

# 30 Tons Gantry Crane Series: RTG & RMG

## Heavy Lifting Solutions

Original link: <https://www.globalweihua.com/products/gantry-crane/30-tons-gantry-crane/>



30 Tons Gantry Crane

## 30 Tons Gantry Crane (General Type)

### Introduction

The 30 tons gantry crane is a versatile heavy-duty lifting equipment widely used in industrial and logistics fields. It is designed to safely and efficiently handle loads up to 30 tons, serving as a core tool in ports, steel mills, shipyards, construction sites, and large-scale warehouses. With a modular design and customizable configurations, this gantry crane adapts to both indoor and outdoor working environments, providing stable and reliable lifting performance to meet diverse operational needs.

### Key Features

- **Robust Structure:** Adopts high-strength Q235B steel for the main girder (single or double girder optional), ensuring strong load-bearing capacity and resistance to deformation under

heavy-duty operations. The overall structure is optimized through finite element analysis to reduce self-weight while enhancing stability.

- **Precise Control:** Equipped with PLC control system and variable frequency drive (VFD) technology, enabling smooth and stepless adjustment of lifting, traversing, and traveling speeds. This minimizes load sway, improves operation accuracy, and reduces damage to goods.
- **Comprehensive Safety Protection:** Integrated with multiple safety devices, including overload protection, lifting height limit switch, traveling limit switch, anti-collision device, emergency stop button, and windproof system (rail clamps, wind anchors for outdoor use), ensuring the safety of operators, equipment, and cargo.
- **High Versatility:** Customizable lifting height, span, and working speed to fit different site dimensions and operational requirements. Suitable for lifting various heavy goods such as containers, steel beams, machinery parts, and bulk materials.

## Technical Parameters

Parameter Name	Specification
Rated Lifting Capacity	30 Tons
Span	10 - 35 m (Customizable)
Lifting Height	8 - 35 m (Customizable)
Lifting Speed	1 - 20 m/min (Stepless Adjustable)
Traversing Speed	5 - 30 m/min
Traveling Speed	10 - 40 m/min
Working Duty	A6 - A8
Protection Class	IP54
Working Temperature	-20°C - +40°C
Power Supply	380V, 50Hz, 3-Phase (Customizable)

## 30 Tons RTG Crane (Rubber Tyred Gantry Crane)



30 Tons RTG Crane (Rubber Tyred Gantry Crane)

## Introduction

The 30 tons RTG (Rubber Tyred Gantry) crane is a mobile variant of the 30 tons gantry crane, characterized by its rubber tire-mounted design that eliminates the need for fixed rails. It is specifically developed for flexible yard operations, widely applied in port container terminals, multi-modal logistics hubs, and large outdoor yards. This crane offers high mobility, allowing free movement between different work areas to handle container stacking, loading, and unloading tasks efficiently.

## Key Features

- **Flexible Mobility:** Equipped with high-quality rubber tires (tire grounding pressure  $\leq 0.8\text{MPa}$ ) and a steering system, enabling 360° rotation and a minimum turning radius of  $\leq 15\text{m}$ . It can move freely on flat concrete or asphalt surfaces without track constraints, adapting to temporary or changing yard layouts.
- **Multiple Power Options:** Available with diesel generator, cable reel, or lithium battery power supply, ensuring reliable operation in areas with or without grid power. The lithium battery variant is energy-saving and environmentally friendly, reducing noise and emissions.
- **Efficient Container Handling:** Supports single lifting of 20-foot, 40-foot, and 45-foot containers, with a maximum lifting height of up to 32m (customizable). It can stack containers 5+1 or 6+1 high, maximizing yard storage space utilization.
- **Intelligent Operation:** Optional remote control and semi-automatic operation systems reduce labor intensity and improve work efficiency. The full digital AC frequency conversion system ensures smooth movement and precise positioning of the crane.
- **Windproof & Stable:** Equipped with wheel edge brakes and manual wind anchors to enhance wind resistance, ensuring stable operation even in windy outdoor environments. The anti-skid tires further improve stability on uneven surfaces.

