## CONTAINER GANTRY CRANE

### 1 集装箱门式起重机



适用于国际标准集装箱的搬运及装卸,该集箱采用牵引小车形式,使整机结构轻便,性能先进,生产效率高,机动性好,对地面不平整度敏感性小。整机采用电缆卷筒供电。

It is suitable for the handling and loading and unloading of international standard containers. The header adopts the form of traction trolley, which makes the whole machine light in structure, advanced in performance, high production efficiency, good mobility and less sensitive to ground roughness. The whole machine is powered by cable drum.



## MG DOUBLE BEAM HOOK GANTRY CRANE

### 2 MG型双梁吊钩门式起重机

MG型双梁吊钩门式起重机主要由门架、起重小车、大车运行机构、司机室和电气控制系统组成。

门架为箱形结构,主梁采用双梁偏轨形式,支腿根据用户要求分A形和U形两种。

操作方式采用闭式司机室,内有可调式座椅,底板铺设绝缘垫,窗玻璃采用钢化玻璃,配有灭火器、电风扇,可根据用户要求配置冷暖空调、讯响器、对讲机等附属设备。

MG double beam hook gantry crane is mainly composed of gantry, lifting trolley, crane running mechanism, cab and electrical control system.

The portal frame is a box structure, and the main beam adopts the form of double beam deflection rail. The outriggers are divided into A-shaped and U-shaped according to the user's requirements.

The operation mode is a closed cab with adjustable seats, insulating mat on the bottom plate, toughened glass window glass, fire extinguisher and electric fan, and auxiliary equipment such as air conditioner, buzzer and walkie talkie can be configured according to user requirements.





## MG TYPE SUBWAY CONSTRUCTION GANTRY CRANE

### 3 MG型地铁施工门式起重机

MG型地铁施工用门式起重机是根据地下施工的使用要求及工况,在通用门式起重机的基础上研制出来的专用门吊,专用于地下施工时出渣作业及吊运物品。

起重机由小车、门架、大车运行机构、液压翻转机构、司机室及电气设备组成。

小车上设有液压翻转机构,该机构有液压工作站和翻渣钩组成。

挂梁中间设有吊钩,用于吊运一般物件。

大车运行机构采用8轮4驱动形式。固定在台车上的电机通过立式减速器驱动车轮,并设有防风用夹轨器,起重机正常工作时,夹轨器的夹钳离开轨道,当起重机停止工作时,操作人员将夹钳放下,夹住轨道,防止起重机滑动。

倒土方向根据施工现场而定。



MG type gantry crane for subway construction is a special gantry crane developed on the basis of the general gantry crane according to the operating requirements and working conditions of underground construction, which is specially used for mucking operation and lifting objects during underground construction.

The crane is composed of trolley, gantry, crane running mechanism, hydraulic turnover mechanism, cab and electrical equipment.

The trolley is equipped with a hydraulic turnover mechanism, which is composed of a hydraulic workstation and a slag turnover hook. A hook is set in the middle of the hanging beam for lifting general objects.

The crane traveling mechanism adopts 8-wheel 4-drive mode. The motor fixed on the trolley drives the wheels through the vertical reducer, and is equipped with a windproof rail clamp. When the crane works normally, the clamp of the rail clamp leaves the rail. When the crane stops working, the operator puts the clamp down to clamp the rail to prevent the crane from sliding.

The direction of dumping shall be determined according to the construction site.



## MG DOUBLE BEAM TRUSS GANTRY CRANE

### 4 MG型双梁桁架门式起重机

MG型双梁桁架门式起重机其主要由门架、起重小车、大车运行机构、司机室和电气控制系统组成。

门架为桁架结构,具有结构轻、抗风力强等优点。包括主梁、上端梁、支腿、下端梁、行走台车及走台栏杆等,主梁采用三角桁架结构,上面铺设轨道,供起重小车沿主梁方向作横向移动。支腿为桁架结构,由型钢组焊。走台用来放置电气设备及检修用,外侧设有防护栏杆。



Mg double beam truss gantry crane is mainly composed of gantry, lifting trolley, crane operating mechanism, cab and electrical control system form.

The portal frame is a truss structure, which has the advantages of light structure and strong wind resistance. Including the main beam, upper end beam, outrigger, lower end beam, traveling trolley and walking platform railing, etc. The main beam is of triangular truss structure, with rails laid on it for the crane trolley to move laterally along the direction of the main beam. The outrigger is a truss structure, which is assembled and welded by section steel. Walkways are used for placing electrical equipment and maintenance, and protective railings are set outside.





## MG TYPE ROAD AND BRIDGE GANTRY CRANE

### 5 MG型路桥门式起重机

MG路桥门式起重机主要用于桥梁建设,工作速度慢,由门架、卷扬机小车、大车运行机构、司机室和电气控制系统组成。

门架为桁架结构,具有结构轻、抗风力强等优点。包括主梁、上端梁、支腿、下端梁、行走台车及走台栏杆等。主梁采用三角桁架结构,上面铺设轨道,供小车沿主梁方向作横向移动。支腿采用箱形或钢管两种形式。

小车上布置有卷扬机,体积紧凑,自重轻。

大车运行采用摆线针轮减速器,软启动电机,八轮四驱,运行平稳。



MG road bridge gantry crane is mainly used for bridge construction, and its working speed is slow. It is composed of gantry, winch trolley, crane operating mechanism, cab and electrical control system.

The portal frame is a truss structure, which has the advantages of light structure and strong wind resistance. It includes main beam, upper end beam, outrigger, lower end beam, traveling trolley, walking platform railing, etc. Triangular truss structure is adopted for the main beam, and rails are laid on it for the trolley to move laterally along the direction of the main beam. The outriggers are of box type or steel pipe type.

The trolley is equipped with a winch, which is compact and light in weight.

Trochoidal pin wheel reducer, soft start motor, eight wheel four drive, flat running stable.



## SHIPBUILDING GANTRY CRANE

### 6 造船门式起重机

ME型造船门式起重机是一种大起重量、大跨度、大起升高度的门式起重机,专用于船坞进行大型船体分段运输、对接及翻转作业。

主要技术特点:

- ★ 具有单吊、抬吊、空中翻转、空中水平微转等多功能;
- ★ 门架有单主梁型和双主梁型两种,为合理使用材料,主梁采用变截面优化设计;
- ★ 上小车设有双主钩,分别置于主梁两外侧;下小车设有主、副两钩,置于两主梁中心;上、下小车可以相互穿越作业;
- ★ 所有工作机构均采用变频调速;
- ★ 刚性支腿侧主梁顶面设有旋臂起重机,以完成上、下小车的维修作业;
- ★ 为防止暴风袭击,设有安全可靠的夹轨器、地锚等防风装置。

ME shipbuilding gantry crane is a kind of gantry crane with large lifting capacity, large span, and large lifting height, which is specially used for large ship block transportation, docking and turnover operations in the dock.

