

CNC Controller Market By Technology (Open Loop CNC Controllers, Close Loop CNC Controllers), By Control Architecture (PC Based Control System, Embedded Control System), By Axis Type (2-Axis, 3-Axis, 4-Axis, Multi-Axis): Global Opportunity Analysis and Industry Forecast, 2024-2033

Market Report | 2025-03-01 | 334 pages | Allied Market Research

AVAILABLE LICENSES:

- Cloud Access License \$2493.00
- Business User License \$4155.00
- Enterprise License \$6960.00

Report description:

The CNC controller market was valued at \$3.2 billion in 2023, and is projected to reach \$7.2 billion by 2033, growing at a CAGR of 8.3% from 2024 to 2033.

CNC (Computer Numerical Control) controllers are essential components in modern CNC machines for automating the control of machine tools. They interpret G-code and other programming languages to precisely control the movement of machinery, enabling the production of complex parts with high accuracy and repeatability.

The rising demand for high-precision machining in industries such as aerospace, automotive, and electronics is a significant driver. In addition, the trend toward miniaturization in electronics manufacturing requires highly accurate CNC systems. The increasing adoption of CNC controllers in small and medium-sized enterprises (SMEs) due to their cost-effectiveness and efficiency also boosts market growth. However, the high initial investment and maintenance costs can be a barrier for some companies. Despite this, the overall market outlook remains positive, driven by technological advancements and the growing need for automation in manufacturing processes. These advancements are particularly beneficial in high-precision industries such as aerospace, automotive, and medical devices, where the demand for complex and accurate parts is high.

The market has seen significant technological innovations, including the integration of AI, IoT, and machine learning, which have enhanced the functionality and efficiency of CNC controllers. The demand for high-precision manufacturing in industries such as aerospace, automotive, and medical devices has further fueled market expansion. In May 2024, Fagor Automation and GEKA, announced to boost the digitalization of production processes with the Fagor Digital Suite. The Fagor Digital Suite is a modular digitalization platform designed to enhance manufacturing processes, including those involving CNC controllers. This collaboration aims to integrate advanced digital solutions into CNC systems, thus improving efficiency, precision, and overall productivity in

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

production environments.

Segment Review

The CNC Controller Market size is segmented by technology, control architecture, axis type, and region. By technology, the CNC controller market outlook is segmented into Open-Loop CNC Controllers and Closed-Loop CNC Controllers. By control architecture, the CNC controller market forecast is segmented into PC-based control systems and embedded control system. By axis type, the CNC controller market analysis is segmented by 2-Axis, 3-Axis, 4-Axis, 5-Axis, and multi-Axis. Region wise, the market is analyzed across North America, Europe, Asia-Pacific, and LAMEA.

Key Findings

By technology, the close loop CNC controller segment accounted for the major share of the CNC controller market in 2023.

By control architecture, the embedded control system dominated the CNC controller market in 2023.

By axis type, the 3-axis segment was the largest segment in the CNC controller market in 2023.

By region, Asia-Pacific accounted for a major share in the market in 2023.

Competitive Analysis

The key players profiled in the report include Siemens AG, Fanuc Corporation, Mitsubishi Electric Corporation, Bosch Rexroth AG, Haas Automation, Inc., Okuma Corporation, DMG Mori Co., Ltd., Heidenhain Corporation, Fagor Automation, and GSK CNC Equipment Co., Ltd. Market players have adopted various strategies, such as product launch, collaboration & partnership, joint venture, and acquisition, to expand their foothold in the CNC controller market.

Additional benefits you will get with this purchase are:

- Quarterly Update and* (only available with a corporate license, on listed price)
- 5 additional Company Profile of client Choice pre- or Post-purchase, as a free update.
- Free Upcoming Version on the Purchase of Five and Enterprise User License.
- 16 analyst hours of support* (post-purchase, if you find additional data requirements upon review of the report, you may receive support amounting to 16 analyst hours to solve questions, and post-sale queries)
- 15% Free Customization* (in case the scope or segment of the report does not match your requirements, 15% is equivalent to 3 working days of free work, applicable once)
- Free data Pack on the Five and Enterprise User License. (Excel version of the report)
- Free Updated report if the report is 6-12 months old or older.
- 24-hour priority response*
- Free Industry updates and white papers.

