Industrial Robotics Market by Type, Application, Component, and Geography - Analysis & Forecast to 2022

Description: The use of industrial robots is expected to grow exponentially in the future as their use leads to cost reduction, improved quality, increased production, and enhanced workplace health and safety. The global industrial robotics market is expected to reach USD 79.58 billion by 2022, growing at a CAGR of 11.92% between 2016 and 2022.

The main drivers of this growth are the adoption of automation to ensure quality production and meet market demand as well as the growing demand from small- and medium-scale enterprises in developing countries. However, the lack of skilled force to work in the automated manufacturing units is one of the main restraints of the industrial robotics market.

The industrial robotics market in APAC is segmented into countries such as China, Japan, India, Taiwan, South Korea, and Rest of APAC. Given the availability of labor and low cost of manufacturing, many global players are setting up their manufacturing facilities in countries such as China and India. Moreover, low-cost collaborative industrial robots are gathering much traction from the small- and medium-scale enterprises, which would enable the collaborative industrial robotics market to grow at a prominent rate.

The controller is the major component of industrial robotics systems; it acts as the brain of robotic system which gives commands to carry out the required task efficiently. The market for the controller component held the largest share in 2015. However, the market for the sensors component is expected to grow at the highest CAGR between 2016 and 2022 owing to the advancement in technologies and implementation of artificial intelligence for making robotic systems smarter.

Breakdown of profile of primary participants:
- By Designation: C level—10%, Director level—40%, Others—50%
- By Region: North America—60%, Europe—25%, APAC—10%, RoW—5%

The opportunity for industrial robots lies in the increase in demand for low-cost robots working collaboratively with humans, which would increase the safety and productivity. The major players in industrial robotics market are ABB Ltd. (Switzerland), KUKA AG (Germany), FANUC Corp. (Japan), Yaskawa Electric Corp. (Japan), and Kawasaki Heavy Industries Ltd. (Japan) among others.

Reasons to Buy the Report:
- This report includes the market statistics pertaining to type, component, vertical, and geography along with their respective market sizes.
- The Porter’s five forces framework has been utilized along with the value chain analysis to provide an in-depth insight into the global industrial robotics market.
- Major drivers, restraints, challenges, and opportunities for the industrial robotics market have been detailed in this report.
- Illustrative segmentation, analysis, and forecast for markets segmented on the basis of on type, component, vertical, and geography have been conducted to give an overall view of the global industrial robotics market.

Contents:
1 Introduction
1.1 Objectives of the Study
1.2 Market Definition
1.3 Study Scope
1.3.1 Markets Covered
1.3.2 Years Considered for the Study
1.4 Currency
1.5 Stakeholders
2 Research Methodology
2.1 Research Data
2.1.1 Secondary Data
2.1.1.1 Key Data From Secondary Sources
2.1.2 Primary Data
2.1.2.1 Key Data From Primary Sources
2.1.2.2 Breakdown of Primaries
2.2 Market Size Estimation
2.2.1 Bottom-Up Approach
2.2.2 Top-Down Approach
2.3 Market Breakdown & Data Triangulation
2.4 Research Assumptions and Limitations
2.4.1 Assumptions
2.4.2 Limitations

3 Executive Summary

4 Premium Insights
4.1 Attractive Opportunities in the Industrial Robotics Market
4.2 APAC Leads the Global Industrial Robotics Market: 2016
4.3 Global Traditional Industrial Robotics Market, Segment-Wise Market Share
4.4 Global Industrial Robotics Market, By Vertical
4.5 Global Industrial Robotics Market, By Component

5 Market Overview
5.1 Market Segmentation
5.1.1 Industrial Robotics Market, By Type
5.1.2 Industrial Robotics Market, By Vertical
5.1.3 Industrial Robotics Market, By Component
5.1.4 Industrial Robotics Market, By Geography
5.2 Market Dynamics
5.2.1 Drivers
5.2.1.1 Adoption of Automation to Ensure Quality Production and Meet Market Demand
5.2.1.2 Growing Demand From Small- and Medium-Scale Enterprises in Developing Countries
5.2.2 Restraints
5.2.2.1 Lack of Skilled Workforce to Work in Automated Manufacturing Units
5.2.3 Opportunities
5.2.3.1 Increase in Demand for Low-Cost Industrial Robots Capable of Working in Collaboration With Humans
5.2.4 Challenges
5.2.4.1 Manufacturing Advanced Robotic Systems That Meet the Requirement of Consumers in the Era of Industrial Internet of Things (IIOT)