Main technical features:

It has multiple functions such as single lifting, lifting, aerial overturning, aerial horizontal micro rotation, etc;

There are two types of portal frame: single main beam type and double main beam type. In order to use materials reasonably, the main beam adopts variable section optimization design;

The upper trolley is equipped with double main hooks, which are respectively placed on the two outer sides of the main beam; The lower trolley is equipped with main and auxiliary hooks, which are placed in the center of two main beams; The upper and lower trolleys can cross each other for operation;

All working mechanisms adopt frequency conversion speed regulation;

The top surface of the main beam at the rigid outrigger side is equipped with a jib crane to complete the maintenance of the upper and lower trolleys;

In order to prevent storm attacks, safe and reliable rail clamps, ground anchors and other wind protection devices are provided.





## L-TYPE GANTRY CRANE

### 7 L型门式起重机

L型门式起重机主要由门架、起重小车、大车运行机构、司机室和电气控制系统组成。

门架为箱形结构,起重量20t以下时小车采用垂直反滚轮式,大于20t时小车采用水平反滚轮式,在主梁一侧运行。主梁采用单梁偏轨形式,支腿为L形,吊运空间大,过跨能力强,便于将物件从跨内转运到悬臂下。

操作方式采用闭式司机室,内有可调式座椅,底板铺设绝缘垫,窗玻璃采用钢化玻璃,配有灭火器、电风扇,可根据用户要求配置冷暖空调、讯响器、对讲机等附属设备。

L-type gantry crane is mainly composed of gantry, lifting trolley, crane running mechanism, cab and electrical control system.

The portal frame is of box structure. When the lifting capacity is less than 20t, the trolley is of vertical reverse roller type. When the lifting capacity is greater than 20t, the trolley is of horizontal reverse roller type and runs on one side of the main beam. The main beam is in the form of single beam deflection rail, and the leg is L-shaped, with large lifting space and strong span passing capacity, which is convenient for transferring objects from the inside of the span to the cantilever.

The operation mode is a closed cab with adjustable seats, insulating mat on the bottom plate, toughened glass window glass, fire extinguisher and electric fan, and auxiliary equipment such as air conditioner, buzzer and walkie talkie can be configured according to user requirements.



## MH ELECTRIC HOIST GANTRY CRANE

### 8 MH型电动葫芦门式起重机

MH型电动葫芦门式起重机是有轨运行的中小型起重设备,主要由门架(主梁、支腿、下横梁等)、起升机构、运行机构及电控部分组成,以电动葫芦作为起升机构,工作时沿主梁工字钢下翼缘运行,门架结构分箱形和桁架两种,箱形工艺好,制作方便;桁架自重轻,抗风能力强。整机具有自重轻、结构简单、安装维修方便等特点,适用于中小起重重量范围内的厂矿、货场及仓库等室外场所作一般装卸吊运工作,禁止在有易燃、易爆及充满腐蚀性气体的环境中工作。

操作方式设有地面手柄、无线遥控和司机室等三种操作形式。

MH type electric hoist gantry crane is a small and medium-sized lifting equipment with rail operation, which is mainly composed of gantry (main beam, outrigger, lower beam, etc.), lifting mechanism, operating mechanism and electric control part. The electric hoist is used as the lifting mechanism, which operates along the lower flange of I-beam of the main beam when working. The gantry structure is divided into box type and truss type. The box type process is good, and the production is convenient; The truss has light deadweight and strong wind resistance. The whole machine has the characteristics of light deadweight, simple structure, convenient installation and maintenance, etc. It is suitable for general loading and unloading and lifting work in factories, mines, freight yards, warehouses and other outdoor areas within the range of small and medium-sized lifting capacity. It is prohibited to work in an environment with flammable, explosive and corrosive gases.

The operation mode includes ground handle, wireless remote control and cab.





## BMG AND BMH SEMI GANTRY CRANES

### 9 BMG、BMH型半门式起重机



BMG型双主梁吊钩半门式起重机

双主梁吊钩半门式起重机主要由门架、起重小车、大车运行机构和电气控制系统组成。

门架为箱形结构，一侧设有支腿，沿地面轨道上运行，另一侧无支腿，沿厂房上部轨道运行。

操作方式采用闭式司机室，内有可调式座椅，底板铺设绝缘垫，窗玻璃采用钢化玻璃，配有灭火器、电风扇，可根据用户要求配置冷暖空调、讯响器、对讲机等物品。

BMG type semi gantry crane with double main beam hook

The double girder hook semi gantry crane is mainly composed of gantry, lifting trolley, crane running mechanism and electrical control system.

The portal frame is a box structure, with outriggers on one side running along the ground track, and no outriggers on the other side running along the upper track of the plant.

The operation mode is a closed cab with adjustable seats, insulating mat on the bottom plate, tempered glass on the window glass, fire extinguisher and electric fan. Air conditioner, buzzer, walkie talkie and other items can be configured according to user requirements.



BMH型电动葫芦半门式起重机

电动葫芦半门式起重机是有轨运行的中小型起重设备，主要由门架(主梁、支腿、下横梁等)、起升机构、运行机构及电控部分组成，以电动葫芦作为起升机构，工作时沿主梁工字钢下翼缘运行。门架一侧设有支腿，沿地面轨道上运行，另一侧无支腿，沿厂房上部轨道运行，其余结构和配置与MH型电动葫芦门式起重机一致。

BMH electric hoist semi gantry crane

The electric hoist semi portal crane is a small and medium-sized lifting equipment with rail operation, which is mainly composed of portal frame (main beam, outrigger, lower beam, etc.), lifting mechanism, operating mechanism and electric control part. The electric hoist is used as the lifting mechanism, and runs along the lower flange of the I-beam of the main beam when working. One side of the gantry is equipped with outriggers, which run along the ground track, and the other side is not equipped with outriggers, which run along the upper track of the powerhouse. Other structures and configurations are the same as those of the MH electric hoist gantry crane.

