

Titanium Alloy Market Report by Microstructure (Alpha and Near-alpha Alloy, Alpha-beta Alloy, Beta Alloy), End Use Industry (Aerospace, Automotive and Shipbuilding, Chemical, Power and Desalination, and Others), and Region 2025-2033

Market Report | 2025-04-01 | 138 pages | IMARC Group

AVAILABLE LICENSES:

- Electronic (PDF) Single User \$3999.00
- Five User Licence \$4999.00
- Enterprisewide License \$5999.00

Report description:

The global titanium alloy market size reached USD 5.2 Billion in 2024. Looking forward, IMARC Group expects the market to reach USD 8.1 Billion by 2033, exhibiting a growth rate (CAGR) of 4.89% during 2025-2033. Currently, the Asia-Pacific region holds the largest market share, fueled by expanding industrial applications, increasing investments, and the region's strong manufacturing base for high-performance materials.

Titanium alloys are metals obtained by the homogeneous mixture of pure titanium mixed with other metals in small quantities, such as palladium, vanadium, aluminum, iron, molybdenum, and tin. They are widely used to manufacture high-performance materials, such as steam turbine blades, autoclaves, airframes, missile fuel tanks, orthopedic pins and screws, and automobile parts. Titanium alloys offer high tensile strength, biocompatibility, toughness, and corrosion resistance. They also exhibit low density, which helps them withstand extreme temperatures without breaking or chipping. As a result, they find extensive applications across the aerospace, transportation, power generation, chemical, utilities, automotive, and healthcare industries.

Titanium Alloy Market Trends:

The global titanium alloy market is primarily being driven by significant growth in the aerospace industry. Titanium alloys are widely used to make aero-engines, aircraft turbines, airframes, armor plating, spacecraft, landing gear, and hydraulic tubing. In line with this, the extensive product incorporation in missiles, airplanes, and rockets, owing to their high strength-to-density ratio, resistance to seawater, low weight strength, and high temperatures is favoring the market growth. Additionally, the integration of three-dimensional (3D) printing technology to develop super-strong, highly ductile, lightweight, and cost-effective titanium alloys is providing an impetus to the market growth. Moreover, rising demand from the healthcare industry for producing dental and surgical implants, such as denture frameworks and bases, bar connectors, orthodontic wires, hip joints, bone splints, and

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

pacemaker cases, is providing a considerable boost to the market growth. Other factors, including widespread product adoption in the automotive industry to manufacture parts of the internal combustion engine, such as valves and valve springs, and extensive research and development (R&D) activities, are supporting the market growth.

Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global titanium alloy market report, along with forecasts at the global, regional and country level from 2025-2033. Our report has categorized the market based on microstructure and end use industry.

Breakup by Microstructure:

- Alpha and Near-alpha Alloy
- Alpha-beta Alloy
- Beta Alloy

Breakup by End Use Industry:

- Aerospace
- Automotive and Shipbuilding
- Chemical
- Power and Desalination
- Others

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

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

- 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 Allegheny Technologies Incorporated, Altemp Alloys LLC, AMG Advanced Metallurgical Group N.V., Carpenter Technology Corporation, Daido Steel Co. Ltd., Haynes International Inc., Kobe Steel Ltd., Mishra Dhatu Nigam Limited, NeoNickel, Nippon Steel Corporation, Precision Castparts Corp. (Berkshire Hathaway Inc.), thyssenkrupp AG and United Titanium Inc.

Key Questions Answered in This Report

- 1.What was the size of the global titanium alloy market in 2024?
- 2.What is the expected growth rate of the global titanium alloy market during 2025-2033?
- 3.What are the key factors driving the global titanium alloy market?
- 4.What has been the impact of COVID-19 on the global titanium alloy market?
- 5.What is the breakup of the global titanium alloy market based on the microstructure?
- 6.What is the breakup of the global titanium alloy market based on the end use industry?
- 7.What are the key regions in the global titanium alloy market?
- 8.Who are the key players/companies in the global titanium alloy market?

