

Tower Crane Market Assessment, By Design [Top Slewing, Bottom Slewing], By Product [Flat Top, Hammerhead, Luffing Jib, Self-erecting], By Loading Capacity [Less than 5 tons, 6 to 20 tons, 21 to 50 tons, 51 to 80 tons, More than 80 tons], By End-user [Infrastructure, Construction, Energy & Power, Others], By Region, Opportunities and Forecast, 2017-2031F

https://marketpublishers.com/r/TC3A6C739243EN.html

Date: March 2025 Pages: 220 Price: US\$ 4,500.00 (Single User License) ID: TC3A6C739243EN

# **Abstracts**

Global tower crane market is projected to witness a CAGR of 5.85% during the forecast period 2024-2031, growing from USD 6.42 billion in 2023 to USD 10.12 billion in 2031. The market has experienced significant growth in recent years and is expected to maintain a strong pace of expansion in the coming years.

As the world's population rises, more people are relocating to cities for greater economic prospects and a higher quality of life. Because of the flow of people into cities, there is an urgent need to create contemporary infrastructure, such as skyscrapers, residential structures, and commercial complexes. Tower cranes are critical for building projects because they allow for the efficient and safe lifting and positioning of large items and equipment at great heights. As a result, to keep up with the ever-expanding metropolitan landscape, the construction sector has seen a boom in demand for tower cranes. Furthermore, because of its stable foundation, tower cranes are effective for activities in rugged and uneven terrains. The fixed aspect of tower cranes improves the equipment's stability, making it useful in constructing bridges, railway lines, dams, and other structures. Additionally, tower cranes are useful in lifting prefabricated components of bridges and other infrastructure structures, which is projected to fuel the



tower crane market's growth.

For instance, in March 2023, Australian crane specialist Marr Contracting received a contract for heavy lifting services on the Kangaroo Point Green bridge in Brisbane. They developed the lifting proposal based on a M2480D heavy lift luffing tower crane having a 64-meter-long boom installed on a platform in the middle of the Brisbane River.

Expanding Role of Specialized Cranes in the Energy Sector

The global energy sector is undergoing a substantial upheaval, with a push toward cleaner and more sustainable energy sources. This change has resulted in an increase in demand for specialized cranes to help in the building and maintenance of various energy infrastructure projects. Wind turbines and solar panels require sophisticated lifting solutions that can manage the exact and careful positioning of these complex components. The tower crane market is poised to benefit from the increased usage of renewable energy technologies. Manufacturers are anticipated to focus on designing cranes adapted to the specific needs of renewable energy projects, ensuring efficiency, safety, and precision throughout installation and maintenance activities.

For example, in November 2023, XCMG's XGC28000 crawler crane completed the wind turbine installation of the world's first offshore floating wind power and aquaculture project on Nanri Island of Putian, Fujian Province. The crawler crane, with a 2,000-ton lifting capacity, had to operate at the dock due to the vessel's large width. It used a 126-meter main boom to precisely match the two tower tubes before assembling the engine room and raising three blades to dock with the wheel hub.

Increased R&D Investments to Boost Future Demand

Tower crane manufacturers invest in research and development (R&D) to create new and advanced equipment. The rapid development of modern systems, such as intelligent service panels, remote monitoring, cranes with optimal pulley rope angles, and high-speed hoist mechanisms, will likely increase market demand. Moreover, introducing intelligent control technology, which consists of safety measures with additional logic provable control systems that control tower crane operation with reduced risk, is acting as another growth-inducing factor. New technologies, such as connected equipment and tools, telematics, smartphone applications, and intelligent control, are some of the most recent technical developments expected to boost future demand.



For example, in October 2023, Potain launched the Evy 20-23 4 t, a part of Evy selferecting tower range, specifically designed for home construction and residential building up to three stories in height. It is equipped with crane control system (CCS), smart set-up, power control, and drive control, offering users complete control and precision on the working site.

#### Government Infrastructure Projects to Drive Market

Government infrastructure development schemes have grown in number over time. The construction of hospitals, bridges, dams, and other types of public and private infrastructure has increased the market's growth potential, and this trend is predicted to continue in the future. Companies can introduce innovative products to market by expanding R&D efforts through partnerships or collaboration. The market is expected to have high sales potential because of the establishment of sales and service operations in developing countries, as well as long-term collaborations with local distributors. The market is expanding because of increased construction activity and the advent of high-rise commercial and residential buildings worldwide. When compared to other traditional options, the heavyweight lifting capabilities of these machines will enhance their usage, particularly in urban construction scenarios.

