

Cartesian Robots Market Report by Product Type (XY-X Series, 2X-Y-Z Series, 2X-2Y-Z Series), Axis Type (1-Axis, 2-Axis, 3-Axis, 4-Axis), End User (Automotive, Electrical and Electronics, Chemical and Petrochemical, Food and Beverage, Manufacturing, and Others), and Region 2024-2032

https://marketpublishers.com/r/CD13E93518E0EN.html

Date: March 2024 Pages: 148 Price: US\$ 2,999.00 (Single User License) ID: CD13E93518E0EN

# **Abstracts**

The global cartesian robots market size reached US\$ 23.5 Billion in 2023. Looking forward, IMARC Group expects the market to reach US\$ 56.6 Billion by 2032, exhibiting a growth rate (CAGR) of 9.95% during 2024-2032. The growing need for material handling in a cost-effective manner, increasing adoption in the automobile industry, and the rising utilization for sorting and labeling various products represent some of the key factors driving the market.

Cartesian robots, also known as linear robots, rely on linear axes for movement. They comprise an overhead structure that controls the motion in the horizontal plane and a robotic arm that facilitates motion vertically. They have a higher payload carrying capacity and are easy to program as compared to other robots. They also offer enhanced versatility, flexibility, accuracy, high precision, and hold up against vibrations and deflection. They assist in providing high repeatability with increased speed while reducing the risk of errors. They also aid in automating several tasks, streamlining the workflow process, saving time, reducing manual workload, and carrying heavy loads over a longer distance. Besides this, they are beneficial in picking and moving objects from one place to another. As a result, cartesian robots are widely employed in the pharmaceutical, aerospace, food and beverage (F&B), metals, automotive, and manufacturing industries across the globe.



Cartesian Robots Market Trends:

At present, the rising utilization of cartesian robots in the automobile industry to apply adhesives and sealants on different parts efficiently represents one of the primary factors bolstering the growth of the market. Besides this, the growing demand for these robots for welding purposes to provide accurate welds on the surface is offering a favorable market outlook. Additionally, the rising employment of cartesian robots in the pharmaceutical industry for dispensing materials, filling containers, and processing laboratory samples is propelling the growth of the market. Apart from this, the rising demand for these robots in computer numeric controls (CNC)-based machines to manufacture products according to designs made in engineering design software is positively influencing the market. In addition, the rising employment of cartesian robots for material handling in a cost-effective way around the world is contributing to the growth of the market. Moreover, the increasing demand for these robots in the warehouse sector for cutting and scribing packaging is offering lucrative growth opportunities to industry investors. In line with this, the rising utilization of cartesian robots for sorting and labeling numerous products is strengthening the market growth. Besides this, governing agencies of various countries are promoting the adoption of robotics and automation, which is impelling the market growth. Furthermore, the increasing adoption of these robots for printed circuit board (PCB) assembling is supporting the growth of the market.

#### Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each segment of the global cartesian robots market, along with forecasts at the global, regional, and country levels from 2024-2032. Our report has categorized the market based on product type, axis type, and end user.

Product Type Insights:

XY-X Series 2X-Y-Z Series 2X-2Y-Z Series

The report has provided a detailed breakup and analysis of the cartesian robots market based on the product type. This includes XY-X series, 2X-Y-Z series, and 2X-2Y-Z series. According to the report, 2X-Y-Z series represented the largest segment.

Axis Type Insights:



1-Axis

2-Axis

3-Axis

4-Axis

A detailed breakup and analysis of the cartesian robots market based on the axis type has also been provided in the report. This includes 1-axis, 2-axis, 3-axis, and 4-axis. According to the report, 3-axis accounted for the largest market share.

End User Insights:

Automotive Electrical and Electronics Chemical and Petrochemical Food and Beverage Manufacturing Others

A detailed breakup and analysis of the cartesian robots market based on the end user has also been provided in the report. This includes automotive, electrical and electronics, chemical and petrochemical, food and beverage, manufacturing, and others. According to the report, automotive accounted for the largest market share.

Regional Insights:

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

The report has also provided a comprehensive analysis of all the major regional markets, which include North America (the United States and Canada); Asia Pacific (China, Japan, India, South Korea, Australia, Indonesia, and others); Europe (Germany, France, the United Kingdom, Italy, Spain, Russia, and others); Latin America (Brazil, Mexico, and others); and the Middle East and Africa. According to the report, Asia Pacific was the largest market for cartesian robots. Some of the factors driving the Asia Pacific cartesian robots market included the growing adoption in the manufacturing industry, favorable government initiatives, increasing demand for electrical and electronic components among individuals, etc.