6 Industry Trends
6.1 Value Chain Analysis
6.2 Porter's Five Force Analysis
6.2.1 Threat of New Entrants
6.2.2 Threat of Substitutes
6.2.3 Bargaining Power of Suppliers
6.2.4 Bargaining Power of Buyers
6.2.5 Intensity of Competitive Rivalry

7 Industrial Robotics Market, By Type
7.1 Introduction
7.2 Traditional Industrial Robots
7.2.1 Articulated Robots
7.2.2 Scara Robots
7.2.3 Parallel Robots
7.2.4 Cartesian Robots
7.2.5 Cylindrical Robots
7.2.6 Other Robots
7.3 Collaborative Industrial Robots

8 Industrial Robotics Market, By Vertical
8.1 Introduction
8.2 Automotive  
8.3 Electrical and Electronics Industry  
8.4 Chemical, Rubber, and Plastic Industry  
8.5 Metal and Machinery Industry  
8.6 Food and Beverages Industry  
8.7 Precision and Optics Industry  
8.8 Others  

9 Industrial Robotics Market, By Component  
9.1 Introduction  
9.1.1 Controller  
9.1.2 Robotic ARM  
9.1.3 End Effector  
9.1.4 Drive  
9.1.4.1 Hydraulic Drive  
9.1.4.2 Electric Drive  
9.1.4.3 Pneumatic Drive  
9.1.5 Sensors  

10 Industrial Robotics Market, By Region  
10.1 Introduction  
10.2 North America  
10.2.1 U.S.  
10.2.2 Canada  
10.2.3 Mexico  
10.3 APAC  
10.3.1 China  
10.3.2 Japan  
10.3.3 India  
10.3.4 Taiwan  
10.3.5 Republic of Korea  
10.3.6 Australia  
10.3.7 Thailand  
10.3.8 Rest of APAC  
10.4 Europe  
10.4.1 Italy  
10.4.2 Germany  
10.4.3 France  
10.4.4 Spain  
10.4.5 U.K.  
10.4.6 Rest of Europe  
10.5 RoW  
10.5.1 Latin America  
10.5.2 Middle East and Africa  

11 Competitive Landscape  
11.1 Overview  
11.2 Market Share Analysis  
11.3 Competitive Situation and Trends  
11.4 Product Launches  
11.5 Contracts, Agreements, Partnerships, and Collaborations  
11.6 Mergers, Acquisition, Expansions, and Joint Ventures  

12 Company Profiles  
(Overview, Financials, Products & Services, Strategy, and Developments)*  
12.1 ABB Ltd.  
12.2 Kawasaki Heavy Industries Ltd.  
12.3 Yaskawa Electric Corp.  
12.4 Fanuc Corp  
12.5 KUKA AG  
12.6 Mitsubishi Electric Corp  
12.7 Adept Technology, Inc.  
12.8 Denso Wave Inc.
12.9 Rockwell Automation, Inc.
12.10 Nachi-Fujikoshi Corp

*Details on Overview, Financials, Product & Services, Strategy, and Developments Might Not Be Captured in Case of Unlisted Companies.

13 Appendix
13.1 Insights of Industry Experts
13.2 Discussion Guide
13.3 Introducing RT: Real Time Market Intelligence
13.4 Available Customizations
13.5 Related Reports

