

Shipyard Gantry Crane: High-Performance Lifting Solution for Marine Construction

Original link: <https://www.globalweihua.com/products/gantry-crane/shipyard-gantry-crane/>



Shipyard Gantry Crane

As a core piece of lifting equipment in the shipbuilding industry, the Shipyard Gantry Crane is engineered to meet the rigorous demands of marine construction, offering unparalleled load capacity, precision control, and operational reliability. Designed specifically for the assembly, transportation, and installation of large ship components—such as hull sections, engines, propellers, and superstructures—this [gantry crane](#) serves as the backbone of efficient and safe shipbuilding operations, enabling shipyards to handle ultra-heavy loads with exceptional stability and accuracy.

Core Advantages Tailored for Shipbuilding Needs



Shipyard Gantry Crane

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- **Ultra-High Load Capacity:** Engineered with robust steel structures and advanced lifting mechanisms, our shipyard gantry cranes boast a rated load capacity ranging from [50 tons gantry crane](#) to over 1,000 tons gantry crane, capable of handling the heaviest components in modern ship construction. The optimized beam design and reinforced supports ensure structural integrity even under extreme loads, making it ideal for lifting large hull blocks and marine propulsion systems.
- **Precision & Stability in Complex Operations:** Equipped with high-precision variable frequency drives (VFD) and advanced control systems, the crane enables smooth and accurate positioning of heavy loads. The anti-sway technology minimizes load oscillation during lifting and traversing, critical for precise assembly of ship sections where millimetric accuracy is required. Additionally, the wide span design (customizable up to 100+ meters) covers large work areas in shipyards, reducing the need for multiple lifting devices and improving operational efficiency.

- Durability & Adaptability to Harsh Environments:** Shipyards operate in harsh, corrosive marine environments—our gantry cranes are built to withstand saltwater, humidity, and extreme temperatures. The steel components undergo anti-corrosion treatments (such as galvanization and epoxy painting), and key mechanisms are sealed to prevent dust and water ingress. The crane can also be customized with weather protection systems (e.g., rain covers, wind speed monitors) to ensure reliable operation in all weather conditions.
- Safety-First Design:** Safety is paramount in shipyard operations. Our shipyard gantry cranes are equipped with multiple safety features, including overload protection, emergency stop systems, limit switches (for lifting height and traversing range), anti-collision devices, and real-time load monitoring. These systems work together to prevent accidents, protect personnel, and safeguard valuable ship components.

Key Technical Features

Feature	Description
Lifting Mechanism	High-efficiency hoist with double-drum or single-drum design, equipped with planetary gearboxes for smooth power transmission
Control System	PLC-based automatic control with manual backup; remote control option available for enhanced operator safety and convenience
Travel System	Heavy-duty rail-mounted travel mechanism with anti-derailment devices and variable speed control for precise movement
Power Supply	Cable reel or sliding contact line power supply; optional diesel generator for emergency backup
Customization Options	Span, lifting height, load capacity, and auxiliary devices (e.g., grab buckets, magnetic lifters) customizable to specific shipyard requirements

Equipment Specification Table

Parameter	Specification/Range	Remarks
Rated Lifting Capacity	50T - 1200T	Customizable based on project requirements
Span	20m - 120m	Adjustable for different shipyard sizes
Lifting Height	15m - 50m	Including hook lifting height
Lifting Speed	0.5m/min - 10m/min	Variable speed adjustable via VFD

Travelling Speed (Crane)	5m/min - 30m/min	Rail-mounted, anti-derailment c
Travelling Speed (Trolley)	3m/min - 20m/min	Precision positioning control
Working Class	A6 - A8	Complies with ISO/FEM standard
Power Supply	380V/400V/415V, 50Hz/60Hz, 3Phase	Compatible with global voltage standards
Protection Class	IP54 - IP65	Suitable for marine corrosive environment
Wind Resistance Capacity	≤25m/s (working), ≤60m/s (non-working)	Equipped with wind speed mon system

Applications in Shipbuilding Industry

Our shipyard gantry cranes are widely used in various stages of ship construction and maintenance, including:

- 1. Lifting and assembling hull blocks (bow, stern, midship sections)
- 2. Installing marine engines, gearboxes, and propeller systems
- 3. Handling superstructures, masts, and other large ship fittings
- 4. Loading and unloading materials and equipment in shipyard docks
- 5. Maintenance and repair work on existing vessels (e.g., lifting and replacing heavy components)

Why Choose Our Shipyard Gantry Crane?

With years of experience in designing and manufacturing heavy lifting equipment for the marine industry, we prioritize quality, performance, and customer satisfaction. Our shipyard gantry cranes are manufactured in compliance with international standards (e.g., ISO, FEM, ABS) and undergo rigorous testing to ensure reliability and durability. We also offer comprehensive after-sales services, including installation, commissioning, maintenance, and technical training, to support your shipyard operations around the clock.

For more information about our shipyard gantry crane solutions or to request a custom quote, please contact our sales team today.

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