

Shape Memory Alloy (SMA) Actuators Market Expanding With \$3.09 Billion at 11.2% CAGR by 2029

The Business Research Company's Shape Memory Alloy (SMA) Actuators Global Market Report 2025 – Market Size, Trends, And Global Forecast 2025-2034

LONDON, GREATER LONDON, UNITED KINGDOM, August 28, 2025
/EINPresswire.com/ -- Get 30% Off All Global Market Reports With Code ONLINE30 – Stay Ahead Of Trade Shifts, Macroeconomic Trends, And Industry Disruptors

The Business
Research Company

Shape Memory Alloy (SMA) Actuators Global Market Report 2025

What Is The Forecast For The Shape Memory Alloy (SMA) Actuators Market From 2024 To 2029?

The market for shape memory alloy (SMA) actuators has seen a swift expansion in recent times, escalating from \$1.81 billion in 2024 to an estimated \$2.02 billion in 2025 at a compound annual growth rate (CAGR) of 11.6%. This historical growth is attributed to factors such as heightened demand in the biomedical field, expanded use of robotics and automation, an uptick in industrial automation, a surge in the manufacturing of lightweight components for the automotive industry, and the rise in production of medical implants.

“

Get 30% Off All Global Market Reports With Code ONLINE30 – Stay Ahead Of Trade Shifts, Macroeconomic Trends, And Industry Disruptors”

The Business Research Company

The market for shape memory alloy (SMA) actuators is projected to expand significantly over the coming years,

with predictions estimating its growth to \$3.09 billion in 2029 with a compound annual growth rate (CAGR) of 11.1%. This expected growth throughout the forecast period is primarily due to factors such as escalating demand for miniaturization, rising requirements for the product in the defense and aerospace sectors, a flourishing automobile industry, growing need for home appliances, and an increased focus on smart materials. The forecast period will also witness certain trends including advances in medical technology, transformations in the actuator outlook, development of advanced shape memory alloy (SMA) alloys, and a shift towards

environmentally friendly materials.

Download a free sample of the shape memory alloy (sma) actuators market report:

<https://www.thebusinessresearchcompany.com/sample.aspx?id=25562&type=smp>

What Are The Core Growth Drivers Shaping The Future Of The Shape Memory Alloy (SMA) Actuators Market?

Rapid growth in the automotive industry is anticipated to boost the shape memory alloy (SMA) actuators market expansion in the coming years. Referring to all the activities related to the conception, production, distribution, and sale of automobiles, this industry is experiencing growth due to escalating consumer demand for personal transportation, fuelled by rising urbanization and increasing disposable income levels. The use of SMA actuators in the automobile industry allows for the creation of lightweight and compact vehicle designs, thus boosting vehicle performance and fuel economy. They also enhance the system's durability and response time, adding to the advancement of safety and comfort elements. For example, the Organisation Internationale des Constructeurs d'Automobiles, a French trade organization, reported in March 2024 that the global production of motor vehicles soared past 93.54 million units in 2023 from 84.83 million units in 2022. Consequently, the flourishing automotive industry is spurring the shape memory alloy (SMA) actuators market growth. The escalating demand for consumer electronics is also anticipated to promote the growth of the SMA actuators market. Defined as electronic devices intended for individual and everyday use such as smartphones, tablets, laptops, and home entertainment systems, the consumer electronics industry's expansion is fueled by increased reliance on smart devices and connected technologies in day-to-day activities. SMA actuators are often utilized in these devices to provide compact and precise motion control, supporting device miniaturization. These actuators enhance the use of smartphones, wearables, and other smart devices functionality and response, contributing to user experience. In February 2024, the Japan Electronics and Information Technology Industries Association reported that the production of consumer electronic equipment in Japan surged to \$201.91 million (¥31,685 million) in 2024 from \$149.27 million (¥23,425 million) in 2023, highlighting the surging demand for consumer electronics which is powering the SMA actuators market's growth.

Which Companies Are Currently Leading In The Shape Memory Alloy (SMA) Actuators Market?