## Technical Parameters

Parameter Name	Specification
Rated Lifting Capacity	30 Tons
Span	18 - 30 m (Customizable)
Lifting Height	12 - 32 m (Customizable)
Lifting Speed	2 - 18 m/min
Traversing Speed	6 - 25 m/min
Traveling Speed	0 - 20 m/min (Stepless Adjustable)
Turning Radius	$\leq 15\text{ m}$
Tire Grounding Pressure	$\leq 0.8\text{ MPa}$
Working Duty	A7 - A8
Power Supply	Diesel Generator / Cable Reel / Lithium Battery
Container Stacking Height	5+1 / 6+1 High Cube Boxes

# 30 Tons RMG Crane (Rail Mounted Gantry Crane)

## Introduction

The 30 tons RMG (Rail Mounted Gantry) crane is a fixed-track variant of the 30 tons gantry crane, designed for high-precision and high-efficiency lifting operations in fixed-layout yards and terminals. It operates along pre-installed rail tracks, ensuring stable and precise movement, making it ideal for large-scale container terminals, automated warehouses, and industrial workshops where consistent and efficient handling is required.

## Key Features

- **High Stability & Precision:** Operates on fixed rail tracks (rail gauge customizable from 18m to 35m), minimizing vibration during lifting and traveling. This ensures precise positioning of loads, reducing the risk of cargo damage and improving operation efficiency.
- **Large Working Range:** The rail-mounted design allows the crane to cover a wide working area along the track, suitable for long-distance and high-volume lifting tasks. It can be equipped with a telescopic girder to further expand the working coverage.
- **Energy-Saving & Environmentally Friendly:** Adopts grid power supply with a high-efficiency motor and VFD technology, reducing energy consumption and emissions compared to diesel-powered cranes. The closed electrical control system ensures low noise and stable operation.
- **Automated Compatibility:** Easily integrated with automated control systems (such as PLC, SCADA, and IoT) to realize fully automated operation, including automatic positioning, loading, unloading, and stacking. This significantly reduces labor costs and improves operational safety.
- **Durable & Low Maintenance:** The rail and wheel system is wear-resistant and requires minimal maintenance. The overall structure is corrosion-resistant, suitable for long-term outdoor operation in harsh environments such as coastal ports.

## Technical Parameters

Parameter Name	Specification
Rated Lifting Capacity	30 Tons
Span	18 - 35 m (Customizable)
Lifting Height	10 - 30 m (Customizable)
Lifting Speed	2 - 20 m/min
Traversing Speed	8 - 30 m/min

Traveling Speed	15 - 45 m/min
Rail Gauge	1.435 m - 3 m (Customizable)
Working Duty	A7 - A8
Protection Class	IP55
Power Supply	380V, 50Hz, 3-Phase (Customizable)
Automation Level	Semi-Automatic / Fully Automatic (Optional)

## Applications of 30 Tons Gantry Crane Series

- **Port and Container Terminals:** Indispensable for container loading, unloading, and stacking operations, with the 30 tons RTG crane for flexible yard movement and the 30 tons RMG crane for high-efficiency fixed-layout handling.
- **Steel Mills:** Widely used to handle heavy steel products such as steel beams, steel coils, and steel ingots, leveraging the robust structure of the general-type 30 tons gantry crane for stable heavy-duty lifting.
- **Shipyards:** Plays a crucial role in shipbuilding and maintenance, responsible for lifting hull sections, marine engines, and related large components to support ship assembly and repair work.
- **Construction Sites:** Suitable for hoisting large construction machinery, precast concrete components, and building materials, adapting to both indoor and outdoor working environments with customizable configurations.
- **Large-Scale Warehouses and Logistics Hubs:** Used for heavy cargo transfer between storage areas, with versatile configurations to match different yard sizes and cargo handling needs.
- **Energy Plants:** Applied in thermal power plants, hydropower stations, and other energy facilities for the installation and maintenance of large-scale equipment, ensuring safe and precise operation.
- **Manufacturing Workshops:** Ideal for handling large mechanical parts, finished products, and production equipment, improving handling efficiency and reducing labor intensity.

(注：文档部分内容可能由 AI 生成)