Warehouse Overhead Crane - Product Details Introduction

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Warehouse Overhead Crane

Types of Warehouse Overhead Cranes and Their Applications

1. Single Girder Overhead Crane

It has a single main beam structure, compact design, and light dead weight. The lifting capacity is usually 0.5-20 tons, and the span is 7.5-31.5 meters. It is suitable for warehouses with small to medium lifting requirements, such as light industry workshops, logistics distribution centers, and small parts storage warehouses, where the operation frequency is not too high.

2. Double Girder Overhead Crane

Equipped with two parallel main beams, it has stronger load-bearing capacity and stability than single girder cranes. The lifting capacity can reach 5-500 tons, and the span is 10-40 meters. It is widely used in heavy industry warehouses, machinery manufacturing workshops, and large-scale logistics warehouses that need to lift heavy equipment, molds, or bulk materials.

3. Low Headroom Overhead Crane

Designed with a special structure to reduce the headroom (the distance from the top of the crane to the top of the warehouse). It is suitable for warehouses with limited vertical space, such as old warehouses or buildings with low ceiling heights, ensuring maximum utilization of the available lifting height.

4. EOT (Electric Overhead Traveling) Crane

A general term for electric-driven overhead cranes, which can be single-girder or double-girder. It uses electric motors for lifting and traveling, with stable operation and high efficiency. It is the most common type of crane in various warehouses, applicable to most material handling scenarios, including loading/unloading, transfer, and stacking.

5. Underslung Overhead Crane

Its main beam is suspended from the roof truss or special track of the warehouse, without occupying the ground or column space. It is suitable for warehouses with complex ground layouts, such as workshops with many production equipment on the ground, or places where the ground needs to be kept unobstructed for other operations.

6. Explosion-Proof Overhead Crane

Made of explosion-proof components and materials, it can prevent sparks and static electricity during operation. It is specially used in warehouses storing flammable, explosive, or corrosive materials, such as chemical warehouses, oil storage depots, and pharmaceutical workshops with explosive environments.

What are the Cranes Used in Warehouses?

Warehouse overhead cranes, also known as bridge cranes, are essential material handling equipment widely used in warehouse environments. They are designed to lift, move, and position heavy loads horizontally within the warehouse space. These warehouse overhead cranes operate on an overhead runway system consisting of rails mounted on the warehouse ceiling or support columns, allowing them to cover a large working area without occupying valuable floor space. Warehouse overhead cranes play a crucial role in various warehouse operations such as loading and unloading goods from trucks, transferring materials between different storage areas, stacking heavy items on high shelves, and assisting in the assembly or maintenance of equipment within the warehouse. Their ability to handle heavy loads efficiently makes them indispensable for improving productivity and streamlining material flow in warehouses of all sizes, from small distribution centers to large industrial warehouses.

Product Features of Warehouse Overhead Crane

- **High Efficiency**: Equipped with advanced driving systems and lifting mechanisms, warehouse overhead cranes can achieve fast lifting and running speeds, significantly reducing the time required for material handling operations. This helps to improve the overall work efficiency of the warehouse and meet the demands of high-throughput logistics.
- **Superior Safety**: Safety is a top priority, and these cranes are fitted with multiple safety devices. These include overload protection systems that prevent the crane from lifting loads exceeding its rated capacity, limit switches that control the upper and lower limits of the lifting hook to avoid overtravel, emergency stop buttons for immediate shutdown in case of emergencies, and anti-collision devices to prevent collisions between cranes or with other objects in the warehouse. These safety features ensure the safety of personnel and equipment during operation.
- **Flexible Operation**: The warehouse overhead crane's trolley can move along the bridge, and the bridge can move along the runway, enabling three-dimensional movement of the load. This allows for precise positioning of materials anywhere within the crane's working range, making it suitable for handling various types of goods and adapting to different warehouse layouts.
- **Durable Construction**: Made of high-quality steel materials, the warehouse overhead crane structure has strong load-bearing capacity and good stability. The key components such as motors, reducers, and brakes are sourced from well-known brands, ensuring long service life and reliable performance even in harsh warehouse working conditions with frequent use.

- **Customizable Design**: We offer customizable solutions to meet the specific needs of different warehouses. The crane's rated lifting capacity, span, lifting height, control method (such as pendant control, remote control, or cabin control), and additional accessories can be tailored according to the customer's warehouse space, material characteristics, and operation requirements.