List of Tables

Table 1 Market Segmentation: By Type
Table 2 Market Segmentation: By Vertical
Table 3 Market Segmentation, By Component
Table 4 Adoption of Automation and Growing Demand From Small- and Medium-Scale Enterprises in Developing Countries Driving the Industrial Robotics Market
Table 5 Lack of Skilled Workforce in the Automated Manufacturing Units Restraining the Growth of the Industrial Robotics Market
Table 6 Increase in Demand for Low-Cost Industrial Robots to Work in Collaboration With Humans Offers A Huge Opportunity for the Industrial Robotics Market
Table 7 Manufacturing Advanced Robotic Systems That Meet the Requirement of Consumers in Industrial Internet of Things Poses A Major Challenge for Industrial Robotics Market
Table 8 Global Industrial Robotics Market Size, By Type, 2013-2022 (USD Billion)
Table 9 Global Industrial Robotics Market Size, By Type, 2013-2022 (Thousand Units)
Table 10 Global Traditional Industrial Robots Market Size, By Type, 2013-2022 (USD Billion)
Table 11 Global Traditional Industrial Robots Market Size, 2013-2022 (Thousand Units)
Table 12 Global Traditional Industrial Robots Market Size, By Vertical, 2013-2022 (USD Billion)
Table 13 Global Traditional Industrial Robots Market Size, By Vertical, 2013-2022 (Thousand Units)
Table 14 Global Collaborative Industrial Robots Market Size, By Vertical, 2013-2022 (USD Million)
Table 15 Global Collaborative Industrial Robots Market Size, By Vertical, 2013-2022 (Units)
Table 16 Global Industrial Robotics Market Size, By Vertical, 2013-2022 (USD Billion)
Table 17 Global Industrial Robotics Market Size, By Vertical, 2013-2022 (Thousand Units)
Table 18 Automotive Industry: Industrial Robotics Market Size, By Region, 2013-2022 (USD Million)
Table 19 Automotive Industry: Industrial Robotics Market Size in North America, By Country, 2013-2022 (USD Million)
Table 20 Automotive Industry: Industrial Robotics Market Size in Europe, By Country, 2013-2022 (USD Million)
Table 21 Automotive Industry: Industrial Robotics Market Size in APAC, By Country, 2013-2022 (USD Million)
Table 22 Automotive Industry: Industrial Robotics Market Size in RoW, By Region, 2013-2022 (USD Million)
Table 23 Electrical and Electronics Industry: Industrial Robotics Market Size, By Region, 2013-2022 (USD Million)
Table 24 Electrical and Electronics Industry: Industrial Robotics Market Size in North America, By Country, 2013-2022 (USD Million)
Table 25 Electrical and Electronics Industry: Industrial Robotics Market Size in Europe, By Country, 2013-2022 (USD Million)
Table 26 Electrical and Electronics Industry: Industrial Robotics Market Size in APAC, By Country, 2013-2022 (USD Million)
Table 27 Electrical and Electronics Industry: Industrial Robotics Market Size in RoW, By Region, 2013-2022 (USD Million)
Table 28 Chemical, Rubber, and Plastic Industry: Industrial Robotics Market Size, By Region, 2013-2022 (USD Million)
Table 32 Chemical, Rubber, and Plastic Industry: Industrial Robotics Market Size in RoW, By Region, 2013-
Table 33 Metal and Machinery Industry: Industrial Robotics Market Size, By Region, 2013-2022 (USD Million)
Table 34 Metal and Machinery Industry: Industrial Robotics Market Size in North America, By Country, 2013-2022 (USD Million)
Table 35 Metal and Machinery Industry: Industrial Robotics Market Size in Europe, By Country, 2013-2022 (USD Million)
Table 36 Metal and Machinery Industry: Industrial Robotics Market Size in APAC, By Country, 2013-2022 (USD Million)
Table 37 Metal and Machinery Industry: Industrial Robotics Market Size in RoW, By Region, 2013-2022 (USD Million)
Table 38 Food and Beverages Industry: Industrial Robotics Market Size, By Region, 2013-2022 (USD Million)
Table 39 Food and Beverages Industry: Industrial Robotics Market Size in North America, By Country, 2013-2022 (USD Million)
Table 40 Food and Beverages Industry: Industrial Robotics Market Size in Europe, By Country, 2013-2022 (USD Million)
Table 41 Food and Beverages Industry: Industrial Robotics Market Size in APAC, By Country, 2013-2022 (USD Million)
Table 42 Food and Beverages Industry: Industrial Robotics Market Size in RoW, By Region, 2013-2022 (USD Million)
Table 43 Precision and Optics Industry: Industrial Robotics Market Size, By Region, 2013-2022 (USD Million)
Table 44 Precision and Optics Industry: Industrial Robotics Market Size in North America, By Country, 2013-2022 (USD Million)
Table 45 Precision and Optics Industry: Industrial Robotics Market Size in Europe, By Country, 2013-2022 (USD Million)
Table 46 Precision and Optics Industry: Industrial Robotics Market Size in APAC, By Country, 2013-2022 (USD Million)
Table 47 Precision and Optics Industry: Industrial Robotics Market Size in RoW, By Region, 2013-2022 (USD Million)
Table 48 Others: Industrial Robotics Market Size, By Region, 2013-2022 (USD Million)
Table 49 Others: Industrial Robotics Market Size in North America, By Country, 2013-2022 (USD Million)
Table 50 Others: Industrial Robotics Market Size in Europe, By Country, 2013-2022 (USD Million)
Table 51 Others: Industrial Robotics Market Size in APAC, By Country, 2013-2022 (USD Million)
Table 52 Others: Industrial Robotics Market Size in RoW, By Region, 2013-2022 (USD Million)
Table 53 Global Industrial Robotics Market Size, By Component, 2013-2022, (USD Billion)
Table 54 Global Industrial Robotics Market Size, By Region, 2013-2022 (USD Billion)
Table 55 Global Industrial Robotics Market Size, By Region, 2013-2022 (Thousand Units)
Table 56 North America: Industrial Robotics Market Size, By Country, 2013-2022 (USD Billion)
Table 57 North America: Industrial Robotics Market Size, By Country, 2013-2022 (Thousand Units)
Table 58 North America: Industrial Robotics Market Size, By Vertical, 2013-2022 (USD Billion)
Table 59 APAC: Industrial Robotics Market Size, By Country, 2013-2022 (USD Billion)
Table 60 APAC: Industrial Robotics Market Size, By Country, 2013-2022 (Thousand Units)
Table 61 APAC: Industrial Robotics Market Size, By Vertical, 2013-2022 (USD Billion)
Table 62 Europe: Industrial Robotics Market Size, By Country, 2013-2022 (USD Billion)
Table 63 Europe: Industrial Robotics Market Size, By Country, 2013-2022 (Thousand Units)
Table 64 Europe: Industrial Robotics Market Size, By Vertical, 2013-2022 (USD Billion)
Table 65 RoW: Industrial Robotics Market Size, By Region, 2013-2022 (USD Billion)
Table 66 RoW: Industrial Robotics Market Size, By Region, 2013-2022 (Thousand Units)
Table 67 RoW: Industrial Robotics Market Size, By Vertical, 2013-2022 (USD Billion)
Table 68 New Product Launch, 2012-2015
Table 69 Contracts, Agreements, Partnerships, and Collaborations, 2012-2015
Table 70 Mergers, Acquisition, Expansions, and Joint Ventures, 2012-2015