#### Competitive Landscape:

The report has also provided a comprehensive analysis of the competitive landscape in the global cartesian robots market. Detailed profiles of all major companies have been provided. Some of the companies covered include Aerotech Inc., Bosch Rexroth GmbH (Robert Bosch GmbH), G?del Group AG, HIRATA Corporation, Kuka AG (Midea Group), Parker Hannifin Corporation, Robostar Co. Ltd., Samick Thk Co. Ltd., Sepro Robotique SAS, Shibaura Machine Co. Ltd., Yamaha Motor Co. Ltd., etc. Kindly note that this only represents a partial list of companies, and the complete list has been provided in the report.

#### Key Questions Answered in This Report:

How has the global cartesian robots market performed so far, and how will it perform in the coming years?

What are the drivers, restraints, and opportunities in the global cartesian robots market? What is the impact of each driver, restraint, and opportunity on the global cartesian robots market?

What are the key regional markets?

Which countries represent the most attractive cartesian robots market?



What is the breakup of the market based on the product type? Which is the most attractive product type in the cartesian robots market? What is the breakup of the market based on the axis type? Which is the most attractive axis type in the cartesian robots market? What is the breakup of the market based on the end user? Which is the most attractive end user in the cartesian robots market? What is the competitive structure of the global cartesian robots market? Who are the key players/companies in the global cartesian robots market?



# Contents

#### **1 PREFACE**

#### **2 SCOPE AND METHODOLOGY**

- 2.1 Objectives of the Study
- 2.2 Stakeholders
- 2.3 Data Sources
- 2.3.1 Primary Sources
- 2.3.2 Secondary Sources
- 2.4 Market Estimation
- 2.4.1 Bottom-Up Approach
- 2.4.2 Top-Down Approach
- 2.5 Forecasting Methodology

#### **3 EXECUTIVE SUMMARY**

#### **4 INTRODUCTION**

- 4.1 Overview
- 4.2 Key Industry Trends

## **5 GLOBAL CARTESIAN ROBOTS MARKET**

- 5.1 Market Overview
- 5.2 Market Performance
- 5.3 Impact of COVID-19
- 5.4 Market Forecast

## 6 MARKET BREAKUP BY PRODUCT TYPE

6.1 XY-X Series
6.1.1 Market Trends
6.1.2 Market Forecast
6.2 2X-Y-Z Series
6.2.1 Market Trends
6.2.2 Market Forecast
6.3 2X-2Y-Z Series



6.3.1 Market Trends

6.3.2 Market Forecast

### **7 MARKET BREAKUP BY AXIS TYPE**

7.1 1-Axis 7.1.1 Market Trends 7.1.2 Market Forecast 7.2 2-Axis 7.2.1 Market Trends 7.2.2 Market Forecast 7.3 3-Axis 7.3.1 Market Trends 7.3.2 Market Forecast 7.4 4-Axis 7.4.1 Market Trends 7.4.2 Market Forecast

#### **8 MARKET BREAKUP BY END USER**

8.1 Automotive 8.1.1 Market Trends 8.1.2 Market Forecast 8.2 Electrical and Electronics 8.2.1 Market Trends 8.2.2 Market Forecast 8.3 Chemical and Petrochemical 8.3.1 Market Trends 8.3.2 Market Forecast 8.4 Food and Beverage 8.4.1 Market Trends 8.4.2 Market Forecast 8.5 Manufacturing 8.5.1 Market Trends 8.5.2 Market Forecast 8.6 Others 8.6.1 Market Trends 8.6.2 Market Forecast



#### 9 MARKET BREAKUP BY REGION

9.1 North America 9.1.1 United States 9.1.1.1 Market Trends 9.1.1.2 Market Forecast 9.1.2 Canada 9.1.2.1 Market Trends 9.1.2.2 Market Forecast 9.2 Asia-Pacific 9.2.1 China 9.2.1.1 Market Trends 9.2.1.2 Market Forecast 9.2.2 Japan 9.2.2.1 Market Trends 9.2.2.2 Market Forecast 9.2.3 India 9.2.3.1 Market Trends 9.2.3.2 Market Forecast 9.2.4 South Korea 9.2.4.1 Market Trends 9.2.4.2 Market Forecast 9.2.5 Australia 9.2.5.1 Market Trends 9.2.5.2 Market Forecast 9.2.6 Indonesia 9.2.6.1 Market Trends 9.2.6.2 Market Forecast 9.2.7 Others 9.2.7.1 Market Trends 9.2.7.2 Market Forecast 9.3 Europe 9.3.1 Germany 9.3.1.1 Market Trends 9.3.1.2 Market Forecast 9.3.2 France 9.3.2.1 Market Trends 9.3.2.2 Market Forecast 9.3.3 United Kingdom



