

3D Weaving Global Market Insights 2025, Analysis and Forecast to 2030, by Market Participants, Regions, Technology, Application, Product Type

<https://marketpublishers.com/r/39CC816AD865EN.html>

Date: July 2025

Pages: 90

Price: US\$ 3,200.00 (Single User License)

ID: 39CC816AD865EN

Abstracts

3D Weaving Market Summary

Introduction

3D weaving technology produces complex, multi-layered fabrics for applications in automotive, construction, consumer electronics, defense, aerospace, energy, healthcare, and other industries. These fabrics, created using glass fiber, composite, spacer, carbon, and customized weaving machines, offer enhanced strength, lightweight properties, and design flexibility. The global demand for lightweight materials, with over 50% of aerospace components now using composites, drives market growth. Advancements in automated weaving and sustainable materials further propel the market, addressing needs for high-performance, durable textiles in diverse sectors.

Market Size and Growth Forecast

The global 3D weaving market is projected to reach between USD 25.0 billion and USD 35.0 billion in 2025, with a compound annual growth rate (CAGR) of 7% to 13% through 2030, reflecting growing adoption of advanced materials.

Regional Analysis

North America: The U.S. leads due to strong aerospace and defense sectors. Canada focuses on automotive applications. Europe: Germany, France, and the UK dominate,

driven by automotive and aerospace innovation. Asia Pacific: China and India see rapid growth due to manufacturing expansion. Japan emphasizes precision weaving. Rest of the World: Brazil invests in infrastructure applications, while the Middle East, particularly the UAE, adopts advanced composites.

Application Analysis

Automotive: Expected growth of 7.5-13.5%, driven by lightweight components. Trends focus on fuel efficiency. **Construction and Infrastructure:** Projected growth of 7.0-13.0%, linked to durable materials. Developments emphasize sustainability. **Consumer Electronics:** Anticipated growth of 6.8-12.8%, tied to flexible displays. Advances prioritize miniaturization. **Defense & Aerospace:** Expected growth of 7.5-13.5%, driven by composite demand. Trends highlight high-strength fabrics. **Energy and Goods:** Projected growth of 6.5-12.5%, linked to renewable energy. Developments focus on durability. **Healthcare:** Anticipated growth of 6.8-12.8%, tied to medical textiles. Advances prioritize biocompatibility. **Others:** Expected growth of 6.5-12.5%, including niche applications. Trends highlight customization.

Type Analysis

Glass Fiber Weaving Machines: Expected growth of 7.0-13.0%, valued for cost-effectiveness. Trends focus on lightweight designs. **Composite Textile Weaving Machines:** Projected growth of 7.5-13.5%, key for high-strength applications. Advances highlight automation. **Spacer Weaving Machines:** Anticipated growth of 6.8-12.8%, driven by structural applications. Developments prioritize versatility. **Carbon Weaving Machines:** Expected growth of 7.2-13.2%, tied to aerospace demand. Trends focus on durability. **Customized Weaving Machines:** Projected growth of 6.5-12.5%, offering tailored solutions. Advances emphasize flexibility.

Key Market Players

Leading firms include Lindauer DORNIER GmbH, advancing weaving technology; Dashmesh Jacquard And Powerloom, supporting mass production; Marjan Polymer Industries, focusing on composites; St?ubli International, enhancing automation; Kale Texnique, improving textile quality; Sino Textile Machinery, scaling production; UNSPUN, innovating in sustainable weaving; VUTS, offering specialized machines; Optima3D, advancing precision; and Hefei Fanyuan Instrument, supporting customized solutions. These companies drive growth through innovation and global expansion.

Porter's Five Forces Analysis

Threat of New Entrants: Moderate, due to high R&D costs, though niche players can enter with specialized machines. Threat of Substitutes: Low, as 3D weaving offers unique structural benefits. Bargaining Power of Buyers: Moderate, with industries seeking high-performance, cost-effective textiles. Bargaining Power of Suppliers: Low, due to multiple material suppliers. Competitive Rivalry: High, with firms competing on automation, material strength, and customization.

Market Opportunities and Challenges

Opportunities: Over 50% of aerospace components using composites drive demand for 3D weaving. Innovations like St?ubli's automated looms enhance production efficiency. Growing manufacturing in Asia Pacific offers significant growth potential. Challenges: High costs of advanced weaving machines limit adoption in smaller firms. Complex material integration poses technical hurdles. Limited expertise in emerging markets slows penetration.