Possible Customization with this report (with additional cost and timeline, please talk to the sales executive to know more)

- Market share analysis of players by products/segments
- Pain Point Analysis
- Regulatory Guidelines
- Historic market data
- Import Export Analysis/Data
- List of customers/consumers/raw material suppliers- value chain analysis
- SWOT Analysis

Key Market Segments

By Technology

- Open Loop CNC Controllers
- Close Loop CNC Controllers

By Control Architecture

- PC Based Control System
- Embedded Control System

By Axis Type

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 2-Axis
- 3-Axis
- 4-Axis
- Multi-Axis

By Region

- North America
- U.S.
- Canada
- Mexico
- Europe
- UK
- Germany
- France
- Italy
- Rest of Europe
- Asia-Pacific
- China
- Japan
- India
- South Korea
- Rest of Asia-Pacific
- LAMEA
- Latin America
- Middle East
- Africa
- Key Market Players
- Mitsubishi Electric Corporation
- Bosch Rexroth AG
- HAAS AUTOMATION, INC.
- Okuma Corporation.
- Siemens AG
- Heidenhain Corporation
- Hurco Companies, Inc.
- FANUC Corporation
- NUM Group
- Fagor Automation Corporation

Table of Contents:

CHAPTER 1: INTRODUCTION

- 1.1. Report description
- 1.2. Key market segments
- 1.3. Key benefits to the stakeholders
- 1.4. Research methodology
 - 1.4.1. Primary research
 - 1.4.2. Secondary research
 - 1.4.3. Analyst tools and models

CHAPTER 2: EXECUTIVE SUMMARY

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 2.1. CXO perspective
- CHAPTER 3: MARKET OVERVIEW
- 3.1. Market definition and scope
- 3.2. Key findings
 - 3.2.1. Top impacting factors
 - 3.2.2. Top investment pockets
- 3.3. Porter's five forces analysis
 - 3.3.1. Moderate bargaining power of suppliers
 - 3.3.2. Moderate to high threat of new entrants
 - 3.3.3. Moderate threat of substitutes
 - 3.3.4. Moderate to high intensity of rivalry
 - 3.3.5. Moderate bargaining power of buyers
- 3.4. Market dynamics
 - 3.4.1. Drivers
 - 3.4.1.1. Technological Advancements in CNC Machines
 - 3.4.1.2. Growth in Manufacturing and Automation
 - 3.4.1.3. Rise of Small and Medium Enterprises (SMEs) in Emerging Markets
 - 3.4.2. Restraints
 - 3.4.2.1. High Initial Investment and Maintenance Costs
 - 3.4.3. Opportunities
 - 3.4.3.1. Integration with IoT and Industry 4.0
- CHAPTER 4: CNC CONTROLLER MARKET, BY TECHNOLOGY
- 4.1. Overview
 - 4.1.1. Market size and forecast
- 4.2. Open Loop CNC Controllers
 - 4.2.1. Key market trends, growth factors and opportunities
 - 4.2.2. Market size and forecast, by region
 - 4.2.3. Market share analysis by country
- 4.3. Close Loop CNC Controllers
 - 4.3.1. Key market trends, growth factors and opportunities
 - 4.3.2. Market size and forecast, by region
 - 4.3.3. Market share analysis by country
- CHAPTER 5: CNC CONTROLLER MARKET, BY CONTROL ARCHITECTURE
- 5.1. Overview
 - 5.1.1. Market size and forecast
- 5.2. PC Based Control System
 - 5.2.1. Key market trends, growth factors and opportunities
 - 5.2.2. Market size and forecast, by region
 - 5.2.3. Market share analysis by country
- 5.3. Embedded Control System
 - 5.3.1. Key market trends, growth factors and opportunities
 - 5.3.2. Market size and forecast, by region
 - 5.3.3. Market share analysis by country
- CHAPTER 6: CNC CONTROLLER MARKET, BY AXIS TYPE
- 6.1. Overview
 - 6.1.1. Market size and forecast
- 6.2. 2-Axis