9.3.3.1 Market Trends 9.3.3.2 Market Forecast 9.3.4 Italy 9.3.4.1 Market Trends 9.3.4.2 Market Forecast 9.3.5 Spain 9.3.5.1 Market Trends 9.3.5.2 Market Forecast 9.3.6 Russia 9.3.6.1 Market Trends 9.3.6.2 Market Forecast 9.3.7 Others 9.3.7.1 Market Trends 9.3.7.2 Market Forecast 9.4 Latin America 9.4.1 Brazil 9.4.1.1 Market Trends 9.4.1.2 Market Forecast 9.4.2 Mexico 9.4.2.1 Market Trends 9.4.2.2 Market Forecast 9.4.3 Others 9.4.3.1 Market Trends 9.4.3.2 Market Forecast 9.5 Middle East and Africa 9.5.1 Market Trends 9.5.2 Market Breakup by Country 9.5.3 Market Forecast

#### **10 DRIVERS, RESTRAINTS, AND OPPORTUNITIES**

10.1 Overview10.2 Drivers10.3 Restraints10.4 Opportunities

#### **11 VALUE CHAIN ANALYSIS**

## **12 PORTERS FIVE FORCES ANALYSIS**

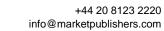


- 12.1 Overview
- 12.2 Bargaining Power of Buyers
- 12.3 Bargaining Power of Suppliers
- 12.4 Degree of Competition
- 12.5 Threat of New Entrants
- 12.6 Threat of Substitutes

#### **13 PRICE ANALYSIS**

#### **14 COMPETITIVE LANDSCAPE**

- 14.1 Market Structure
- 14.2 Key Players
- 14.3 Profiles of Key Players
- 14.3.1 Aerotech Inc.
  - 14.3.1.1 Company Overview
  - 14.3.1.2 Product Portfolio
- 14.3.2 Bosch Rexroth GmbH (Robert Bosch GmbH)
- 14.3.2.1 Company Overview
- 14.3.2.2 Product Portfolio
- 14.3.3 G?del Group AG
- 14.3.3.1 Company Overview
- 14.3.3.2 Product Portfolio
- 14.3.4 HIRATA Corporation
- 14.3.4.1 Company Overview
- 14.3.4.2 Product Portfolio
- 14.3.4.3 Financials
- 14.3.5 Kuka AG (Midea Group)
- 14.3.5.1 Company Overview
- 14.3.5.2 Product Portfolio
- 14.3.5.3 Financials
- 14.3.5.4 SWOT Analysis
- 14.3.6 Parker Hannifin Corporation
- 14.3.6.1 Company Overview
- 14.3.6.2 Product Portfolio
- 14.3.6.3 Financials
- 14.3.6.4 SWOT Analysis
- 14.3.7 Robostar Co. Ltd.





- 14.3.7.1 Company Overview
- 14.3.7.2 Product Portfolio
- 14.3.7.3 Financials
- 14.3.8 Samick Thk Co. Ltd.
- 14.3.8.1 Company Overview
- 14.3.8.2 Product Portfolio
- 14.3.8.3 Financials
- 14.3.9 Sepro Robotique SAS
- 14.3.9.1 Company Overview
- 14.3.9.2 Product Portfolio
- 14.3.10 Shibaura Machine Co. Ltd.
- 14.3.10.1 Company Overview
- 14.3.10.2 Product Portfolio
- 14.3.10.3 Financials
- 14.3.11 Yamaha Motor Co. Ltd.
- 14.3.11.1 Company Overview
- 14.3.11.2 Product Portfolio
- 14.3.11.3 Financials
- 14.3.11.4 SWOT Analysis

Kindly note that this only represents a partial list of companies, and the complete list has been provided in the report.



