

Single Girder Overhead Crane

Original link: <https://www.globalweihua.com/crane-hook/single-girder-overhead-crane/>

Single Girder Overhead Crane: Efficient Material Handling Solutions for Industrial Needs

Introduction to Single Girder Overhead Crane

A single girder overhead crane is a versatile material handling equipment designed for lifting and moving loads in industrial settings. Composed of a single main beam (girder) supported by end carriages, a trolley, and a hoist, this crane operates on elevated runways, maximizing floor space utilization. Ideal for light to medium-duty applications, it balances cost-effectiveness, compact design, and reliable performance—making it a go-to choice for factories, warehouses, and workshops seeking efficient load management.

Key Features of Our Single Girder Overhead Crane

Our single girder overhead cranes are engineered to meet rigorous industrial demands, with features that set them apart:

- **Compact & Space-Saving Design:** The single girder structure reduces overall height and weight, making it suitable for facilities with limited vertical space.
- **Easy Installation & Maintenance:** Simplified components and modular design minimize setup time; routine maintenance (e.g., hoist checks, track lubrication) is straightforward, reducing downtime.
- **High Efficiency:** Equipped with precision hoists and smooth-traveling trolleys, it ensures fast, stable load movement—boosting workflow productivity.
- **Customizable Configurations:** Available in various lifting capacities, spans, and lifting heights to match specific operational needs (e.g., low-headroom models for tight spaces).
- **Enhanced Safety:** Built-in safety features include overload protection, emergency stop buttons, limit switches (to prevent over-travel), and anti-derailment devices, ensuring compliance with global safety standards (ISO, CE).

Single Girder Overhead Crane Technical Specifications

Parameter	Range/Details
-----------	---------------

Lifting Capacity	0.5 – 32 tons (customizable for higher capacities upon request)
Span Length	5 – 30 meters (adjustable based on facility dimensions)
Lifting Height	3 – 30 meters (extendable with specialized configurations)
Working Class	A3 – A5 (suitable for medium-duty, intermittent operations)
Hoist Speed	0.8 – 16 m/min (variable speed options available)
Trolley Travel Speed	10 – 30 m/min
Crane Travel Speed	20 – 45 m/min
Power Supply	380V/3PH/50Hz (customizable for 220V, 440V, or other regional standards)
Control System	Pendant control, remote control (wireless optional), or PLC integration

Single Girder Overhead Industry Applications

Our single girder overhead cranes excel in diverse sectors, streamlining material handling across:

- **Manufacturing:** In automotive component plants, it transfers stamped metal parts between presses and assembly stations; in electronics manufacturing, it handles sensitive circuit board trays and small production machinery with precise positioning to avoid damage.
- **Warehousing & Logistics:** In e-commerce fulfillment centers, it lifts and stacks pallets of packaged goods to maximize vertical storage space; in freight yards, it assists with loading/unloading bulk items from trucks and containers efficiently.
- **Construction:** At prefabricated building factories, it moves concrete wall panels and steel trusses to assembly areas; on construction sites, it hoists tools, cement bags, and small precast components with weather-resistant variants adapting to outdoor conditions.
- **Metallurgy:** In non-ferrous metal processing plants, it transports aluminum ingots and copper coils between annealing furnaces and rolling mills; in steel workshops, it handles light to medium-sized finished steel profiles for sorting and packaging.
- **Food & Beverage:** In beverage bottling plants, it lifts large syrup tanks and palletized bottles; in dairy facilities, sanitary-grade models with stainless steel hoists move cheese blocks and milk powder containers while meeting food safety standards.
- **Automotive Workshops:** In auto repair shops, it lifts engines and transmissions for maintenance or replacement; in custom car garages, it positions vehicle bodies onto modification platforms with smooth, low-noise operation.

Frequently Asked Questions (FAQ)

Q1: What's the difference between a single girder and double girder overhead crane?

A1: Single girder cranes use one main beam, are lighter, more affordable, and ideal for light to medium loads. Double girder cranes have two beams, offering higher lifting capacities (32+ tons) and greater stability for heavy-duty applications.

Q2: Can a single girder overhead crane be installed outdoors?

A2: Yes—we offer weatherproof models with corrosion-resistant coatings, sealed electrical components, and rain shields, suitable for outdoor yards or construction sites.

Q3: How long does installation take?

A3: Installation typically takes 3–7 days, depending on the crane size, site preparation (e.g., runway setup), and configuration complexity. Our team provides on-site support for seamless setup.

Q4: What maintenance is required?

A4: Regular maintenance includes checking hoist cables for wear, lubricating trolley/crane wheels, testing safety switches, and inspecting electrical connections. We recommend quarterly inspections for optimal performance.

Q5: Are your cranes compliant with international standards?

A5: Absolutely. All our single girder overhead cranes meet ISO 9001 quality standards, CE certification for EU markets, and OSHA guidelines for safety, ensuring global compatibility.

Ready to Optimize Your Material Handling?

Our single girder overhead cranes combine durability, efficiency, and flexibility to elevate your operational productivity. Contact us today for a custom quote or to discuss your specific requirements—let's find the perfect solution for your facility.

(注：文档部分内容可能由 AI 生成)