Container Gantry Crane: Types, Price, Spreader & Trusted Manufacturer - WEIHUA

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Container Gantry Crane

Container gantry cranes are the backbone of global logistics, enabling efficient loading, unloading, and stacking of containers in ports, terminals, and logistics hubs. As a leading container gantry crane manufacturer, WEIHUA offers a full range of high-performance models, including STS, RTG, and RMG gantry cranes, paired with reliable spreaders and transparent pricing. This guide covers key details about container gantry crane types, spreader options, price factors, and why WEIHUA is the preferred partner for international businesses.

Introduction to Container Gantry Crane

A container gantry crane is a heavy-duty material handling equipment designed specifically for container operations. It features a gantry-style structure (portal frame) that spans across container stacks or truck/train lanes, with a trolley and spreader to lift and move containers. Key advantages include:

- High load capacity (20ft, 40ft, 45ft containers, or multiple containers at once)
- Precise positioning for efficient stacking (up to 8+ layers high)
- Adaptability to various environments (indoor/outdoor, port terminals, inland yards)
- Energy-saving options (electric, hybrid, or diesel-powered)

• Compliance with international standards (ISO, FEM, DIN, etc.)

Whether you need to handle containers at a busy port or a regional logistics center, WEIHUA's container gantry cranes are engineered for durability, safety, and long-term cost efficiency.

Container Gantry Crane Types: STS, RTG, and RMG

WEIHUA offers three core container gantry crane types, each tailored to specific operational needs. Below is a detailed comparison to help you choose the right model:

STS Container Gantry Crane (Ship-to-Shore)



STS Container Gantry Crane (Ship-to-Shore)

- Full Name: Ship-to-Shore Container Gantry Crane
- **Key Function**: Loads/unloads containers between ships and quayside (port terminals)
- **Design Features**: Tall structure (to reach ship decks), long outreach (covers ship's width), high lifting height, and fast operating speed
- **Power Source**: Electric (connected to port power grid)
- **Advantages**: High throughput (handles 30-40 containers per hour), suitable for large container ships (up to 24,000 TEU), precise control
- **Applications**: Deep-sea ports, coastal terminals, large container yards

• **WEIHUA Edge**: Customizable outreach (30-55m), load capacity (30-80 tons), and anti-sway technology for stable operation in harsh marine environments

RTG Container Gantry Crane (Rubber-Tired Gantry)



RTG Container Gantry Crane (Rubber-Tired Gantry)

- Full Name: Rubber-Tired Gantry Container Crane
- **Key Function**: Stacks and moves containers within yards (port yards, inland depots)
- **Design Features**: Rubber tires for mobility (no fixed rails), independent power (diesel generator or electric), compact structure
- **Power Source**: Diesel-electric hybrid, full electric, or LNG-powered (eco-friendly options)

- Advantages: Flexible movement (can change lanes), low infrastructure cost (no rail installation), suitable for medium-sized yards
- Applications: Inland container depots, port storage yards, logistics parks
- **WEIHUA Edge**: Energy-saving systems (fuel consumption reduced by 15-20%), automatic positioning (GPS/laser), and remote operation capability

RMG Container Gantry Crane (Rail-Mounted Gantry)



RMG Container Gantry Crane (Rail-Mounted Gantry)

- Full Name: Rail-Mounted Gantry Container Crane
- **Key Function**: High-density stacking and container transfer in large yards
- **Design Features**: Runs on fixed rails (along yard length), high stacking height, large span
- Power Source: Electric (grid-connected) or battery-powered
- Advantages: High stability (rail-guided), maximum stacking density (up to 9 layers), low operating cost (electric power), high throughput
- Applications: Large port yards, container terminals, intermodal facilities
- **WEIHUA Edge**: Span customization (20-50m), load capacity (40-60 tons), and intelligent control systems (automatic stacking, traffic management)

Туре	Core Application	Power Option	Load Capacity
STS Container Gantry Crane	Ship-to-quay unloading/loading	Electric	30-80 tons
RTG Container Gantry Crane	Yard stacking/mobility	Diesel-electric/electric/LNG	30-50 tons
RMG Container Gantry Crane	High-density yard storage	Electric/battery	40-60 tons