# **List Of Tables**

#### LIST OF TABLES

Table 1: Global: Cartesian Robots Market: Key Industry Highlights, 2023 & 2032 Table 2: Global: Cartesian Robots Market Forecast: Breakup by Product Type (in Million US\$), 2024-2032 Table 3: Global: Cartesian Robots Market Forecast: Breakup by Axis Type (in Million US\$), 2024-2032 Table 4: Global: Cartesian Robots Market Forecast: Breakup by End User (in Million US\$), 2024-2032 Table 5: Global: Cartesian Robots Market Forecast: Breakup by Region (in Million US\$), 2024-2032 Table 6: Global: Cartesian Robots Market: Competitive Structure Table 7: Global: Cartesian Robots Market: Key Players



# **List Of Figures**

#### LIST OF FIGURES

Figure 1: Global: Cartesian Robots Market: Major Drivers and Challenges Figure 2: Global: Cartesian Robots Market: Sales Value (in Billion US\$), 2018-2023 Figure 3: Global: Cartesian Robots Market Forecast: Sales Value (in Billion US\$), 2024-2032 Figure 4: Global: Cartesian Robots Market: Breakup by Product Type (in %), 2023 Figure 5: Global: Cartesian Robots Market: Breakup by Axis Type (in %), 2023 Figure 6: Global: Cartesian Robots Market: Breakup by End User (in %), 2023 Figure 7: Global: Cartesian Robots Market: Breakup by Region (in %), 2023 Figure 8: Global: Cartesian Robots (XY-X Series) Market: Sales Value (in Million US\$), 2018 & 2023 Figure 9: Global: Cartesian Robots (XY-X Series) Market Forecast: Sales Value (in Million US\$), 2024-2032 Figure 10: Global: Cartesian Robots (2X-Y-Z Series) Market: Sales Value (in Million US\$), 2018 & 2023 Figure 11: Global: Cartesian Robots (2X-Y-Z Series) Market Forecast: Sales Value (in Million US\$), 2024-2032 Figure 12: Global: Cartesian Robots (2X-2Y-Z Series) Market: Sales Value (in Million US\$), 2018 & 2023 Figure 13: Global: Cartesian Robots (2X-2Y-Z Series) Market Forecast: Sales Value (in Million US\$), 2024-2032 Figure 14: Global: Cartesian Robots (1-Axis) Market: Sales Value (in Million US\$), 2018 & 2023 Figure 15: Global: Cartesian Robots (1-Axis) Market Forecast: Sales Value (in Million US\$), 2024-2032 Figure 16: Global: Cartesian Robots (2-Axis) Market: Sales Value (in Million US\$), 2018 & 2023 Figure 17: Global: Cartesian Robots (2-Axis) Market Forecast: Sales Value (in Million US\$), 2024-2032 Figure 18: Global: Cartesian Robots (3-Axis) Market: Sales Value (in Million US\$), 2018 & 2023 Figure 19: Global: Cartesian Robots (3-Axis) Market Forecast: Sales Value (in Million US\$), 2024-2032 Figure 20: Global: Cartesian Robots (4-Axis) Market: Sales Value (in Million US\$), 2018 & 2023 Figure 21: Global: Cartesian Robots (4-Axis) Market Forecast: Sales Value (in Million



US\$), 2024-2032

Figure 22: Global: Cartesian Robots (Automotive) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 23: Global: Cartesian Robots (Automotive) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 24: Global: Cartesian Robots (Electrical and Electronics) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 25: Global: Cartesian Robots (Electrical and Electronics) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 26: Global: Cartesian Robots (Chemical and Petrochemical) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 27: Global: Cartesian Robots (Chemical and Petrochemical) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 28: Global: Cartesian Robots (Food and Beverage) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 29: Global: Cartesian Robots (Food and Beverage) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 30: Global: Cartesian Robots (Manufacturing) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 31: Global: Cartesian Robots (Manufacturing) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 32: Global: Cartesian Robots (Other End Users) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 33: Global: Cartesian Robots (Other End Users) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 34: North America: Cartesian Robots Market: Sales Value (in Million US\$), 2018 & 2023

Figure 35: North America: Cartesian Robots Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 36: United States: Cartesian Robots Market: Sales Value (in Million US\$), 2018 & 2023

Figure 37: United States: Cartesian Robots Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 38: Canada: Cartesian Robots Market: Sales Value (in Million US\$), 2018 & 2023

Figure 39: Canada: Cartesian Robots Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 40: Asia-Pacific: Cartesian Robots Market: Sales Value (in Million US\$), 2018 & 2023