## CASTING BRIDGE CRANE

### 10 铸造桥式起重机

铸造桥式起重机适用于冶金行业的冶炼车间在固定跨间做运输铁水、兑钢水及浇铸钢锭之用，此外，也可做清渣、修理等辅助吊运工作，本起重机主要吊取的对象是耳轴中心距一定的钢水包，主钩所配用的吊具是一对用横梁保持固定距的龙门吊钩组，主钩提升钢水包，副钩可用于翻转钢水包或做些辅助吊运工作。



The casting bridge crane is suitable for the smelting workshop in the metallurgical industry to transport molten iron, mix molten steel and cast steel ingots in fixed spans. In addition, it can also be used for auxiliary lifting such as slag removal and repair. The crane mainly lifts the ladle with a certain distance between the center of the trunnion. The lifting appliance for the main hook is a pair of gantry hook groups with a fixed distance maintained by the beam. The main hook lifts the ladle, The auxiliary hook can be used to turn over the ladle or do some auxiliary lifting work.





## QD ELECTRIC DOUBLE BEAM HOOK BRIDGE CRANE

### 11 QD型电动双梁吊钩桥式起重机

QD型电动双梁吊钩桥式起重机是目前应用较为广泛的起重机械，其主要由箱形桥架、起重小车、大车运行机构和电气控制系统组成，取物装置是吊钩。

主梁上面铺设轨道，供起重小车沿主梁方向作横向移动，主梁与箱型端梁焊接而成，端梁中间布置有接头，螺栓连接，供桥架分拆运输。走台用来放置大车运行机构、电气设备及作检修用。

操作方式设有地面手柄、无线遥控和司机室三种操作形式，驾驶室有开式、闭式两种，内有可调式座椅，底板铺设绝缘垫，窗玻璃采用钢化玻璃，配有灭火器、电风扇，可根据用户要求配置冷暖空调、讯响器、对讲机等物品。

本起重机工作级别A3-A7，常用起重量为3-250t，适宜在环境温度-10℃-40℃，相对湿度不大于85%的工厂、仓库及货场等处作装卸吊运工作，禁止在易燃、易爆以及充满腐蚀性气体的环境中工作。

QD electric double beam hook bridge crane is a widely used lifting machinery at present. It is mainly composed of box bridge, lifting trolley, crane running mechanism and electrical control system. The lifting device is the hook.

A track is laid on the main beam for the lifting trolley to move laterally along the direction of the main beam. The main beam is welded with the box end beam. A joint is arranged in the middle of the end beam and connected by bolts for the disassembly and transportation of the bridge. The walking platform is used to place the crane operating mechanism, electrical equipment and maintenance.

There are three operation modes: ground handle, wireless remote control and driver's cab. The driver's cab has two types: open and closed. There are adjustable seats inside. The bottom plate is paved with insulating pads. The window glass is made of tempered glass, equipped with fire extinguisher and electric fan. Cold and warm air conditioner, buzzer, walkie talkie and other items can be configured according to the user's requirements.

The working level of the crane is a3-a7, and the common lifting capacity is 3-250t. It is suitable for loading, unloading and hoisting in factories, warehouses and freight yards where the ambient temperature is - 10 °C -40 °C and the relative humidity is not greater than 85%. It is prohibited to work in flammable, explosive and corrosive gas environments.



## QZ ELECTRIC GRAB BRIDGE CRANE

### 12 QZ型电动抓斗桥式起重机

QZ型电动抓斗桥式起重机主要由箱形桥架、抓斗小车、大车运行机构、司机室和电气控制系统组成，取物装置为能抓取散装物料的抓斗。

抓斗小车上有关闭机构和起升机构，抓斗以四根钢丝绳分别悬挂在关闭机构和起升机构上。关闭机构驱动抓斗闭合，抓取物料，当斗口闭合后，立即开动起升机构，使四根钢丝绳平均受载进行起升工作。卸料时只开动关闭机构，斗口随即张开，倾卸物料。

本起重机除起升机构不同外，其余结构部分与吊钩桥式起重机基本相同。

QZ electric grab bridge crane is mainly composed of box bridge, grab trolley, crane running mechanism, cab and electrical control system. The picking device is a grab that can grab bulk materials.

The grab trolley is equipped with an opening/closing mechanism and a lifting mechanism, and the grab is suspended on the opening/closing mechanism and the lifting mechanism by four wire ropes. The opening/closing mechanism drives the grab to close and grab the materials. When the bucket mouth is closed, the lifting mechanism will be started immediately to make the four wire ropes loaded evenly for lifting. When unloading, only the opening/closing mechanism is opened, and the bucket mouth immediately opens to dump materials.

Except that the hoisting mechanism of the crane is different, the other structural parts of the crane are basically the same as those of the steel overhead crane.





## QB EXPLOSION PROOF BRIDGE CRANE

### 13 QB型防爆桥式起重机

QB型防爆桥式起重机所有电机、电器防爆性能符合GB3836.2-2010《爆炸性环境第2部分:由隔爆外壳"d"保护的设备》、整机性能符合J/B 55897-2014《防爆桥式起重机》标准之规定,经国家指定的防爆产品检验单位检验合格,取得了《防爆合格证》。防爆标志为ExdIIBT4, ExdIICT4。

本产品适用于工厂内传爆能力不高于IIB或IIC级,引燃温度组别为T1-T4组的可燃性气体或蒸气与空气形成的爆炸性气体混合物的场所,适用的危险区域为1区或2区。

本产品一般为地面操作,根据用户需要也可以司机室操作。

The explosion-proof performance of all motors and electrical appliances of QB explosion-proof bridge crane complies with GB3836.2-2010 Explosive Atmospheres - Part 2: Equipment Protected by Flameproof Enclosures "d", and the overall performance complies with the provisions of J/B 55897-2014 Explosion proof Bridge Crane. It has passed the inspection of the national designated explosion-proof product inspection unit and obtained the Explosion proof Certificate. The explosion-proof signs are ExdIIBT4 and ExdIICT4.

This product is applicable to the places where the explosion transmission capacity in the factory is not higher than IIB or IIC, and the ignition temperature is T1-T4 group of combustible gas or explosive gas mixture formed by steam and air. The applicable hazardous area is Zone 1 or Zone 2.

This product is generally operated on the ground, and can also be operated in the cab according to user needs.