List of Figures

Figure 1 Industrial Robotics Market: Markets Covered
Figure 2 Years Considered for the Study
Figure 3 Research Design: Industrial Robotics Market
Figure 4 Industrial Robotics Market Size Estimation Methodology: Bottom-Up Approach
Figure 5 Industrial Robotics Market Size Estimation Methodology: Top-Down Approach
Figure 6 Market Breakdown & Data Triangulation
Figure 7 Assumptions of the Research Study
Figure 8 Limitations of the Research Study
Figure 9 Global Industrial Robotics Market Snapshot (2015 vs 2022): Electrical and Electronics Industry to Witness the Highest Growth During the Forecast Period
Figure 10 Sensors Market to Grow at the Highest CAGR During the Forecast Period
Figure 11 Articulated Robots Held the Major Share of the Global Traditional Industrial Robotics Market in the Forecasted Period
Figure 12 APAC to Hold the Largest Share of the Industrial Robotics Market in 2016
Figure 13 Lucrative Market Opportunities in the Global Industrial Robotics Market
Figure 14 APAC Market Expected to Show Significant Growth Rate During the Forecast Period
Figure 15 Articulated Robots Held the Major Share of the Global Traditional Industrial Robotics Market
Figure 16 Electrical and Electronics Industry Expected to Grow at the Highest CAGR Between 2016 and 2022
Figure 17 Controller is Expected to Hold the Major Share of the Industrial Robotics Market From 2016-2022
Figure 18 Market Segmentation, By Geography
Figure 19 Value Chain Analysis
Figure 20 Porter's Five Forces Analysis: the Availability of Wide Choice of Suppliers Would Result in High Bargaining Power for Buyers
Figure 21 Porter's Five Forces Analysis: With the Rising Adoption of Industrial Robotics, Threat of New Entrants Would Increase
Figure 22 Threat of New Entrants: Number of NewEntrants Would Increase With Higher Market Growth
Figure 23 Threat of Substitutes: There is No Cheap Substitute for Industrial Robots as Yet
Figure 24 Bargaining Power of the Suppliers: Product Differentiation Would Create the Major Demand Among the Customers
Figure 25 Bargaining Power of Buyers: Low Switching Cost of Suppliers and New Technologies Implemented By Buyers
Figure 26 Intensity of Competitive Rivalry: Large Number of Players and Medium Entry Barriers Lead to High Intensity of Competitive Rivalry
Figure 27 Articulated Robots is Expected to Hold A Major Share of the Traditional Industrial Robotics Market From 2016-2022
Figure 28 Electrical and Electronics Industry Expected to Grow at the Highest CAGR During the Forecast Period
Figure 29 Sensors Market Expected to Grow at the Highest CAGR During the Forecast Period
Figure 30 Industrial Robotics Market: Geographic Snapshot 2015
Figure 31 North America: Industrial Robotics Snapshot
Figure 32 APAC: Industrial Robotics Market Snapshot
Figure 33 Europe: Industrial Robotics Market Snapshot
Figure 34 Key Players Adopted New Product Launches as the Key Strategy in the Global Industrial Robotics Market From 2012-2015
Figure 35 Market Share Analysis, By Revenue :2014
Figure 36 Market Share Analysis, By Install Base: as of 2014
Figure 37 Market Evaluation Framework: (2012-2015)
Figure 38 Battle for Market Share: New Product Launches Was the Key Strategy
Figure 39 ABB Ltd.: Company Snapshot
Figure 40 SWOT Analysis
Figure 41 Kawasaki Heavy Industries Ltd: Company Snapshot
Figure 42 SWOT Analysis
Figure 43 Business Overview: Yaskawa Electric Corp
Figure 44 SWOT Analysis
Figure 45 Fanuc Corp.: Company Snapshot
Figure 46 SWOT Analysis
Figure 47 KUKA AG: Company Snapshot
Figure 48 SWOT Analysis
Figure 49 Mitsubishi Electric Corp.: Company Snapshot
Figure 50 Adept Technology, Inc.: Company Snapshot
Figure 51 Denso Wave Inc.: Company Snapshot
Figure 52 Rockwell Automation, Inc.: Company Snapshot
Figure 53 Nachi-Fujikoshi Corp.: Company Snapshot