For example, in August 2023, multiple projects in Gujarat International Finance Tec-City were responsible for driving the demand of tower cranes to build and install tall structures. Furthermore, a 1200-ton crawler crane was used to lift loads of more than 1,150 tons while setting up of the Pachpadra Oil Refinery in Rajasthan.

#### Dominance of Hammerhead Cranes

Hammerhead cranes account for the highest proportion (42% in 2022), which is expected to expand at a CAGR of 6% between 2023 and 2030. These cranes are becoming increasingly popular due to their dependable handling of large loads with precision and accuracy in horizontal load transfer. Its operation is adaptable and can be tailored to perform efficiently for any project site and any type or volume of material being moved. Hammerhead cranes are meant to be more energy efficient and emit less emissions than other typical construction machinery, contributing to a more environmentally friendly construction sector.

For instance, in December 2021, LIEBHERR Australia introduced hammerhead cranes to its fleet. The installation assisted in the construction of the WestConnex M4-M5 Link Tunnels. The use of energy-efficient components in the crane demonstrates the



company's commitment to reducing its environmental imprint while also lowering operational costs.

Asia-Pacific Dominates Tower Crane Market

Asia-Pacific is exerting its dominance in the global tower crane market. It includes a significant increase in construction activities of high rise commercial and residential projects as well as several infrastructure development projects undertaken by government and private firms. Singapore has a huge infrastructure development program initiated by its government. Additionally, India is also experiencing a high demand for tower cranes on account of multiple infrastructure development projects from the government. ASEAN countries, such as the Philippines, Vietnam, Thailand, Indonesia, and Malaysia, also witness a significant boost in infrastructure and construction activities. In many cases, the projects have been facilitated through loans and assistance from other major countries including India, Japan, and China. Furthermore, several rail and road projects will likely increase demand for tower cranes in the region in the future.

For instance, according to the "National Development and Reform Commission," China approved 26 infrastructure projects totaling USD 142 billion in investment for 2022. Songdo, South Korea, is a planned city near Seoul that is being built from the bottom up as a smart city. Forest City is a vast mixed-use development in Johor Bahru, Malaysia, that contains residential, business, and recreational activities.

Future Market Scenario (2024 – 2031F)

The tower crane market is primarily being driven by expanding high-rise construction activity. The need for housing, particularly in metropolitan areas, has influenced the construction of high-rise structures that need the lifting and handling of building materials and components at higher heights, resulting in strong market demand.

Government initiatives regarding public infrastructure have grown substantially with the construction of dams, bridges, hospitals, smart cities as well as other public and private infrastructure facilities. This is expected to continue the same between 2024 and 2031.

Another key area that requires heavy-duty construction cranes is the rise in demand for prefabricated buildings to be built on construction sites, which is



predicted to increase demand for tower cranes over the medium to long term.

New technologies, such as connected equipment and tools, smartphone applications, telematics, intelligent control, and other technological breakthroughs, are likely to drive the global tower crane market in the future.

Key Players Landscape and Outlook

Key participants in the tower crane market include Liebherr International AG, Wolffkran International AG, The Manitowoc Company, Inc., Xuzhou Heavy Machinery Co., Ltd. (XCMG), and Zoomlion Heavy Industry Science & Technology Co., Ltd. Major players are investing in R&D to improve their products and drive further growth in the tower crane market. Tower crane manufacturers are also taking strategic decisions to expand their footprint, with new product launches, contractual agreements, mergers and acquisitions, investments, and collaboration with other organizations. Local manufacturing with minimized operational costs is a major business tactic used by the players to benefit clients and increase market share.

For instance, in March 2022, Terex Corporation partnered with XL Kranlogistik to expand its reach in the Australia market, with the latter placing a significant order of 14 tower cranes to enhance its existing crane fleet.

In April 2023, Zoomlion Heavy Industry Science and Technology Co., Ltd. rolled off the production line at Zoomlion Tower Crane Intelligent Factory in Changde, China. It will offer more modern solutions to China's industrial heavy-duty trend and construction industrialization, increasing Chinese brands' impact and competitiveness in the global tower crane market.