## QC TYPE ELECTROMAGNETIC BRIDGE CRANE

### 14 QC型电磁桥式起重机

QC型电磁桥式起重机带有可拆卸的电磁盘,特别适用于冶金工厂在室内或露天的固定跨间较繁重地装卸及搬运具有磁性的黑色金属制品与材料(如钢锭、型钢、生铁块)。

本机属重级(A6)工作级别,起重机包括电磁盘自重。

本机由箱形桥架、大车运行机构、小车、电气设备、电磁盘五部分组成,全部机构均在操纵室内操纵,当露天使用时带有防雨设备。



QC type electromagnetic bridge crane is equipped with removable electromagnetic disk, which is especially suitable for heavy loading and unloading and handling of magnetic ferrous metal products and materials (such as steel ingot, section steel, pig iron block) in indoor or outdoor fixed spans of metallurgical plants.

This machine belongs to the heavy (A6) working level, and the crane includes the dead weight of the electromagnetic disc.

This machine is composed of five parts: box bridge, crane running mechanism, trolley, electrical equipment and electromagnetic panel. All mechanisms are operated in the control room. When used in the open air, it is equipped with rain proof equipment.





## QCL TYPE ELECTROMAGNETIC HANGING BEAM BRIDGE CRANE

### 15 QCL型电磁挂梁桥式起重机

QCL型电磁挂梁桥式起重机适用于吊运较长的型钢、棒料、板材、废钢、盘圆等,吊钩和挂梁可拆连接,下面配置电磁吸盘或夹钳或特殊群钩进行吊装,挂梁布置形式分垂直于主梁或平行于主梁两种。



QCL type electromagnetic hanging beam bridge crane is suitable for lifting long section steel, bar stock, plate, scrap steel, coil circle, etc. The hook and hanging beam can be disassembled and connected, and the following is equipped with electromagnetic sucker or clamp or special group hook for lifting. The hanging beam is arranged in two ways: perpendicular to the main beam or parallel to the main beam.

## QY INSULATED BRIDGE CRANE

### QY型绝缘桥式起重机 16



QY型绝缘桥式起重机的结构形式与吊钩桥式起重机基本相同,只是为了防止在工作过程中,带电设备有可能通过被吊运的物件传到起重机上,危及司机的生命安全,故在吊钩组、小车架、小车轮(或者在小车轨道下)三个部位,设置了三道绝缘装置。绝缘材料多采用环氧酚醛玻璃布板。适用在冶炼铝、镁的工厂。

The structural form of QY insulated bridge crane is basically the same as that of the hook bridge crane, except that in order to prevent the live equipment from being transferred to the crane through the lifted objects during the working process, endangering the life safety of the driver, three insulation devices are set at three parts of the hook group, trolley frame, and trolley wheel (or under the trolley track). The insulating materials are mostly epoxy phenol leavened glass cloth. It is applicable to factories smelting aluminum and magnesium.

## LH ELECTRIC HOIST DOUBLE BEAM CRANE

### 17 LH型电动葫芦双梁起重机



LH型电动葫芦双梁起重机由箱形桥架、大车运行机构、小车、电气设备四部分组成,采用固定式电动葫芦安装在小车架上作起升机构,小车运行采用LD型传动,大车运行分LD型传动和QD型传动两种。结构简便轻巧,具有整体高度小,自重轻等特点,适用于中小起重重量范围内的厂矿、车间及仓库等工作场所。

操作方式设有地面手柄、无线遥控和司机室三种操作形式。驾驶室有开式、闭式两种。

The LH electric hoist double beam crane is composed of four parts: box bridge, crane traveling mechanism, trolley and electrical equipment. The fixed electric hoist is installed on the trolley frame as the lifting mechanism. The trolley is driven by LD type. The crane is driven by LD type and QD type. It is simple and light in structure, small in overall height, light in self weight, etc. It is suitable for factories, mines, workshops, warehouses and other workplaces within the range of medium and small lifting weights.

The operation mode includes ground handle, wireless remote control and cab. There are two types of cab: open type and closed type.





## LDP, LD, LDC, LX ELECTRIC SINGLE BEAM CRANE

# 18 LDP、LD、LDC、LX型电动单梁起重机

LDP系列电动单梁起重机属于超低净空轻小型起重机,电动葫芦位于主梁的一侧,增加了吊钩工作空间,可以降低厂房高度和造价。适用于车间厂房净空高度较低的场所。

本产品由钢板组焊的箱形主梁、端梁、小车及运行机构组成,小车由运行端梁、小车架及固定式电动葫芦组成,采用偏挂形式,在主梁一侧运行,葫芦位置由传统的主梁下提升到主梁上侧,有效提高了起升高度。小车运行方式为锥形电机驱动,开式齿轮传动。

主梁为箱型机构,偏轨,上、下设水平轮,安全可靠,并可防止啃轨。

小车运行采用分别驱动形式,锥形电机驱动,开式齿轮传动。运行电机可根据用户要求选用软启动电机和变频调速,起重机启动平稳,运行安全可靠。

操作方式设有地面手柄、无线遥控和司机室三种操作形式。驾驶室有开式、闭式两种。

跨度为7.5-31.5m(可根据用户要求进行非标设计),工作级别为A3,工作环境温度-25℃-40℃。

LDP series electric single beam crane is a super low clearance light small crane. The electric hoist is located on one side of the main beam, which increases the working space of the hook, which can reduce the plant height and cost. It is applicable to places with low headroom of workshop.

This product is composed of box girder welded with steel plates, end beam, trolley and running mechanism. The trolley is composed of running end beam, trolley frame and fixed electric hoist. The trolley is mounted laterally on one side of the main beam. The hoist is lifted from the traditional main beam to the upper side of the main beam, effectively improving the lifting height.

The trolley is braked by tapered motor and driven by open gear.

The main beam is a box type mechanism, with eccentric rails and horizontal wheels at the top and bottom, which is safe and reliable and can prevent rail gnawing.

The crane is driven separately, with tapered motor braking and open gear transmission. The operating motor can be soft start motor and frequency conversion speed regulation according to the user's requirements. The crane starts stably and operates safely and reliably.

The operation mode includes ground handle, wireless remote control and cab. There are two types of cab: open type and closed type.

The span is 7.5-31.5m (non-standard design can be carried out according to user requirements), the working class is A3, and the working ambient temperature is -25℃-40℃.



LD型电动单梁起重机由钢板与工字钢组焊成的主梁、端梁、电动葫芦及运行机构组成,电动葫芦沿主梁工字钢下翼缘运行,完成物品的吊运工作,具有结构轻巧、安装维护方便等特点,广泛应用于工厂、仓库、料场等不同场合吊运货物,禁止在易燃、易爆、腐蚀性介质环境中使用。跨度为7.5-31.5m(可根据用户要求进行非标设计),工作级别为A3,工作环境温度为-25℃-40℃。



LD type electric single beam crane is composed of main beam, end beam, electric hoist and running mechanism welded by steel plate and I-beam. The electric hoist runs along the lower flange of I-beam of the main beam to complete the lifting work. It has the characteristics of light structure, convenient installation and maintenance. It is widely used in factories, warehouses, stockyards and other different places to lift goods. It is prohibited to use it in flammable, explosive and corrosive media environments. The span is 7.5-31.5m (non-standard design can be carried out according to user requirements), the working class is A3, and the working ambient temperature is -25℃-40℃.