Ordering:
Order Online - [http://www.researchandmarkets.com/reports/3619108/](http://www.researchandmarkets.com/reports/3619108/)

Order by Fax - using the form below

Order by Post - print the order form below and send to
Fax Order Form
To place an order via fax simply print this form, fill in the information below and fax the completed form to 646-607-1907 (from USA) or +353-1-481-1716 (from Rest of World). If you have any questions please visit
http://www.researchandmarkets.com/contact/

Order Information
Please verify that the product information is correct and select the format(s) you require.

Product Name: Industrial Robotics Market by Type, Application, Component, and Geography - Analysis & Forecast to 2022
Web Address: http://www.researchandmarkets.com/reports/3619108/
Office Code: SCBRO3VS

Product Formats
Please select the product formats and quantity you require:

Quantity
Electronic (PDF) - Single User: ☐ USD 5650
Electronic (PDF) - 1 - 5 Users: ☐ USD 6650
Electronic (PDF) - Site License: ☐ USD 8150
Electronic (PDF) - Enterprisewide: ☐ USD 10000

Contact Information
Please enter all the information below in BLOCK CAPITALS

Title: ☐ Mr ☐ Mrs ☐ Dr ☐ Miss ☐ Ms ☐ Prof
First Name: ___________________________ Last Name: ___________________________
Email Address: * ___________________________
Job Title: ___________________________
Organisation: ___________________________
Address: ___________________________
City: ___________________________
Postal / Zip Code: ___________________________
Country: ___________________________
Phone Number: ___________________________
Fax Number: ___________________________

* Please refrain from using free email accounts when ordering (e.g. Yahoo, Hotmail, AOL)
Payment Information

Please indicate the payment method you would like to use by selecting the appropriate box.

☐ Pay by credit card:

You will receive an email with a link to a secure webpage to enter your credit card details.

☐ Pay by check:

Please post the check, accompanied by this form, to:
Research and Markets,
Guinness Center,
Taylors Lane,
Dublin 8,
Ireland.

☐ Pay by wire transfer:

Please transfer funds to:

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account number</td>
<td>833 130 83</td>
</tr>
<tr>
<td>Sort code</td>
<td>98-53-30</td>
</tr>
<tr>
<td>Swift code</td>
<td>ULSBIE2D</td>
</tr>
<tr>
<td>IBAN number</td>
<td>IE78ULSB98533083313083</td>
</tr>
<tr>
<td>Bank Address</td>
<td>Ulster Bank, 27-35 Main Street, Blackrock, Co. Dublin, Ireland.</td>
</tr>
</tbody>
</table>

If you have a Marketing Code please enter it below:

Marketing Code: ______________________

Please note that by ordering from Research and Markets you are agreeing to our Terms and Conditions at http://www.researchandmarkets.com/info/terms.asp