Figure 41: Asia-Pacific: Cartesian Robots Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 42: China: Cartesian Robots Market: Sales Value (in Million US\$), 2018 & 2023 Figure 43: China: Cartesian Robots Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 44: Japan: Cartesian Robots Market: Sales Value (in Million US\$), 2018 & 2023 Figure 45: Japan: Cartesian Robots Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 46: India: Cartesian Robots Market: Sales Value (in Million US\$), 2018 & 2023 Figure 47: India: Cartesian Robots Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 48: South Korea: Cartesian Robots Market: Sales Value (in Million US\$), 2018 & 2023

Figure 49: South Korea: Cartesian Robots Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 50: Australia: Cartesian Robots Market: Sales Value (in Million US\$), 2018 & 2023

Figure 51: Australia: Cartesian Robots Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 52: Indonesia: Cartesian Robots Market: Sales Value (in Million US\$), 2018 & 2023

Figure 53: Indonesia: Cartesian Robots Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 54: Others: Cartesian Robots Market: Sales Value (in Million US\$), 2018 & 2023 Figure 55: Others: Cartesian Robots Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 56: Europe: Cartesian Robots Market: Sales Value (in Million US\$), 2018 & 2023 Figure 57: Europe: Cartesian Robots Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 58: Germany: Cartesian Robots Market: Sales Value (in Million US\$), 2018 & 2023

Figure 59: Germany: Cartesian Robots Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 60: France: Cartesian Robots Market: Sales Value (in Million US\$), 2018 & 2023 Figure 61: France: Cartesian Robots Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 62: United Kingdom: Cartesian Robots Market: Sales Value (in Million US\$), 2018 & 2023

Figure 63: United Kingdom: Cartesian Robots Market Forecast: Sales Value (in Million



US\$), 2024-2032

Figure 64: Italy: Cartesian Robots Market: Sales Value (in Million US\$), 2018 & 2023 Figure 65: Italy: Cartesian Robots Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 66: Spain: Cartesian Robots Market: Sales Value (in Million US\$), 2018 & 2023 Figure 67: Spain: Cartesian Robots Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 68: Russia: Cartesian Robots Market: Sales Value (in Million US\$), 2018 & 2023 Figure 69: Russia: Cartesian Robots Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 70: Others: Cartesian Robots Market: Sales Value (in Million US\$), 2018 & 2023 Figure 71: Others: Cartesian Robots Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 72: Latin America: Cartesian Robots Market: Sales Value (in Million US\$), 2018 & 2023

Figure 73: Latin America: Cartesian Robots Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 74: Brazil: Cartesian Robots Market: Sales Value (in Million US\$), 2018 & 2023 Figure 75: Brazil: Cartesian Robots Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 76: Mexico: Cartesian Robots Market: Sales Value (in Million US\$), 2018 & 2023 Figure 77: Mexico: Cartesian Robots Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 78: Others: Cartesian Robots Market: Sales Value (in Million US\$), 2018 & 2023 Figure 79: Others: Cartesian Robots Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 80: Middle East and Africa: Cartesian Robots Market: Sales Value (in Million US\$), 2018 & 2023

Figure 81: Middle East and Africa: Cartesian Robots Market: Breakup by Country (in %), 2023

Figure 82: Middle East and Africa: Cartesian Robots Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 83: Global: Cartesian Robots Industry: Drivers, Restraints, and Opportunities

Figure 84: Global: Cartesian Robots Industry: Value Chain Analysis

Figure 85: Global: Cartesian Robots Industry: Porter's Five Forces Analysis



#### I would like to order

Product name: Cartesian Robots Market Report by Product Type (XY-X Series, 2X-Y-Z Series, 2X-2Y-Z Series), Axis Type (1-Axis, 2-Axis, 3-Axis, 4-Axis), End User (Automotive, Electrical and Electronics, Chemical and Petrochemical, Food and Beverage, Manufacturing, and Others), and Region 2024-2032

Product link: https://marketpublishers.com/r/CD13E93518E0EN.html

Price: US\$ 2,999.00 (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/CD13E93518E0EN.html</u>

# To pay by Wire Transfer, please, fill in your contact details in the form below:

First name: Last name: Email: Company: Address: City: Zip code: Country: Tel: Fax: Your message:

\*\*All fields are required

Custumer signature \_\_\_\_

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <u>https://marketpublishers.com/docs/terms.html</u>



To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970