LDC型电动单梁起重机由钢板组焊成的箱型的主梁、端梁、电动葫芦及运行机构组成,主梁下翼缘板(材质16Mn)作为电动葫芦运行轨道,完成物品的吊运工作。电动葫芦为低净空结构,可有效提升起升高度,适用于厂房低、起升高度要求高的场所。



LDC electric single girder crane is composed of box girder, end beam, electric hoist and running mechanism formed by steel plate assembly and welding. The lower flange plate of the girder (16Mn) is used as the running track of the electric hoist to complete the lifting of articles. The electric hoist is of low headroom structure, which can effectively lift the lifting height, and is suitable for places with low factory buildings and high lifting height requirements.

LX型电动单梁悬挂起重机由钢板与工字钢组焊成的主梁、端梁、电动葫芦及电动跑车组成,悬挂在厂房上部的工字梁轨道上,悬臂长度0.5-1m,电动葫芦沿主梁工字钢下翼缘运行,完成物品的吊运工作,具有结构轻巧、安装维护方便等特点,广泛应用于生产车间、仓库及货场等场所。跨度为3-16m(可根据用户要求进行非标设计),工作级别为A3,工作环境温度为-25℃-40℃。



LX type electric single beam suspension crane is composed of main beam, end beam, electric hoist and electric sports car assembled and welded by steel plate and I-beam. It is suspended on the I-beam track above the plant, with a cantilever length of 0.5-1m. The electric hoist runs along the lower flange of the I-beam of the main beam to complete the lifting of goods. It has the characteristics of light structure, convenient installation and maintenance, and is widely used in production workshops, warehouses, freight yards and other places. The span is 3-16m (non-standard design can be carried out according to user requirements), the working level is A3, and the working ambient temperature is -25℃-40℃.



## NEW BRIDGE CRANE

# 19 新型桥式起重机

新型电动葫芦桥式起重机采用新型电动葫芦作为起升机构,大、小车运行采用三合一驱动形式,整体外形尺寸小,自重轻。

新型电动葫芦采用C型结构,起升电机,减速器、卷筒和起升限位开关的一体化紧凑型设计节约了用户的使用空间。标准的导绳器采用耐磨性强和自润滑性能好的工程塑料加工而成。

起升电机采用双绕组鼠笼式变极电机,实现1:6的快慢速比,配备了双碟电磁盘式制动器,制动器集成在电机的末端,电机断电时制动器会自动闭合,防止负载滑落,制动器的刹车间隙在首次设定好后无需人工调节(间隙可通过刹车弹簧自行调节),当刹车片厚度低于设定值时通过附加的监控开关可以自动报警,提示用户进行更换。双碟电磁盘式制动器安全可靠,制动次数可达100万,在安全使用周期内无需维护。

运行机构采用"电动机+减速箱+走轮"三合一结构,结构紧凑,配合变频调速系统,启动平稳无冲击,大大降低了吊重物在运行过程中的摇晃,增强了操作的安全性,重载慢速,轻载快速,提高了生产效率。

The new electric hoist bridge crane uses the new electric hoist as the lifting mechanism, and the large and small cars are driven in a three in one way, with small overall dimensions and light deadweight.

The new electric hoist adopts C-type structure, and the integrated compact design of lifting motor, reducer, drum and lifting limit switch saves users' use space. The standard rope guide is made of engineering plastics with strong wear resistance and good self-lubricating performance.

The lifting motor adopts a double winding squirrel cage pole changing motor to achieve a speed ratio of 1:6. It is equipped with a double disc electromagnetic disc brake. The brake is integrated at the end of the motor. When the motor is powered off, the brake will automatically close to prevent the load from slipping. The brake clearance of the brake does not need to be adjusted manually after it is set for the first time (the clearance can be adjusted automatically by the brake spring). When the thickness of the brake pad is lower than the set value, the additional monitoring switch can automatically alarm, Prompt the user to replace it. The double disc electromagnetic disc brake is safe and reliable, with the braking times up to 1 million, requiring no maintenance during the safe service life.

The running mechanism adopts a three in one structure of "motor+reducer+traveling wheel", which is compact in structure. With the help of the variable speed regulation system, the starting is stable without impact, which greatly reduces the shaking of the hoisted object in the running process, enhances the safety of operation, and improves the production efficiency with slow heavy load and fast light load.