Parameter Table for Warehouse Overhead Crane

Model	Rated Lifting Capacity (t)	Span (m)	Lifting Height (m
QD-5	5	10-30	6-18
QD-10	10	10-35	6-20
QD-20	20	12-40	8-22
Customized	According to customer needs	According to customer needs	According to cust needs

Price of Warehouse Overhead Crane

The price of warehouse overhead cranes is closely related to various equipment parameters, as different parameter configurations will directly affect the production cost and performance of the crane. Key parameters that influence the price include the rated lifting capacity (the higher the capacity, the higher the corresponding cost due to stronger structural requirements and more powerful components), span (longer spans require more robust bridge structures and runway systems), lifting height (greater heights need longer lifting mechanisms and enhanced safety protections), working class (higher working classes demand more durable components to withstand frequent use), control method (advanced control systems like remote or cabin control may increase costs compared to basic pendant control), and additional customized accessories (such as special hooks, anti-sway devices, or monitoring systems). These parameters interact to determine the final price of the warehouse overhead crane.

For customized warehouse overhead cranes, the price will be accurately calculated based on the specific parameter requirements provided by the customer, such as the exact rated lifting capacity, span, lifting height, and any special functional additions. We are committed to offering cost-effective solutions that match the performance needs of our customers. After understanding your detailed parameter demands, our professional sales team will provide a tailored quotation plan that clearly reflects the correlation between each parameter and the corresponding cost component.

How to Choose a Warehouse Overhead Crane?

1. **Determine the Rated Lifting Capacity**: First, you need to clarify the maximum weight of the goods that the crane will lift in daily operations. It is recommended to choose a crane with a rated lifting capacity slightly higher than the maximum load to ensure safety and avoid overloading.
2. **Measure the Span and Lifting Height**: Measure the distance between the two support columns in the warehouse (i.e., the span) and the vertical distance from the ground to the highest point where the goods need to be lifted (i.e., the lifting height). These two parameters are crucial for selecting the appropriate crane model.
3. **Consider the Working Class**: The working class of the crane is determined by the frequency of use and the duration of each operation. If the crane is used frequently for long periods, a higher working class crane should be selected to ensure its service life and reliability.
4. **Evaluate the Working Environment**: Take into account the environmental conditions of the warehouse, such as temperature, humidity, dust concentration, and whether there are corrosive substances. This will help select cranes with appropriate protective measures and component materials.
5. **Choose the Control Method**: Select the control method according to the operation requirements and the operator's habits. Pendant control is suitable for short-distance operations, remote control provides more flexibility and safety for long-distance operations, and cabin control is ideal for large cranes or complex operation scenarios.
6. **Set a Reasonable Budget**: Balance the performance and price of the crane, and choose a cost-effective product within the budget. At the same time, consider the later maintenance costs and after-sales service to ensure the long-term stable operation of the crane.

FAQ: Warehouse Overhead Crane

- **Q: What safety devices are equipped with the warehouse overhead crane?**
  A: Our warehouse overhead cranes are equipped with multiple safety devices, including overload protection, limit switches (upper and lower limit for lifting, left and right limit for running), emergency stop buttons, anti-collision devices, and voltage loss protection. These devices effectively ensure the safety of personnel and equipment during operation.
- **Q: Do I need professional personnel to install the warehouse overhead crane?**
  A: Yes, the installation of warehouse overhead cranes requires professional technical personnel. Our company provides professional installation teams with rich experience. They will carry out on-site installation, debugging, and acceptance in strict accordance with relevant standards and safety regulations to ensure the crane is installed correctly and can operate safely.

- **Q: What is the maintenance cycle of the warehouse overhead crane?**
  A: The maintenance cycle includes daily maintenance, weekly maintenance, monthly maintenance, and annual maintenance. Daily maintenance mainly involves checking the safety devices, lubrication, and appearance of the crane; weekly maintenance focuses on inspecting the mechanical components and electrical systems; monthly maintenance includes more in-depth inspections and adjustments; annual maintenance is a comprehensive overhaul of the entire crane. Specific maintenance content and cycles can refer to the product manual or consult our after-sales service team.
- **Q: Can the warehouse overhead crane be customized according to the size of my warehouse?**
  A: Yes, we provide customized services. We can design and manufacture cranes with appropriate span, lifting height, and other parameters according to the actual size of your warehouse, the layout of support columns, and your material handling needs to ensure the crane can be perfectly adapted to your warehouse environment.
- **Q: How long is the warranty period for the warehouse overhead crane?**
  A: Our warehouse overhead cranes have a standard warranty period of 12 months from the date of successful installation and acceptance. During the warranty period, if there are any quality problems caused by the product itself, we will provide free repair or replacement of parts. We also offer extended warranty services for customers who need it.