Contents

CHAPTER 1 EXECUTIVE SUMMARY

CHAPTER 2 ABBREVIATION AND ACRONYMS

CHAPTER 3 PREFACE

3.1 Research Scope

3.2 Research Sources

3.2.1 Data Sources

3.2.2 Assumptions

3.3 Research Method

Chapter Four Market Landscape

4.1 Market Overview

4.2 Classification/Types

4.3 Application/End Users

CHAPTER 5 MARKET TREND ANALYSIS

5.1 Introduction

5.2 Drivers

5.3 Restraints

5.4 Opportunities

5.5 Threats

CHAPTER 6 INDUSTRY CHAIN ANALYSIS

6.1 Upstream/Suppliers Analysis

6.2 3D Weaving Analysis

6.2.1 Technology Analysis

6.2.2 Cost Analysis

6.2.3 Market Channel Analysis

6.3 Downstream Buyers/End Users

CHAPTER 7 LATEST MARKET DYNAMICS

7.1 Latest News

7.2 Merger and Acquisition

- 7.3 Planned/Future Project
- 7.4 Policy Dynamics

CHAPTER 8 HISTORICAL AND FORECAST 3D WEAVING MARKET IN NORTH AMERICA (2020-2030)

- 8.1 3D Weaving Market Size
- 8.2 3D Weaving Market by End Use
- 8.3 Competition by Players/Suppliers
- 8.4 3D Weaving Market Size by Type
- 8.5 Key Countries Analysis
 - 8.5.1 United States
 - 8.5.2 Canada
 - 8.5.3 Mexico

CHAPTER 9 HISTORICAL AND FORECAST 3D WEAVING MARKET IN SOUTH AMERICA (2020-2030)

- 9.1 3D Weaving Market Size
- 9.2 3D Weaving Market by End Use
- 9.3 Competition by Players/Suppliers
- 9.4 3D Weaving Market Size by Type
- 9.5 Key Countries Analysis
 - 9.5.1 Brazil
 - 9.5.2 Argentina
 - 9.5.3 Chile
 - 9.5.4 Peru

CHAPTER 10 HISTORICAL AND FORECAST 3D WEAVING MARKET IN ASIA & PACIFIC (2020-2030)

- 10.1 3D Weaving Market Size
- 10.2 3D Weaving Market by End Use
- 10.3 Competition by Players/Suppliers
- 10.4 3D Weaving Market Size by Type
- 10.5 Key Countries Analysis
 - 10.5.1 China
 - 10.5.2 India
 - 10.5.3 Japan

- 10.5.4 South Korea
- 10.5.5 Southeast Asia
- 10.5.6 Australia

CHAPTER 11 HISTORICAL AND FORECAST 3D WEAVING MARKET IN EUROPE (2020-2030)

- 11.1 3D Weaving Market Size
- 11.2 3D Weaving Market by End Use
- 11.3 Competition by Players/Suppliers
- 11.4 3D Weaving Market Size by Type
- 11.5 Key Countries Analysis
 - 11.5.1 Germany
 - 11.5.2 France
 - 11.5.3 United Kingdom
 - 11.5.4 Italy
 - 11.5.5 Spain
 - 11.5.6 Belgium
 - 11.5.7 Netherlands
 - 11.5.8 Austria
 - 11.5.9 Poland
 - 11.5.10 Russia

CHAPTER 12 HISTORICAL AND FORECAST 3D WEAVING MARKET IN MEA (2020-2030)

- 12.1 3D Weaving Market Size
- 12.2 3D Weaving Market by End Use
- 12.3 Competition by Players/Suppliers
- 12.4 3D Weaving Market Size by Type
- 12.5 Key Countries Analysis
 - 12.5.1 Egypt
 - 12.5.2 Israel
 - 12.5.3 South Africa
 - 12.5.4 Gulf Cooperation Council Countries
 - 12.5.5 Turkey

CHAPTER 13 SUMMARY FOR GLOBAL 3D WEAVING MARKET (2020-2025)

- 13.1 3D Weaving Market Size
- 13.2 3D Weaving Market by End Use
- 13.3 Competition by Players/Suppliers
- 13.4 3D Weaving Market Size by Type

CHAPTER 14 GLOBAL 3D WEAVING MARKET FORECAST (2025-2030)