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 6.2.1. Key market trends, growth factors and opportunities
- 6.2.2. Market size and forecast, by region
- 6.2.3. Market share analysis by country
- 6.3. 3-Axis
- 6.3.1. Key market trends, growth factors and opportunities
- 6.3.2. Market size and forecast, by region
- 6.3.3. Market share analysis by country
- 6.4. 4-Axis
- 6.4.1. Key market trends, growth factors and opportunities
- 6.4.2. Market size and forecast, by region
- 6.4.3. Market share analysis by country
- 6.5. Multi-Axis
- 6.5.1. Key market trends, growth factors and opportunities
- 6.5.2. Market size and forecast, by region
- 6.5.3. Market share analysis by country
- CHAPTER 7: CNC CONTROLLER MARKET, BY REGION
- 7.1. Overview
- 7.1.1. Market size and forecast By Region
- 7.2. North America
- 7.2.1. Key market trends, growth factors and opportunities
- 7.2.2. Market size and forecast, by Technology
- 7.2.3. Market size and forecast, by Control Architecture
- 7.2.4. Market size and forecast, by Axis Type
- 7.2.5. Market size and forecast, by country
- 7.2.5.1. U.S.
- 7.2.5.1.1. Market size and forecast, by Technology
- 7.2.5.1.2. Market size and forecast, by Control Architecture
- 7.2.5.1.3. Market size and forecast, by Axis Type
- 7.2.5.2. Canada
- 7.2.5.2.1. Market size and forecast, by Technology
- 7.2.5.2.2. Market size and forecast, by Control Architecture
- 7.2.5.2.3. Market size and forecast, by Axis Type
- 7.2.5.3. Mexico
- 7.2.5.3.1. Market size and forecast, by Technology
- 7.2.5.3.2. Market size and forecast, by Control Architecture
- 7.2.5.3.3. Market size and forecast, by Axis Type
- 7.3. Europe
- 7.3.1. Key market trends, growth factors and opportunities
- 7.3.2. Market size and forecast, by Technology
- 7.3.3. Market size and forecast, by Control Architecture
- 7.3.4. Market size and forecast, by Axis Type
- 7.3.5. Market size and forecast, by country
- 7.3.5.1. UK
- 7.3.5.1.1. Market size and forecast, by Technology
- 7.3.5.1.2. Market size and forecast, by Control Architecture
- 7.3.5.1.3. Market size and forecast, by Axis Type
- 7.3.5.2. Germany

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 7.3.5.2.1. Market size and forecast, by Technology
- 7.3.5.2.2. Market size and forecast, by Control Architecture
- 7.3.5.2.3. Market size and forecast, by Axis Type
- 7.3.5.3. France
 - 7.3.5.3.1. Market size and forecast, by Technology
 - 7.3.5.3.2. Market size and forecast, by Control Architecture
 - 7.3.5.3.3. Market size and forecast, by Axis Type
- 7.3.5.4. Italy
 - 7.3.5.4.1. Market size and forecast, by Technology
 - 7.3.5.4.2. Market size and forecast, by Control Architecture
 - 7.3.5.4.3. Market size and forecast, by Axis Type
- 7.3.5.5. Rest of Europe
 - 7.3.5.5.1. Market size and forecast, by Technology
 - 7.3.5.5.2. Market size and forecast, by Control Architecture
 - 7.3.5.5.3. Market size and forecast, by Axis Type
- 7.4. Asia-Pacific
 - 7.4.1. Key market trends, growth factors and opportunities
 - 7.4.2. Market size and forecast, by Technology
 - 7.4.3. Market size and forecast, by Control Architecture
 - 7.4.4. Market size and forecast, by Axis Type
 - 7.4.5. Market size and forecast, by country
 - 7.4.5.1. China
 - 7.4.5.1.1. Market size and forecast, by Technology
 - 7.4.5.1.2. Market size and forecast, by Control Architecture
 - 7.4.5.1.3. Market size and forecast, by Axis Type
 - 7.4.5.2. Japan
 - 7.4.5.2.1. Market size and forecast, by Technology
 - 7.4.5.2.2. Market size and forecast, by Control Architecture
 - 7.4.5.2.3. Market size and forecast, by Axis Type
 - 7.4.5.3. India
 - 7.4.5.3.1. Market size and forecast, by Technology
 - 7.4.5.3.2. Market size and forecast, by Control Architecture
 - 7.4.5.3.3. Market size and forecast, by Axis Type
 - 7.4.5.4. South Korea
 - 7.4.5.4.1. Market size and forecast, by Technology
 - 7.4.5.4.2. Market size and forecast, by Control Architecture
 - 7.4.5.4.3. Market size and forecast, by Axis Type
 - 7.4.5.5. Rest of Asia-Pacific
 - 7.4.5.5.1. Market size and forecast, by Technology
 - 7.4.5.5.2. Market size and forecast, by Control Architecture
 - 7.4.5.5.3. Market size and forecast, by Axis Type
- 7.5. LAMEA
 - 7.5.1. Key market trends, growth factors and opportunities
 - 7.5.2. Market size and forecast, by Technology
 - 7.5.3. Market size and forecast, by Control Architecture
 - 7.5.4. Market size and forecast, by Axis Type
 - 7.5.5. Market size and forecast, by country