Container Gantry Crane Spreader: Key Component for Safe Lifting

The container gantry crane spreader is a critical attachment that connects the crane to containers, ensuring secure and efficient lifting. WEIHUA provides two main types of spreaders, compatible with all standard container sizes (20ft, 40ft, 45ft, etc.):

Manual Spreader

- **Operation**: Manual adjustment of spreader width to fit different container sizes
- Features: Simple structure, low maintenance, cost-effective
- Suitable For: Small yards, low-volume operations, or budget-conscious projects

Automatic Spreader

- **Operation**: Hydraulic or electric automatic width adjustment, with twist-lock mechanism for quick container locking/unlocking
- **Features**: High efficiency (reduces handling time by 30%), intelligent alignment (camera/laser guidance), overload protection
- Suitable For: Large ports, high-throughput terminals, automatic yards
- WEIHUA Spreader Advantages:
 - Corrosion-resistant material (for marine environments)
 - Long service life (10+ years with proper maintenance)
 - Compatibility with all ISO standard containers
 - Emergency release function for safety

Container Gantry Crane Price: Factors & Custom Quotes

Container gantry crane price varies based on multiple factors, as each project has unique requirements. Below is a breakdown of key price-influencing elements and guidance on obtaining a custom quote:

Key Factors Affecting Price

- 1. **Crane Type**: STS cranes (high-capacity, complex design) are more expensive than RTG/RMG cranes; RMG cranes cost more than RTG due to rail infrastructure and stability features.
- 2. **Load Capacity**: Higher capacity (e.g., 60 tons vs. 30 tons) increases material and engineering costs.
- 3. **Span & Lifting Height**: Larger span (for RMG/RTG) or higher lifting height (for STS) requires stronger structural components, raising prices.
- 4. **Power Source**: Electric models are cost-effective long-term, while hybrid/LNG options have higher upfront costs but lower operating expenses.
- 5. **Spreader Type**: Automatic spreaders are more expensive than manual ones (adds 10-20% to the total price).
- 6. **Customization**: Additional features (remote operation, intelligent control, anti-sway systems, cold-resistant design for extreme climates) increase costs.
- 7. **Logistics & Installation**: Shipping distance, on-site installation, and training services affect the final price.

WEIHUA Container Gantry Crane Price Range (Reference)

Crane Type	Price Range (USD)
RTG Container Gantry Crane (30 tons, 20m span)	250,000-400,000
RMG Container Gantry Crane (40 tons, 30m span)	350,000-550,000
STS Container Gantry Crane (50 tons, 40m outreach)	1.2M- 2.5 M

Note: Prices are for reference only. Final quotes are based on custom specifications.

How to Get a Custom Quote

Contact WEIHUA's sales team with the following details for an accurate container gantry crane price:

- Required crane type (STS/RTG/RMG)
- Load capacity (tons) and container size (20ft/40ft/45ft)
- Span (for RMG/RTG) or outreach (for STS)

- Lifting height (m)
- Power source preference (electric/diesel/hybrid)
- Spreader type (manual/automatic)
- Application environment (port/yard/inland, climate conditions)
- Additional requirements (intelligent control, remote operation, etc.)

WEIHUA offers transparent pricing with no hidden fees, and provides a full cost breakdown including equipment, shipping, installation, and after-sales service.

WEIHUA: Trusted Container Gantry Crane Manufacturer

WEIHUA Group is a global leader in material handling equipment, with over 30 years of experience in designing and manufacturing container gantry cranes. As a reliable container gantry crane manufacturer, we stand out for the following strengths:

Manufacturing Capabilities

- State-of-the-art production facilities (covering 500,000+ m²) with advanced CNC machines, welding robots, and quality inspection equipment.
- Annual production capacity of 500+ container gantry cranes, meeting global demand.
- Compliance with international standards: ISO 9001, CE, FEM, DIN, and CCC.

Global Presence & Service

- Export to 100+ countries, including the US, Germany, Brazil, Russia, Australia, and Southeast Asia.
- Local service centers in key regions (Europe, North America, Latin America, Africa) for quick maintenance and support.
- 24/7 technical support via phone, email, or video call.

Customization & Innovation

- Tailor-made solutions based on customer's specific operational needs (e.g., extreme temperature resistance, high-altitude adaptation).
- Investment in R&D (10% of annual revenue) to develop intelligent features: automatic stacking, IoT monitoring, and energy-saving technologies.