- 14.1 3D Weaving Market Size Forecast
- 14.2 3D Weaving Application Forecast
- 14.3 Competition by Players/Suppliers
- 14.4 3D Weaving Type Forecast

CHAPTER 15 ANALYSIS OF GLOBAL KEY VENDORS

- 15.1 Lindauer DORNIER GmbH
 - 15.1.1 Company Profile
 - 15.1.2 Main Business and 3D Weaving Information
 - 15.1.3 SWOT Analysis of Lindauer DORNIER GmbH
 - 15.1.4 Lindauer DORNIER GmbH 3D Weaving Revenue, Gross Margin and Market Share (2020-2025)
- 15.2 Dashmesh Jacquard and Powerloom
 - 15.2.1 Company Profile
 - 15.2.2 Main Business and 3D Weaving Information
 - 15.2.3 SWOT Analysis of Dashmesh Jacquard and Powerloom
 - 15.2.4 Dashmesh Jacquard and Powerloom 3D Weaving Revenue, Gross Margin and Market Share (2020-2025)
- 15.3 Marjan Polymer Industries
 - 15.3.1 Company Profile
 - 15.3.2 Main Business and 3D Weaving Information
 - 15.3.3 SWOT Analysis of Marjan Polymer Industries
 - 15.3.4 Marjan Polymer Industries 3D Weaving Revenue, Gross Margin and Market Share (2020-2025)
- 15.4 St?ubli International
 - 15.4.1 Company Profile
 - 15.4.2 Main Business and 3D Weaving Information
 - 15.4.3 SWOT Analysis of St?ubli International
 - 15.4.4 St?ubli International 3D Weaving Revenue, Gross Margin and Market Share (2020-2025)
- 15.5 Kale Texnique

15.5.1 Company Profile

15.5.2 Main Business and 3D Weaving Information

15.5.3 SWOT Analysis of Kale Texnique

15.5.4 Kale Texnique 3D Weaving Revenue, Gross Margin and Market Share
(2020-2025)

15.6 Sino Textile Machinery

15.6.1 Company Profile

15.6.2 Main Business and 3D Weaving Information

15.6.3 SWOT Analysis of Sino Textile Machinery

15.6.4 Sino Textile Machinery 3D Weaving Revenue, Gross Margin and Market Share
(2020-2025)

Please ask for sample pages for full companies list

Tables & Figures

TABLES AND FIGURES

Table Abbreviation and Acronyms
Table Research Scope of 3D Weaving Report
Table Data Sources of 3D Weaving Report
Table Major Assumptions of 3D Weaving Report
Figure Market Size Estimated Method
Figure Major Forecasting Factors
Figure 3D Weaving Picture
Table 3D Weaving Classification
Table 3D Weaving Applications
Table Drivers of 3D Weaving Market
Table Restraints of 3D Weaving Market
Table Opportunities of 3D Weaving Market
Table Threats of 3D Weaving Market
Table Covid-19 Impact For 3D Weaving Market
Table Raw Materials Suppliers
Table Different Production Methods of 3D Weaving
Table Cost Structure Analysis of 3D Weaving
Table Key End Users
Table Latest News of 3D Weaving Market
Table Merger and Acquisition
Table Planned/Future Project of 3D Weaving Market
Table Policy of 3D Weaving Market
Table 2020-2030 North America 3D Weaving Market Size
Figure 2020-2030 North America 3D Weaving Market Size and CAGR
Table 2020-2030 North America 3D Weaving Market Size by Application
Table 2020-2025 North America 3D Weaving Key Players Revenue
Table 2020-2025 North America 3D Weaving Key Players Market Share
Table 2020-2030 North America 3D Weaving Market Size by Type
Table 2020-2030 United States 3D Weaving Market Size
Table 2020-2030 Canada 3D Weaving Market Size
Table 2020-2030 Mexico 3D Weaving Market Size
Table 2020-2030 South America 3D Weaving Market Size
Figure 2020-2030 South America 3D Weaving Market Size and CAGR
Table 2020-2030 South America 3D Weaving Market Size by Application
Table 2020-2025 South America 3D Weaving Key Players Revenue