Table of 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 Titanium Alloy Market
 - 5.1 Market Overview
 - 5.2 Market Performance
 - 5.3 Impact of COVID-19

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

- 5.4 Market Forecast
- 6 Market Breakup by Microstructure
 - 6.1 Alpha and Near-alpha Alloy
 - 6.1.1 Market Trends
 - 6.1.2 Market Forecast
 - 6.2 Alpha-beta Alloy
 - 6.2.1 Market Trends
 - 6.2.2 Market Forecast
 - 6.3 Beta Alloy
 - 6.3.1 Market Trends
 - 6.3.2 Market Forecast
- 7 Market Breakup by End Use Industry
 - 7.1 Aerospace
 - 7.1.1 Market Trends
 - 7.1.2 Market Forecast
 - 7.2 Automotive and Shipbuilding
 - 7.2.1 Market Trends
 - 7.2.2 Market Forecast
 - 7.3 Chemical
 - 7.3.1 Market Trends
 - 7.3.2 Market Forecast
 - 7.4 Power and Desalination
 - 7.4.1 Market Trends
 - 7.4.2 Market Forecast
 - 7.5 Others
 - 7.5.1 Market Trends
 - 7.5.2 Market Forecast
- 8 Market Breakup by Region
 - 8.1 North America
 - 8.1.1 United States
 - 8.1.1.1 Market Trends
 - 8.1.1.2 Market Forecast
 - 8.1.2 Canada
 - 8.1.2.1 Market Trends
 - 8.1.2.2 Market Forecast
 - 8.2 Asia-Pacific
 - 8.2.1 China
 - 8.2.1.1 Market Trends
 - 8.2.1.2 Market Forecast
 - 8.2.2 Japan
 - 8.2.2.1 Market Trends
 - 8.2.2.2 Market Forecast
 - 8.2.3 India
 - 8.2.3.1 Market Trends
 - 8.2.3.2 Market Forecast
 - 8.2.4 South Korea
 - 8.2.4.1 Market Trends

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

- 8.2.4.2 Market Forecast
- 8.2.5 Australia
 - 8.2.5.1 Market Trends
 - 8.2.5.2 Market Forecast
- 8.2.6 Indonesia
 - 8.2.6.1 Market Trends
 - 8.2.6.2 Market Forecast
- 8.2.7 Others
 - 8.2.7.1 Market Trends
 - 8.2.7.2 Market Forecast
- 8.3 Europe
 - 8.3.1 Germany
 - 8.3.1.1 Market Trends
 - 8.3.1.2 Market Forecast
 - 8.3.2 France
 - 8.3.2.1 Market Trends
 - 8.3.2.2 Market Forecast
 - 8.3.3 United Kingdom
 - 8.3.3.1 Market Trends
 - 8.3.3.2 Market Forecast
 - 8.3.4 Italy
 - 8.3.4.1 Market Trends
 - 8.3.4.2 Market Forecast
 - 8.3.5 Spain
 - 8.3.5.1 Market Trends
 - 8.3.5.2 Market Forecast
 - 8.3.6 Russia
 - 8.3.6.1 Market Trends
 - 8.3.6.2 Market Forecast
 - 8.3.7 Others
 - 8.3.7.1 Market Trends
 - 8.3.7.2 Market Forecast
- 8.4 Latin America
 - 8.4.1 Brazil
 - 8.4.1.1 Market Trends
 - 8.4.1.2 Market Forecast
 - 8.4.2 Mexico
 - 8.4.2.1 Market Trends
 - 8.4.2.2 Market Forecast
 - 8.4.3 Others
 - 8.4.3.1 Market Trends
 - 8.4.3.2 Market Forecast
- 8.5 Middle East and Africa
 - 8.5.1 Market Trends
 - 8.5.2 Market Breakup by Country
 - 8.5.3 Market Forecast
- 9 SWOT Analysis