Customer Testimonials

• "WEIHUA's RTG cranes have improved our yard efficiency by 40%—reliable performance and easy maintenance." – Port of Santos, Brazil

- "The STS container gantry crane from WEIHUA handles our 20,000 TEU ships seamlessly,
 with excellent after-sales support." Dubai Port, UAE
- "We chose WEIHUA for their competitive container gantry crane price and high-quality spreaders—no downtime in 3 years." Logistics Park, Germany

Container Gantry Crane Applications

WEIHUA's container gantry cranes are widely used in various logistics scenarios, supporting global trade and supply chains:

- Port Terminals: STS cranes for ship unloading/loading; RMG/RTG cranes for yard stacking.
- Inland Container Depots: RTG cranes for flexible container transfer and storage.
- Intermodal Facilities: RMG cranes for connecting containers between trucks, trains, and ships.
- Logistics Parks: Compact RTG cranes for medium-volume container handling.
- **Special Environments**: Cold-resistant cranes for polar regions, corrosion-resistant models for coastal areas, and dust-proof cranes for desert regions.

Technical Specifications (Parameter Table)

Parameter	STS Container Gantry Crane	RTG Container Gantry Crane	RMG Container G Crane
Load Capacity	30-80 tons	30-50 tons	40-60 tons
Container Size	20ft/40ft/45ft	20ft/40ft/45ft	20ft/40ft/45ft
Outreach/Span	30-55m (outreach)	20-40m (span)	20-50m (span)
Lifting Height	20-40m	12-20m	15-25m
Trolley Speed	0-120 m/min	0-80 m/min	0-100 m/min
Hoisting Speed	0-40 m/min	0-30 m/min	0-35 m/min
Power Source	Electric (380V/415V, 50/60Hz)	Diesel-electric/electric/LNG	Electric/battery (350/60Hz)
Control System	PLC + HMI, remote control optional	PLC + HMI, automatic positioning optional	PLC + HMI, intelli stacking system
Weight	300-800 tons	80-200 tons	150-300 tons

FAQ About Container Gantry Crane

Q1: What is the difference between STS, RTG, and RMG container gantry cranes?

A1: STS cranes are for ship-to-quay operations (fixed, high-capacity); RTG cranes are mobile (rubber tires) for yard stacking; RMG cranes run on rails for high-density yard storage. Choose based on your operational scenario (port/yard, throughput, mobility needs).

Q2: How long is the delivery time for a WEIHUA container gantry crane?

A2: Standard delivery time is 3-6 months (production + shipping). Customized models or large orders may take 6-9 months. We offer expedited production options for urgent projects.

Q3: What maintenance is required for a container gantry crane?

A3: Routine maintenance includes checking spreader twist-locks, lubricating moving parts, inspecting electrical systems, and testing safety features (overload protection, emergency stop). WEIHUA provides a maintenance manual and offers annual inspection services.

Q4: Can WEIHUA provide installation and training services?

A4: Yes. We send a professional team to handle on-site installation, commissioning, and operator training. Training covers crane operation, safety protocols, and basic maintenance.

Q5: Are WEIHUA's container gantry cranes energy-efficient?

A5: Yes. Our electric models have low power consumption, and RTG cranes offer hybrid/LNG options that reduce fuel use by 15-20%. Intelligent control systems (anti-sway, automatic shutdown) further save energy.

Q6: How to choose the right container gantry crane spreader?

A6: For low-volume operations, choose a manual spreader (cost-effective). For high-throughput terminals, an automatic spreader (faster, more efficient) is recommended. All WEIHUA spreaders are compatible with standard containers.

Contact WEIHUA for Your Container Gantry Crane Needs

As a leading container gantry crane manufacturer, WEIHUA is committed to providing highquality, cost-effective solutions for global logistics. Whether you need a standard model or a customized container gantry crane, we have the expertise to meet your requirements.

- Get a Custom Quote: Send your specifications to aiden@craneweihua.com
- Visit Our Factory: We welcome you to inspect our production facilities in China.

• Whatsapp: +86-17513230665

• Website: www.globalweihua.com

Choose WEIHUA for reliable container gantry cranes, competitive prices, and comprehensive after-sales support—your partner in optimizing global container handling operations.

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