

# Automotive Robotics Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2022-2027

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# **Abstracts**

The global automotive robotics market reached a value of US\$ 8.69 Billion in 2021. Looking forward, IMARC Group expects the market to reach a value of US\$ 17.34 Billion by 2027, exhibiting a CAGR of 11.80% during 2022-2027. Keeping in mind the uncertainties of COVID-19, we are continuously tracking and evaluating the direct as well as the indirect influence of the pandemic on different end use sectors. These insights are included in the report as a major market contributor.

Automotive robotics refers to computer-programmed engineering solutions that are extensively employed by manufacturers for performing complex tasks effectively. It offers flexibility, higher efficiency, reliability, and accuracy, which in turn, is helping organizations in improving quality and production capacity, optimizing workflow, eliminating the risk of errors, and providing safety to employees. On account of these properties, automotive robotics is used in vehicle assembly facilities for executing various applications, including spot welding, painting, trimming plastic molding, cutting fabric, and removing unwarranted materials. At present, it is available in varying product types, such as cartesian, articulated polar and cylindrical robots. Automotive Robotics Market Trends:

With the significant expansion in the automotive industry, there has been an increase in the demand for industrial robots to simplify complex production processes, which, in turn, is acting as one of the prime factors driving the market growth. Automotive robots help in enhancing the quality and working capacity at lower costs, which is further supporting the market growth. Additionally, the rising concerns regarding employee safety due to the increasing instances of injury, manual errors and accidents caused by working under hazardous conditions in the automotive manufacturing industry is acting as another growth-inducing factor. This is further supported by extensive fundings and



numerous favorable initiatives undertaken by the government bodies of various countries for incorporating advanced gadgets and equipment to ensure workers security, while meeting the safety standards. Additionally, rapid technological advancements, such as the integration of the Internet of Things (IoT), cloud solutions, and autonomous intelligent vehicles (AIVs) for transferring components and materials safely from one place to another is contributing to the market growth. Other factors, such as strategic collaborations amongst key players, growing vehicle production due to inflating disposable incomes in emerging economies, and rising investments in research and development (R&D) activities for introducing energy-efficient automotive robots are creating a positive outlook for the market.

## Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global automotive robotics market, along with forecasts at the global, regional and country level from 2022-2027. Our report has categorized the market based on product type, component type, application and end user.

Breakup by Product Type:

Cartesian Robots SCARA Robots Articulated Robot Others

Breakup by Component Type:

Controller
Robotic Arm
End Effector
Drive and Sensors

Breakup by Application: Assembly
Dispensing
Material Handling
Welding
Others

Breakup by End User:



Vehicle Manufacturers
Automotive Component Manufacturers

Breakup by Region: North America

**United States** 

Canada

Asia-Pacific

China

Japan

India

South Korea

Australia

Indonesia

Others

Europe

Germany

France

**United Kingdom** 

Italy

Spain

Russia

Others

Latin America

Brazil

Mexico

Others

Middle East and Africa

#### Competitive Landscape:

The competitive landscape of the industry has also been examined along with the profiles of the key players being ABB Ltd., Denso Wave Incorporated (DENSO Corporation), D?rr Aktiengesellschaft, FANUC, Harmonic Drive Systems Inc., Kawasaki Heavy Industries Ltd., KUKA Aktiengesellschaft (Midea Group), Nachi-Fujikoshi Corp., Omron Corporation, Seiko Epson Corporation, Yamaha Motor Co. Ltd. and Yaskawa Electric Corporation. Key Questions Answered in This Report:

How has the global automotive robotics market performed so far and how will it perform in the coming years?

What has been the impact of COVID-19 on the global automotive robotics market? What are the key regional markets?



What is the breakup of the market based on the product type?
What is the breakup of the market based on the component type?
What is the breakup of the market based on the application?
What is the breakup of the market based on the end user?
What are the various stages in the value chain of the industry?
What are the key driving factors and challenges in the industry?
What is the structure of the global automotive robotics market and who are the key players?

What is the degree of competition in the industry?



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