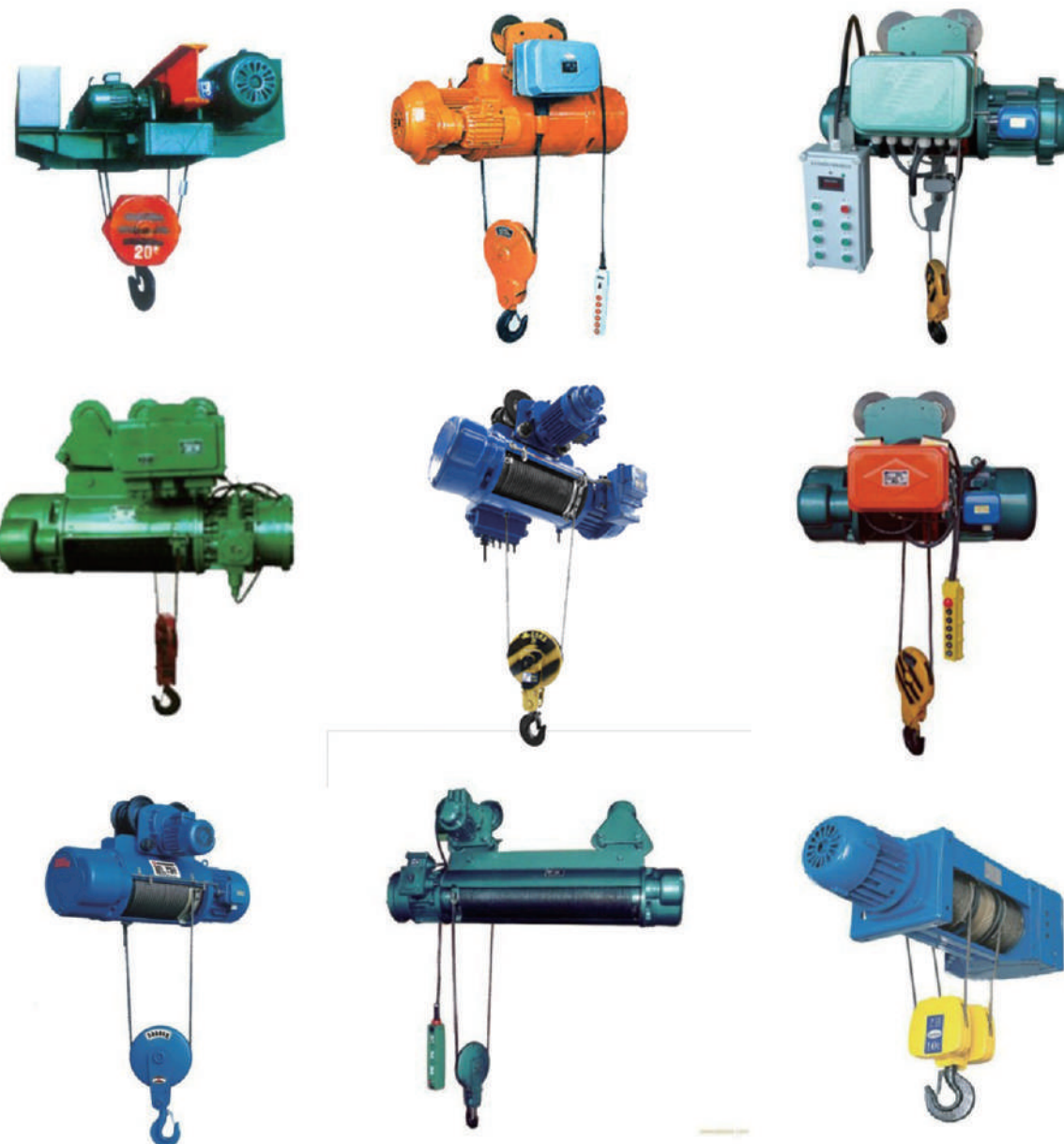


## 系列产品 | 电动葫芦

### ELECTRIC HOIST >>

电动葫芦是一种轻小型起重设备,具有体积小,自重轻,操作简单,使用方便等特点,用于工矿业,仓储码头等场所。

Electric hoist is small lifting equipment,featuring small volumelight dead weighteasy operation and convenient use It is used for such places as industrial and mining establishments and warehouses and wharfs.





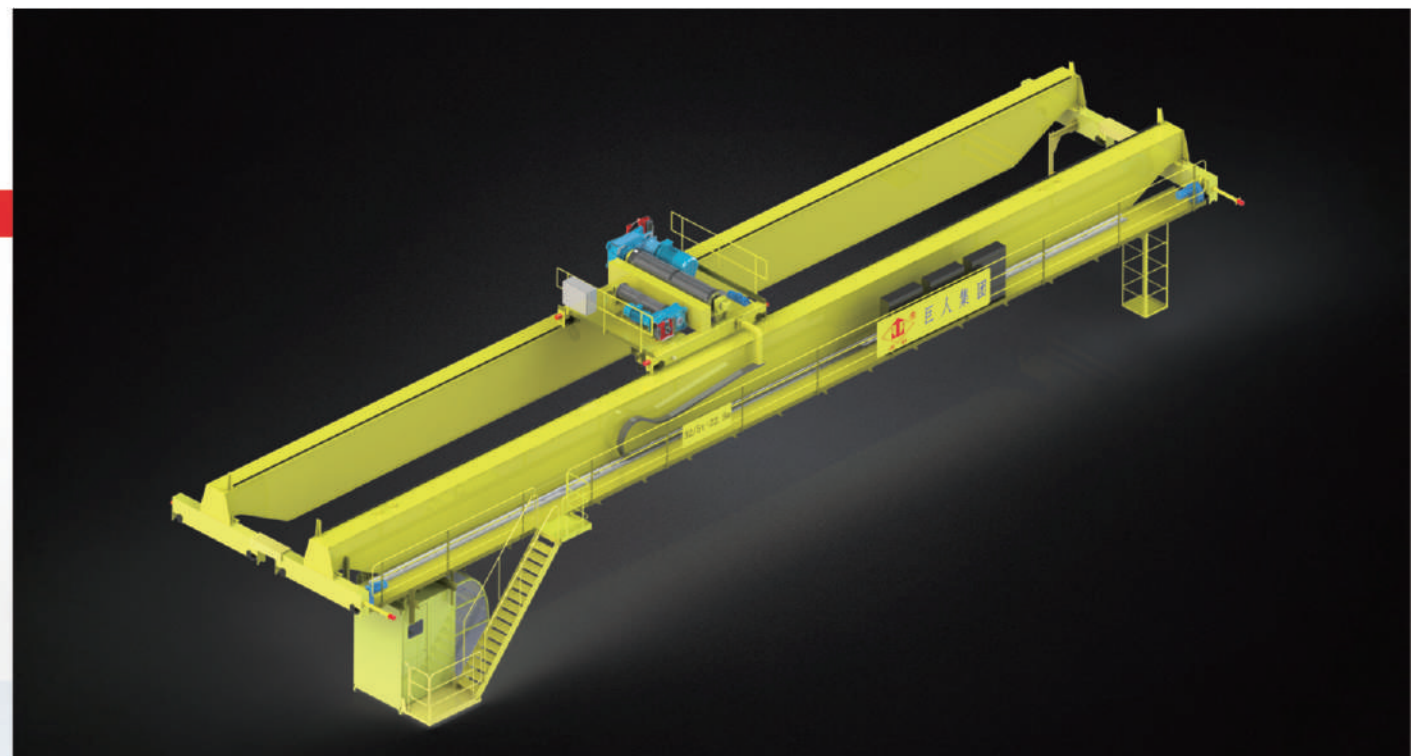
## TECHNICAL FORCE 技术力量>>

拥有各类加工设备1000多台(套),能独立完成制造、化验及热处理等全部工艺流程,产品性能达到国际标准。

巨人集团立足于起重机械领域,自主研发、科技创新,拥有中、高级工程技术人员100余人,为您的需求量身打造。

It has more than 1000 sets of various processing equipment, and can independently complete all the technological processes such as manufacturing, testing and heat treatment. The product performance has reached international standards.

Giant Group is based on the field of lifting machinery, independent research and development, scientific and technological innovation, with more than 100 medium and senior engineering and technical personnel, tailored to your needs.





