+357 96 030922
info@marketpublishers.com

Global Construction Robot Market Size study & Forecast, by Function (Demolition, Bricklaying, Material Handling) by Type (Traditional Robot, Robotic Arm, Exoskeleton) by End-use (Industrial, Residential, Commercial) and Regional Forecasts 2025-2035

https://marketpublishers.com/r/GBF75750CA6BEN.html
Date: November 2025
Pages: 285
Price: US$ 3,750.00 (Single User License)
ID: GBF75750CA6BEN

Abstracts

The Global Construction Robot Market is valued approximately at USD 1.37 billion in 2024 and is projected to expand at a CAGR of 18% over the forecast period 2025-2035. Construction robots are specialized automated systems designed to perform tasks traditionally executed by human labor, including material handling, bricklaying, demolition, and structural assembly. These advanced machines combine robotics, artificial intelligence, and sensor-based automation to improve operational efficiency, reduce labor costs, enhance safety, and accelerate project timelines. The market's expansion is primarily fueled by the growing need for productivity optimization in the construction sector, alongside the rising adoption of smart construction technologies and modular building methods. Additionally, the shortage of skilled labor and the increasing emphasis on worker safety are driving the integration of robotic solutions on construction sites globally.

The escalating adoption of robotics in construction is closely tied to advancements in AI-driven control systems and IoT-enabled monitoring, which allow real-time tracking, precise task execution, and predictive maintenance. According to industry reports, global construction output reached USD 13.2 trillion in 2023, with automation technologies increasingly influencing large-scale industrial, residential, and commercial projects. Demolition robots, bricklaying robots, and material handling systems are increasingly being deployed in urban construction, infrastructure development, and high-rise building projects to ensure accuracy, consistency, and efficiency. Furthermore, innovations in robotic arms and exoskeletons are facilitating the mechanization of

+357 96 030922
info@marketpublishers.com

repetitive and physically intensive tasks, while also reducing human fatigue and occupational hazards. Despite the strong growth trajectory, high initial investment costs and technological integration challenges may limit adoption among smaller construction enterprises throughout the forecast period.

The detailed segments and sub-segments included in the report are:

By Function:

Demolition

Bricklaying

Material Handling

By Type:

Traditional Robot

Robotic Arm

Exoskeleton

By End-use:

Industrial

Residential

Commercial

By Region:

North America

U.S.

+357 96 030922
info@marketpublishers.com

- Canada

Europe

- UK
- Germany
- France
- Spain
- Italy
- Rest of Europe

Asia Pacific

- China
- India
- Japan
- Australia
- South Korea
- Rest of Asia Pacific

Latin America

- Brazil
- Mexico

+357 96 030922
info@marketpublishers.com

Middle East & Africa

UAE

Saudi Arabia

South Africa

Rest of Middle East & Africa

Material Handling Robots Expected to Dominate the Market

Among functions, material handling robots are expected to dominate the market, accounting for the largest share during the forecast period. Their widespread adoption is driven by the critical need to transport heavy construction materials efficiently and safely across sites, particularly in large-scale industrial and infrastructure projects. These robots enhance operational throughput, reduce manual labor dependency, and minimize the risk of workplace injuries. In addition, advancements in autonomous navigation, load-sensing technologies, and AI-enabled path optimization are further strengthening the application of material handling robots in construction environments. While demolition and bricklaying robots are witnessing increasing demand, material handling robots remain the foundational driver due to their versatility and direct impact on site productivity.

Robotic Arms Lead in Revenue Contribution

When segmenting by type, robotic arms currently generate the lion’s share of market revenue. Their widespread deployment is credited to their adaptability, precision, and ability to handle complex construction tasks, ranging from high-precision bricklaying to component assembly. Robotic arms are increasingly being integrated with AI-based vision systems and IoT connectivity to perform multi-task operations autonomously, making them indispensable for modern construction projects. Traditional robots and exoskeletons continue to grow steadily, particularly in niche applications such as demolition and worker augmentation, but robotic arms remain the highest revenue contributors due to their advanced capabilities, technological sophistication, and high ROI for large-scale projects.