## Contents

- **1. RESEARCH METHODOLOGY**
- 2. PROJECT SCOPE & DEFINITIONS
- **3. EXECUTIVE SUMMARY**

#### 4. VOICE OF CUSTOMER

- 4.1. Product and Market Intelligence
- 4.2. Factors Considered in Purchase Decisions
  - 4.2.1. Lifting Capacity
  - 4.2.2. Height and Reach
  - 4.2.3. Construction Site Conditions
  - 4.2.4. Ease of Assembly and Disassembly
  - 4.2.5. Operational Control
  - 4.2.6. Availability of Spare Parts

## 5. GLOBAL TOWER CRANE MARKET OUTLOOK, 2017-2031F

- 5.1. Market Size & Forecast
  - 5.1.1. By Value
  - 5.1.2. By Volume
- 5.2. By Design
  - 5.2.1. Top Slewing
  - 5.2.2. Bottom Slewing
- 5.3. By Product
  - 5.3.1. Flat Top
  - 5.3.2. Hammerhead
  - 5.3.3. Luffing Jib
  - 5.3.4. Self-erecting
- 5.4. By Loading Capacity
  - 5.4.1. Up to 5 tons
  - 5.4.2. 6 to 20 tons
  - 5.4.3. 21 to 50 tons
  - 5.4.4. 51 to 80 tons
  - 5.4.5. More than 80 tons
- 5.5. By End-user

Tower Crane Market Assessment, By Design [Top Slewing, Bottom Slewing], By Product [Flat Top, Hammerhead, Luff...



- 5.5.1. Infrastructure
- 5.5.2. Construction
- 5.5.3. Energy & Power
- 5.5.4. Others
- 5.6. By Region
  - 5.6.1. North America
  - 5.6.2. Europe
  - 5.6.3. Asia-Pacific
  - 5.6.4. South America
  - 5.6.5. Middle East and Africa
- 5.7. By Company Market Share (%), 2023

## 6. GLOBAL TOWER CRANE MARKET OUTLOOK, BY REGION, 2017-2031F

- 6.1. North America\*
  - 6.1.1. Market Size & Forecast
  - 6.1.1.1. By Value
  - 6.1.1.2. By Volume
  - 6.1.2. By Design
    - 6.1.2.1. Top Slewing
  - 6.1.2.2. Bottom Slewing
  - 6.1.3. By Product
    - 6.1.3.1. Flat Top
  - 6.1.3.2. Hammerhead
  - 6.1.3.3. Luffing Jib
  - 6.1.3.4. Self-erecting
  - 6.1.4. By Loading Capacity
  - 6.1.4.1. Less than 5 tons
  - 6.1.4.2. 6 to 20 tons
  - 6.1.4.3. 21 to 50 tons
  - 6.1.4.4. 51 to 80 tons
  - 6.1.4.5. More than 80 tons
  - 6.1.5. By End-user
  - 6.1.5.1. Infrastructure
  - 6.1.5.2. Construction
  - 6.1.5.3. Energy & Power
  - 6.1.5.4. Others
  - 6.1.6. United States\*
    - 6.1.6.1. Market Size & Forecast



- 6.1.6.1.1. By Value
- 6.1.6.1.2. By Volume
- 6.1.6.2. By Design
- 6.1.6.2.1. Top Slewing
- 6.1.6.2.2. Bottom Slewing
- 6.1.6.3. By Product
- 6.1.6.3.1. Flat Top
- 6.1.6.3.2. Hammerhead
- 6.1.6.3.3. Luffing Jib
- 6.1.6.3.4. Self-erecting
- 6.1.6.4. By Loading Capacity
- 6.1.6.4.1. Less than 5 tons
- 6.1.6.4.2. 6 to 20 tons
- 6.1.6.4.3. 21 to 50 tons
- 6.1.6.4.4. 51 to 80 tons
- 6.1.6.4.5. More than 80 tons
- 6.1.6.5. By End-user
- 6.1.6.5.1. Infrastructure
- 6.1.6.5.2. Construction
- 6.1.6.5.3. Energy & Power
- 6.1.6.5.4. Others
- 6.1.7. Canada
- 6.1.8. Mexico
- \*All segments will be provided for all regions and countries covered
- 6.2. Europe
  - 6.2.1. Germany
  - 6.2.2. France
  - 6.2.3. Italy
  - 6.2.4. United Kingdom
  - 6.2.5. Russia
  - 6.2.6. Netherlands
  - 6.2.7. Spain
  - 6.2.8. Turkey
  - 6.2.9. Poland
- 6.3. Asia-Pacific
  - 6.3.1. India
  - 6.3.2. China
  - 6.3.3. Japan
  - 6.3.4. Australia