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 7.5.5.1. Latin America
 - 7.5.5.1.1. Market size and forecast, by Technology
 - 7.5.5.1.2. Market size and forecast, by Control Architecture
 - 7.5.5.1.3. Market size and forecast, by Axis Type
- 7.5.5.2. Middle East
 - 7.5.5.2.1. Market size and forecast, by Technology
 - 7.5.5.2.2. Market size and forecast, by Control Architecture
 - 7.5.5.2.3. Market size and forecast, by Axis Type
- 7.5.5.3. Africa
 - 7.5.5.3.1. Market size and forecast, by Technology
 - 7.5.5.3.2. Market size and forecast, by Control Architecture
 - 7.5.5.3.3. Market size and forecast, by Axis Type

CHAPTER 8: COMPETITIVE LANDSCAPE

- 8.1. Introduction
- 8.2. Top winning strategies
- 8.3. Product mapping of top 10 player
- 8.4. Competitive dashboard
- 8.5. Competitive heatmap
- 8.6. Top player positioning, 2023

CHAPTER 9: COMPANY PROFILES

- 9.1. Mitsubishi Electric Corporation
 - 9.1.1. Company overview
 - 9.1.2. Key executives
 - 9.1.3. Company snapshot
 - 9.1.4. Operating business segments
 - 9.1.5. Product portfolio
 - 9.1.6. Business performance
- 9.2. Bosch Rexroth AG
 - 9.2.1. Company overview
 - 9.2.2. Key executives
 - 9.2.3. Company snapshot
 - 9.2.4. Operating business segments
 - 9.2.5. Product portfolio
 - 9.2.6. Business performance
- 9.3. Hurco Companies, Inc.
 - 9.3.1. Company overview
 - 9.3.2. Key executives
 - 9.3.3. Company snapshot
 - 9.3.4. Operating business segments
 - 9.3.5. Product portfolio
 - 9.3.6. Business performance
- 9.4. Fagor Automation Corporation
 - 9.4.1. Company overview
 - 9.4.2. Key executives
 - 9.4.3. Company snapshot
 - 9.4.4. Operating business segments
 - 9.4.5. Product portfolio

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 9.4.6. Business performance
- 9.4.7. Key strategic moves and developments
- 9.5. HAAS AUTOMATION, INC.
- 9.5.1. Company overview
- 9.5.2. Key executives
- 9.5.3. Company snapshot
- 9.5.4. Operating business segments
- 9.5.5. Product portfolio
- 9.6. FANUC Corporation
- 9.6.1. Company overview
- 9.6.2. Key executives
- 9.6.3. Company snapshot
- 9.6.4. Operating business segments
- 9.6.5. Product portfolio
- 9.6.6. Business performance
- 9.7. Okuma Corporation.
- 9.7.1. Company overview
- 9.7.2. Key executives
- 9.7.3. Company snapshot
- 9.7.4. Operating business segments
- 9.7.5. Product portfolio
- 9.7.6. Business performance
- 9.7.7. Key strategic moves and developments
- 9.8. Siemens AG
- 9.8.1. Company overview
- 9.8.2. Key executives
- 9.8.3. Company snapshot
- 9.8.4. Operating business segments
- 9.8.5. Product portfolio
- 9.8.6. Business performance
- 9.9. Heidenhain Corporation
- 9.9.1. Company overview
- 9.9.2. Key executives
- 9.9.3. Company snapshot
- 9.9.4. Operating business segments
- 9.9.5. Product portfolio
- 9.9.6. Key strategic moves and developments
- 9.10. NUM Group
- 9.10.1. Company overview
- 9.10.2. Key executives
- 9.10.3. Company snapshot
- 9.10.4. Operating business segments
- 9.10.5. Product portfolio

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

CNC Controller Market By Technology (Open Loop CNC Controllers, Close Loop CNC Controllers), By Control Architecture (PC Based Control System, Embedded Control System), By Axis Type (2-Axis, 3-Axis, 4-Axis, Multi-Axis): Global Opportunity Analysis and Industry Forecast, 2024-2033

Market Report | 2025-03-01 | 334 pages | Allied Market Research

To place an Order with Scotts International:

- ☐ - Print this form
- ☐ - Complete the relevant blank fields and sign
- ☐ - Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Cloud Access License	\$2493.00
	Business User License	\$4155.00
	Enterprise License	\$6960.00
		VAT
		Total

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

☐ ** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Date

2026-02-07

Signature



Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com