Major players in the Shape Memory Alloy (SMA) Actuators Global Market Report 2025 include:

- Alps Alpine
- Fort Wayne Metals
- Confluent Medical Technologies
- SAES Getters S.p.A
- Ensign-Bickford Company
- G.RAU GmbH & Co. KG
- Cambridge Mechatronics Ltd.
- Jiangyin Peiertech Co. Ltd
- Dynalloy Inc.

- Takasago Fluidic System

What Are The Top Trends In The [Shape Memory Alloy \(SMA\) Actuators Industry](#)?

Key players in the shape memory alloy (SMA) actuators market are concentrating on the creation of technologically sophisticated products like voice coil motor (VCM) actuators. These advances aim to boost efficiency, allow further downsizing, and increase the response in small electronics such as smartphones and wearable devices. Voice coil motor (VCM) actuators are electromagnetic actuators that operate on the Lorentz force principle to execute linear or rotational movement. For example, in January 2023, Alps Alpine Co. Ltd., a prominent electronics company based in Japan, commenced large-scale production of shape memory alloy (SMA) actuators, thus broadening its actuator range for smartphones and offering miniaturized, high-performance solutions for compact gadgets. These shape memory alloy (SMA) actuators, which remove the requirement for coils and magnets, provide a streamlined design and precise motion control, thereby fulfilling the rising demand for advanced camera features in consumer electronics.

Comparative Analysis Of Leading [Shape Memory Alloy \(SMA\) Actuators Market Segments](#)

The shape memory alloy (SMA) actuators market covered in this report is segmented –

- 1) By Component Type: Linear Motion Actuators, Micro-Actuators, Valve Actuators
- 2) By Actuation Mechanism: Electrically Activated, Magnetically Activated, Pressure-Activated, Thermally Activated
- 3) By Technology: Bio-Integration, IoT Integration, Nanotechnology, Smart Materials
- 4) By Material Type: Copper-Based Alloys, Iron-Based Alloys, Nickel-Titanium (Nitinol)
- 5) By End-User: Aerospace And Defense, Automotive And Transportation, Construction And Infrastructure, Consumer Electronics And Appliances, Medical And Healthcare

Subsegments:

- 1) By Linear Motion Actuators: Rod Actuators, Wire Actuators, Strip Actuators, Spring Actuators
- 2) By Micro-Actuators: Micro-Electro-Mechanical Systems (MEMS)-Based Shape Memory Alloy (SMA) Actuators, Biocompatible Micro Actuators, Micro Grippers, Microvalves
- 3) By Valve Actuators: Rotary Valve Actuators, On Or Off Valve Actuators, Proportional Valve Actuators, Pressure Relief Valve Actuators

View the full shape memory alloy (sma) actuators market report:

<https://www.thebusinessresearchcompany.com/report/shape-memory-alloy-sma-actuators-global-market-report>

Which Regions Are Dominating The Shape Memory Alloy (SMA) Actuators Market Landscape?

In 2024, North America dominated the global market for shape memory alloy (SMA) actuators. However, by 2025, the Asia-Pacific region is predicted to showcase the greatest growth rate. The report encompasses several regions such as Asia-Pacific, Western Europe, Eastern Europe, North America, South America, Middle East, and Africa.

Browse Through More Reports Similar to the Global Shape Memory Alloy (SMA) Actuators Market 2025, By [The Business Research Company](#)

Automotive Actuators Global Market Report 2025

<https://www.thebusinessresearchcompany.com/report/automotive-actuators-global-market-report>

Actuator Global Market Report 2025

<https://www.thebusinessresearchcompany.com/report/actuator-global-market-report>

Military Actuators Global Market Report 2025

<https://www.thebusinessresearchcompany.com/report/military-actuators-global-market-report>

Speak With Our Expert:

Saumya Sahay

Americas +1 310-496-7795

Asia +44 7882 955267 & +91 8897263534

Europe +44 7882 955267

Email: saumyas@tbrc.info

The Business Research Company - www.thebusinessresearchcompany.com

Follow Us On:

• LinkedIn: <https://in.linkedin.com/company/the-business-research-company>"

Oliver Guirdham

The Business Research Company

+44 7882 955267

info@tbrc.info

Visit us on social media:

[LinkedIn](#)

[Facebook](#)

[X](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/843836085>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2025 Newsmatics Inc. All Right Reserved.