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

- 9.1 Overview
- 9.2 Strengths
- 9.3 Weaknesses
- 9.4 Opportunities
- 9.5 Threats
- 10 Value Chain Analysis
- 11 Porters Five Forces Analysis
 - 11.1 Overview
 - 11.2 Bargaining Power of Buyers
 - 11.3 Bargaining Power of Suppliers
 - 11.4 Degree of Competition
 - 11.5 Threat of New Entrants
 - 11.6 Threat of Substitutes
- 12 Price Analysis
- 13 Competitive Landscape
 - 13.1 Market Structure
 - 13.2 Key Players
 - 13.3 Profiles of Key Players
 - 13.3.1 Allegheny Technologies Incorporated
 - 13.3.1.1 Company Overview
 - 13.3.1.2 Product Portfolio
 - 13.3.1.3 Financials
 - 13.3.1.4 SWOT Analysis
 - 13.3.2 Altemp Alloys LLC
 - 13.3.2.1 Company Overview
 - 13.3.2.2 Product Portfolio
 - 13.3.3 AMG Advanced Metallurgical Group N.V.
 - 13.3.3.1 Company Overview
 - 13.3.3.2 Product Portfolio
 - 13.3.3.3 Financials
 - 13.3.4 Carpenter Technology Corporation
 - 13.3.4.1 Company Overview
 - 13.3.4.2 Product Portfolio
 - 13.3.4.3 Financials
 - 13.3.4.4 SWOT Analysis
 - 13.3.5 Daido Steel Co. Ltd.
 - 13.3.5.1 Company Overview
 - 13.3.5.2 Product Portfolio
 - 13.3.5.3 Financials
 - 13.3.5.4 SWOT Analysis
 - 13.3.6 Haynes International Inc.
 - 13.3.6.1 Company Overview
 - 13.3.6.2 Product Portfolio
 - 13.3.6.3 Financials
 - 13.3.6.4 SWOT Analysis
 - 13.3.7 Kobe Steel Ltd.
 - 13.3.7.1 Company Overview

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

- 13.3.7.2 Product Portfolio
- 13.3.7.3 Financials
- 13.3.7.4 SWOT Analysis
- 13.3.8 Mishra Dhatu Nigam Limited
 - 13.3.8.1 Company Overview
 - 13.3.8.2 Product Portfolio
 - 13.3.8.3 Financials
- 13.3.9 NeoNickel
 - 13.3.9.1 Company Overview
 - 13.3.9.2 Product Portfolio
- 13.3.10 Nippon Steel Corporation
 - 13.3.10.1 Company Overview
 - 13.3.10.2 Product Portfolio
 - 13.3.10.3 Financials
 - 13.3.10.4 SWOT Analysis
- 13.3.11 Precision Castparts Corp. (Berkshire Hathaway Inc.)
 - 13.3.11.1 Company Overview
 - 13.3.11.2 Product Portfolio
- 13.3.12 thyssenkrupp AG
 - 13.3.12.1 Company Overview
 - 13.3.12.2 Product Portfolio
 - 13.3.12.3 Financials
 - 13.3.12.4 SWOT Analysis
- 13.3.13 United Titanium Inc.
 - 13.3.13.1 Company Overview
 - 13.3.13.2 Product Portfolio

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

Titanium Alloy Market Report by Microstructure (Alpha and Near-alpha Alloy, Alpha-beta Alloy, Beta Alloy), End Use Industry (Aerospace, Automotive and Shipbuilding, Chemical, Power and Desalination, and Others), and Region 2025-2033

Market Report | 2025-04-01 | 138 pages | IMARC Group

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
	Electronic (PDF) Single User	\$3999.00
	Five User Licence	\$4999.00
	Enterprisewide License	\$5999.00
		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"/>
		Date	<input type="text" value="2026-03-05"/>

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

Signature

An empty rectangular box with a thin black border, intended for a signature.