# PLANT APPEARANCE 厂容厂貌>>

## 巨人集团组织架构图



01



02



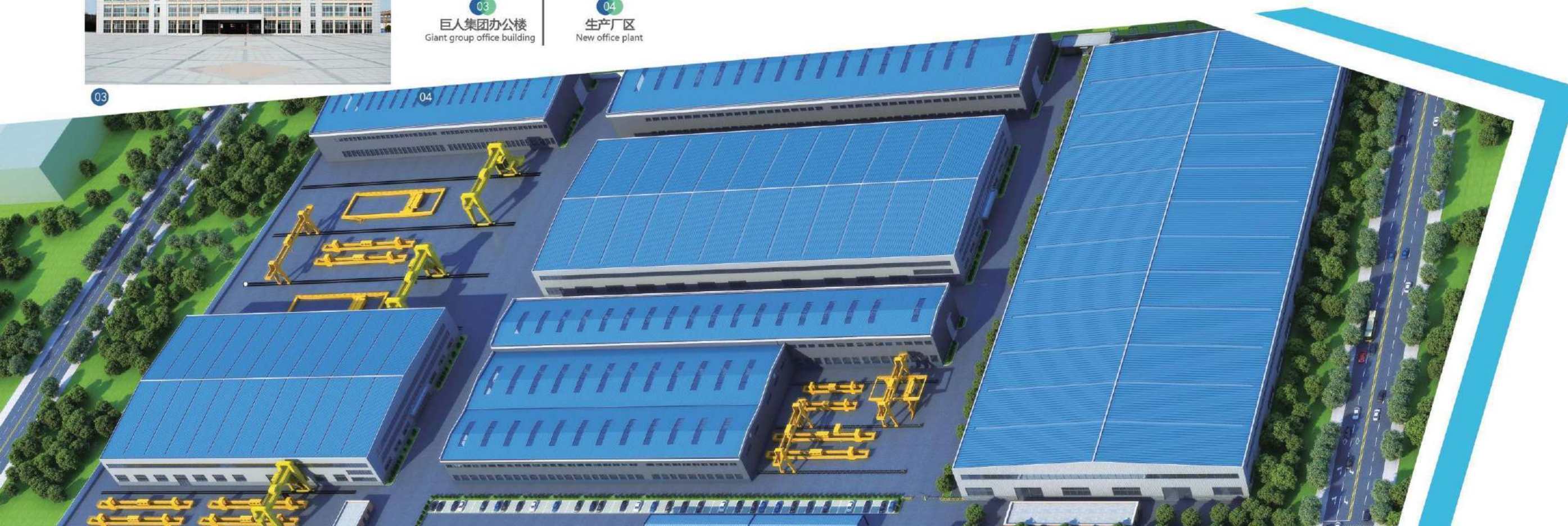
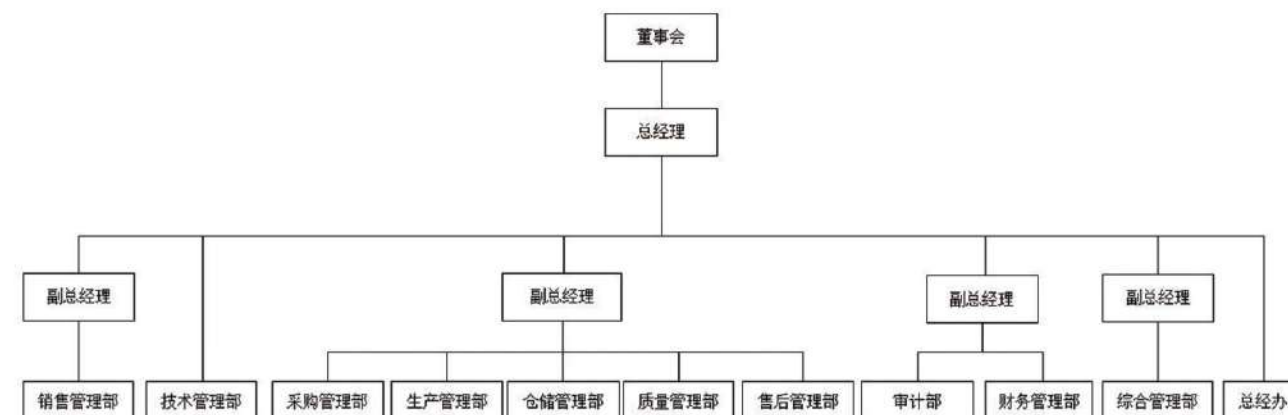
03

01  
巨人集团总部  
Giant Group Headquarters

02  
巨人集团生产车间  
Giant group production workshop

03  
巨人集团办公楼  
Giant group office building

04  
生产厂区  
New office plant





## 部分重点业绩一览表（一）

### LIST OF SOME KEY ACHIEVEMENTS

设备名称	规格型号	数量	使用单位
双主梁门式起重机	MG200/80T-30+11M	2台	三一海洋重工有限公司
双主梁门式起重机	MG50T-20.8M	2台	三一海洋重工有限公司
双主梁门式起重机	MG50T-31M	2台	三一海洋重工有限公司
电动双梁防爆起重机	QB150T-7M	2台	新疆合盛硅业新材料有限公司
葫芦双梁桥式起重机	LH20T-34.5M	4台	山西明一建设有限公司菏泽分公司
双梁桥式起重机小车	QD100/60T-3.3M	1台	国电联合动力技术（保定）有限公司
双梁桥式起重机	QDXX180/80T-22M	1台	国电联合动力技术有限公司
双梁桥式起重机	QDXX80/40T-22M	1台	国电联合动力技术有限公司
双主梁门式起重机	MG180/80T-24M	1台	国电联合动力技术有限公司
双主梁门式起重机	MG180/60T-24+9+9M	2台	国电联合动力技术有限公司
电动葫芦桥式起重机	NLH20/10T-21M	2台	国电联合动力技术有限公司
电动葫芦桥式起重机	NLH20T-28.5M	4台	国电联合动力技术有限公司
电动葫芦桥式起重机	NLH20T-19.5M	4台	国电联合动力技术有限公司
电动葫芦桥式起重机	NLH20T-34.5M	2台	国电联合动力技术有限公司
电动葫芦桥式起重机	NLH20T-22.5M	4台	国电联合动力技术有限公司
双梁桥式起重机小车	QDXX小车40T	1台	国电联合动力技术有限公司
双梁桥式起重机小车	QD100/60T-3M	1台	国电联合动力技术（保定）有限公司
电动双梁电磁挂梁起重机	QCL12.5+12.5T-31.5M	1台	宁夏兴华钢铁有限公司
双梁桥式起重机	QD50/10T-12.1M	1台	青岛华瑞源起重设备有限公司