+357 96 030922
info@marketpublishers.com

The Global Construction Robot Market spans North America, Europe, Asia Pacific, Latin America, and the Middle East & Africa. North America dominated the market in 2025 owing to the presence of a mature construction sector, significant adoption of automation technologies, and high infrastructure spending. The U.S. leads in implementing robotic solutions across commercial and industrial projects, with strong R&D investments in robotics technologies. Asia Pacific is anticipated to witness the fastest growth, driven by rapid urbanization, government-led smart city initiatives, and escalating investments in industrial and residential construction across China, India, and Japan. Europe maintains steady adoption, primarily supported by robotics integration in industrial construction and public infrastructure projects, while Latin America and the Middle East & Africa are emerging markets, displaying growing adoption in commercial and industrial segments due to increasing mechanization and labor productivity initiatives.

Major market players included in this report are:

Brokk AB

Constructo Robotics

Komatsu Ltd.

Caterpillar Inc.

Hitachi Construction Machinery Co., Ltd.

Fanuc Corporation

ABB Ltd.

CRRC Corporation Limited

Engineered Arts Ltd.

SANY Group Co., Ltd.

JCB Ltd.

+357 96 030922
info@marketpublishers.com

Hanson Robotics

Skanska AB

Volvo Construction Equipment

Robot System Products AB

Global Construction Robot Market Report Scope:

Historical Data – 2023, 2024

Base Year for Estimation – 2024

Forecast period - 2025-2035

Report Coverage - Revenue forecast, Company Ranking, Competitive Landscape, Growth factors, and Trends

Regional Scope - North America; Europe; Asia Pacific; Latin America; Middle East & Africa

Customization Scope - Free report customization (equivalent to up to 8 analysts' working hours) with purchase. Addition or alteration to country, regional & segment scope*

The objective of the study is to define market sizes of different segments & countries in recent years and to forecast the values for the coming years. The report is designed to incorporate both qualitative and quantitative aspects of the industry within the countries involved in the study. The report also provides detailed information about crucial aspects, such as driving factors and challenges, which will define the future growth of the market. Additionally, it incorporates potential opportunities in micro-markets for stakeholders to invest, along with a detailed analysis of the competitive landscape and product offerings of key players. The detailed segments and sub-segments of the market are explained below:

Key Takeaways:

+357 96 030922
info@marketpublishers.com

Market Estimates & Forecast for 10 years from 2025 to 2035.

Annualized revenues and regional-level analysis for each market segment.

Detailed analysis of the geographical landscape with country-level analysis of major regions.

Competitive landscape with information on major players in the market.

Analysis of key business strategies and recommendations on future market approach.

Analysis of the competitive structure of the market.

Demand side and supply side analysis of the market.

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

CHAPTER 7. GLOBAL CONSTRUCTION ROBOT MARKET SIZE & FORECASTS BY END USE 2025–2035

CHAPTER 8. GLOBAL CONSTRUCTION ROBOT MARKET SIZE & FORECASTS BY REGION 2025–2035

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

CHAPTER 9. COMPETITIVE INTELLIGENCE

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

List Of Tables

LIST OF TABLES

+357 96 030922
info@marketpublishers.com

List Of Figures

LIST OF FIGURES

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Global Construction Robot Market Size study & Forecast, by Function (Demolition, Bricklaying, Material Handling) by Type (Traditional Robot, Robotic Arm, Exoskeleton) by End-use (Industrial, Residential, Commercial) and Regional Forecasts 2025-2035

Product link: https://marketpublishers.com/r/GBF75750CA6BEN.html

Price: US$ 3,750.00 (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 https://marketpublishers.com/r/GBF75750CA6BEN.html