Table 2020-2025 South America 3D Weaving Key Players Market Share
Table 2020-2030 South America 3D Weaving Market Size by Type
Table 2020-2030 Brazil 3D Weaving Market Size
Table 2020-2030 Argentina 3D Weaving Market Size
Table 2020-2030 Chile 3D Weaving Market Size
Table 2020-2030 Peru 3D Weaving Market Size
Table 2020-2030 Asia & Pacific 3D Weaving Market Size
Figure 2020-2030 Asia & Pacific 3D Weaving Market Size and CAGR
Table 2020-2030 Asia & Pacific 3D Weaving Market Size by Application
Table 2020-2025 Asia & Pacific 3D Weaving Key Players Revenue
Table 2020-2025 Asia & Pacific 3D Weaving Key Players Market Share
Table 2020-2030 Asia & Pacific 3D Weaving Market Size by Type
Table 2020-2030 China 3D Weaving Market Size
Table 2020-2030 India 3D Weaving Market Size
Table 2020-2030 Japan 3D Weaving Market Size
Table 2020-2030 South Korea 3D Weaving Market Size
Table 2020-2030 Southeast Asia 3D Weaving Market Size
Table 2020-2030 Australia 3D Weaving Market Size
Table 2020-2030 Europe 3D Weaving Market Size
Figure 2020-2030 Europe 3D Weaving Market Size and CAGR
Table 2020-2030 Europe 3D Weaving Market Size by Application
Table 2020-2025 Europe 3D Weaving Key Players Revenue
Table 2020-2025 Europe 3D Weaving Key Players Market Share
Table 2020-2030 Europe 3D Weaving Market Size by Type
Table 2020-2030 Germany 3D Weaving Market Size
Table 2020-2030 France 3D Weaving Market Size
Table 2020-2030 United Kingdom 3D Weaving Market Size
Table 2020-2030 Italy 3D Weaving Market Size
Table 2020-2030 Spain 3D Weaving Market Size
Table 2020-2030 Belgium 3D Weaving Market Size
Table 2020-2030 Netherlands 3D Weaving Market Size
Table 2020-2030 Austria 3D Weaving Market Size
Table 2020-2030 Poland 3D Weaving Market Size
Table 2020-2030 Russia 3D Weaving Market Size
Table 2020-2030 MEA 3D Weaving Market Size
Figure 2020-2030 MEA 3D Weaving Market Size and CAGR
Table 2020-2030 MEA 3D Weaving Market Size by Application
Table 2020-2025 MEA 3D Weaving Key Players Revenue
Table 2020-2025 MEA 3D Weaving Key Players Market Share

Table 2020-2030 MEA 3D Weaving Market Size by Type
Table 2020-2030 Egypt 3D Weaving Market Size
Table 2020-2030 Israel 3D Weaving Market Size
Table 2020-2030 South Africa 3D Weaving Market Size
Table 2020-2030 Gulf Cooperation Council Countries 3D Weaving Market Size
Table 2020-2030 Turkey 3D Weaving Market Size
Table 2020-2025 Global 3D Weaving Market Size by Region
Table 2020-2025 Global 3D Weaving Market Size Share by Region
Table 2020-2025 Global 3D Weaving Market Size by Application
Table 2020-2025 Global 3D Weaving Market Share by Application
Table 2020-2025 Global 3D Weaving Key Vendors Revenue
Figure 2020-2025 Global 3D Weaving Market Size and Growth Rate
Table 2020-2025 Global 3D Weaving Key Vendors Market Share
Table 2020-2025 Global 3D Weaving Market Size by Type
Table 2020-2025 Global 3D Weaving Market Share by Type
Table 2025-2030 Global 3D Weaving Market Size by Region
Table 2025-2030 Global 3D Weaving Market Size Share by Region
Table 2025-2030 Global 3D Weaving Market Size by Application
Table 2025-2030 Global 3D Weaving Market Share by Application
Table 2025-2030 Global 3D Weaving Key Vendors Revenue
Figure 2025-2030 Global 3D Weaving Market Size and Growth Rate
Table 2025-2030 Global 3D Weaving Key Vendors Market Share
Table 2025-2030 Global 3D Weaving Market Size by Type
Table 2025-2030 3D Weaving Global Market Share by Type

I would like to order

Product name: 3D Weaving Global Market Insights 2025, Analysis and Forecast to 2030, by Market Participants, Regions, Technology, Application, Product Type

Product link: <https://marketpublishers.com/r/39CC816AD865EN.html>

Price: US\$ 3,200.00 (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 <https://marketpublishers.com/r/39CC816AD865EN.html>