## 部分重点业绩一览表（二）

### LIST OF SOME KEY ACHIEVEMENTS

设备名称	规格型号	数量	使用单位
欧式双梁起重机	QDXX85/20T-17M	1台	云南永鑫水电开发有限公司
电动抓斗双梁起重机	QZ16T-21M	1台	南京南钢产业发展有限公司
电动单梁悬挂起重机	LX10T-5.5+0.75+0.75M	2台	中铁建发展集团有限公司
电动防爆单梁悬挂起重机	LXB10T-6.5M	1台	中国能源建设集团安徽电力建设第一工程有限公司
葫芦双梁桥式起重机	LH5T-22.1M	2台	信华重工（上海）有限公司
葫芦双梁桥式起重机	LH5T-22.65M	2台	信华重工（上海）有限公司
通用桥式起重机	QDXX32T-17.17M	2台	湖南三一快而居住宅工业有限公司
单梁门式起重机	MH5T-30.05M	1台	福建东南造船有限公司
单梁门式起重机	MHBH16T-18+4M	3台	中国化学工程第三建设有限公司
电动葫芦桥式起重机	LHE10+10-28.5M	2台	南通金丝膜材料有限公司
双梁桥式起重机	QD32/5T-31.5M	3台	浙江佑丰新材料股份有限公司
单梁桥式起重机	LD10T-22.5M	37台	湖州三一装载机有限公司
通用桥式起重机	QCL12.5+12.5T-37M	6台	江苏永钢集团有限公司
双主梁门式起重机	ME100+100/32T-13M	2台	中国铁建重工集团股份有限公司
单梁桥式起重机	LD20T-24.5M	2台	山东盛宝管道科技有限公司
通用桥式起重机	QCL20+20T-31M	4台	江西新旭特殊材料有限公司
通用桥式起重机	QCL16+16T-28M	7台	江西新旭特殊材料有限公司
通用桥式起重机	QCL12.5+12.5T-28M	3台	江西新旭特殊材料有限公司
电动葫芦门式起重机	MH10T-27M	2台	中铁十六局集团北京建功机械有限公司



## 部分重点业绩一览表 (三)

### LIST OF SOME KEY ACHIEVEMENTS

设备名称	规格型号	数量	使用单位
通用桥式起重机	QDXX25T-34.5M	2台	三一（塔城）风电设备有限公司
双梁桥式起重机	QD40T-22.5M	4台	中铁四局集团第四工程有限公司
双梁桥式起重机	QD10T-46.4M	4台	四川紫宸科技有限公司
轨道式集装箱专用门式起重机	MJ40.5T-30M	1台	南昌铁路装备制造有限公司
轨道式集装箱专用门式起重机	MJ40.5T-35M	1台	南昌铁路装备制造有限公司
通用桥式起重机	QDXX36T-43M	18台	三一（巴彦淖尔）风电设备有限公司
通用桥式起重机	QDXX25T-43M	6台	三一（巴彦淖尔）风电设备有限公司
通用桥式起重机	QDXX36T-22.5M	1台	三一（巴彦淖尔）风电设备有限公司
通用桥式起重机	QDXX36T-46M	2台	三一（巴彦淖尔）风电设备有限公司
通用桥式起重机	QD40T-22.5M	4台	河北炫玖实业有限公司
电动葫芦桥式起重机	NLH32/5T-41.5M	4台	苏州科宏起重机械有限公司
防爆桥式起重机	QB32/5T-14.8M	16台	新疆东部合盛硅业有限公司
双梁桥式起重机	QD20/5T-19.5M	2台	陆军工程大学石家庄校区
通用桥式起重机	QCL10+10T-25M	1台	萍乡萍钢安源钢铁有限公司
单梁桥式起重机	LD10T-16M	2台	联峰钢铁（张家港）有限公司
葫芦双梁起重机	NLH80/30T-28.5M	1台	西安煤矿机械有限公司
电动葫芦	CD型	180台	青山控股
轨道式门式起重机	MJ40.5T-42M	4台	河北陆港保税物流有限公司
双梁桥式起重机	QD160/50T-29.7M、吊具320T	1台	常州安驰起重机械有限公司

## 部分重点业绩一览表 (四)

### LIST OF SOME KEY ACHIEVEMENTS

设备名称	规格型号	数量	使用单位
双梁桥式起重机	QE150 (150+75) T-22.7M	2台	河南迈锐斯工程机械有限公司
双梁桥式起重机	QC25T-25.5M	1台	山东西王特钢有限公司
通用桥式起重机	QCL12.5+12.5T-31M	3台	青岛特殊钢铁有限公司
地铁专用门式起重机	MG45/20T-20-37+3.5+3.5M	1台	四川省浦源建筑工程有限公司
通用桥式起重机	QZ10T-28.5M	2台	上海发电设备成套设计研究院有限责任公司
葫芦双梁起重机	LH32/5T-18.94M	1台	浙江隆城锻件有限公司
通用桥式起重机	QE25 (25+10) T-25.5M	1台	南京钢铁集团有限公司
门式起重机	MG40.5T-26M	2台	宁夏然尔特业集团有限公司
门式起重机	MHE32 (16+16) T-23M	1台	中国水利水电第十工程局有限公司
门式起重机	MHE20 (10+10) T-20M	1台	青岛龙程昊宇工贸有限公司
双梁桥式起重机	QD50/10T	3台	广东欣龙隧道装备股份有限公司
双梁桥式起重机	QE150+75T-18.38M	1台	广东欣龙隧道装备股份有限公司
双梁桥式起重机	QDXX65/5T-15M	1台	河南弗尔格机械设备有限公司
单梁桥式起重机	LD30T-7.9M	2台	汝州天瑞物资有限公司
单梁桥式起重机	LD25T-10.7M	6台	青岛佳讯通和智能装备科技有限公司
单梁桥式起重机	LD25T	3台	兴隆县北隆矿业有限公司
欧式葫芦双梁起重机	NLHE20 (10+10) T-18.6M	1台	广西仙鹤新材料有限公司
欧式葫芦双梁起重机	NLHE80 (40+40) T-28.5M	1台	广西仙鹤新材料有限公司
葫芦双梁起重机	LH63/10T-22.5M	1台	贵州轮胎股份有限公司