6.3.5. Vietnam
6.3.6. South Korea
6.3.7. Indonesia
6.3.8. Philippines
6.4. South America
6.4.1. Brazil
6.4.2. Argentina
6.5. Middle East & Africa
6.5.1. Saudi Arabia
6.5.2. UAE
6.5.3. South Africa

#### 7. MARKET MAPPING, 2023

- 7.1. By Design
- 7.2. By Product
- 7.3. By Loading Capacity
- 7.4. By End-user
- 7.5. By Region

#### 8. MACRO ENVIRONMENT AND INDUSTRY STRUCTURE

- 8.1. Demand Supply Analysis
- 8.2. Import Export Analysis
- 8.3. Value Chain Analysis
- 8.4. PESTEL Analysis
  - 8.4.1. Political Factors
  - 8.4.2. Economic System
  - 8.4.3. Social Implications
  - 8.4.4. Technological Advancements
  - 8.4.5. Environmental Impacts
  - 8.4.6. Legal Compliances and Regulatory Policies (Statutory Bodies Included)
- 8.5. Porter's Five Forces Analysis
  - 8.5.1. Supplier Power
  - 8.5.2. Buyer Power
  - 8.5.3. Substitution Threat
  - 8.5.4. Threat from New Entrant
  - 8.5.5. Competitive Rivalry

Tower Crane Market Assessment, By Design [Top Slewing, Bottom Slewing], By Product [Flat Top, Hammerhead, Luff...



#### 9. MARKET DYNAMICS

- 9.1. Growth Drivers
- 9.2. Growth Inhibitors (Challenges and Restraints)

### **10. KEY PLAYERS LANDSCAPE**

- 10.1. Competition Matrix of Top Five Market Leaders
- 10.2. Market Revenue Analysis of Top Five Market Leaders (in %, 2023)
- 10.3. Mergers and Acquisitions/Joint Ventures (If Applicable)
- 10.4. SWOT Analysis (For Five Market Players)
- 10.5. Patent Analysis (If Applicable)

## **11. CASE STUDIES**

## **12. KEY PLAYERS OUTLOOK**

- 12.1. Liebherr International AG
  - 12.1.1. Company Details
  - 12.1.2. Key Management Personnel
  - 12.1.3. Products & Services
  - 12.1.4. Financials (As reported)
  - 12.1.5. Key Market Focus & Geographical Presence
- 12.1.6. Recent Developments
- 12.2. Wolffkran International AG
- 12.3. The Manitowoc Company, Inc.
- 12.4. SANY Heavy Equipment Co., Ltd.
- 12.5. Konecranes PLC
- 12.6. Zhenhua Heavy Industries Co., Ltd.
- 12.7. Yongmao Holdings Ltd.
- 12.8. Xuzhou Heavy Machinery Co., Ltd.
- 12.9. Zoomlion Heavy Industry Science & Technology Co., Ltd.
- 12.10. Action Construction Equipment Ltd.

\*Companies mentioned above DO NOT hold any order as per market share and can be changed as per information available during research work.

## **13. STRATEGIC RECOMMENDATIONS**

## 14. ABOUT US & DISCLAIMER



#### I would like to order

Product name: Tower Crane Market Assessment, By Design [Top Slewing, Bottom Slewing], By Product [Flat Top, Hammerhead, Luffing Jib, Self-erecting], By Loading Capacity [Less than 5 tons, 6 to 20 tons, 21 to 50 tons, 51 to 80 tons, More than 80 tons], By End-user [Infrastructure, Construction, Energy & Power, Others], By Region, Opportunities and Forecast, 2017-2031F

Product link: https://marketpublishers.com/r/TC3A6C739243EN.html

Price: US\$ 4,500.00 (Single User License / Electronic Delivery) If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <u>https://marketpublishers.com/r/TC3A6C739243EN.html</u>