

# **Semiconductor Tubing and Fittings Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2024 – 2032**

<https://marketpublishers.com/r/SBDCABF8E591EN.html>

Date: November 2024

Pages: 229

Price: US\$ 4,850.00 (Single User License)

ID: SBDCABF8E591EN

## **Abstracts**

The Global Semiconductor Tubing And Fittings Market reached a value of USD 3.1 billion in 2023, with a projected growth rate of over 8.2% CAGR from 2024 to 2032. This expansion is largely fueled by the surging demand for semiconductors, spurred by technological advancements and the increasing use of electronic devices across diverse sectors, including automotive, consumer electronics, telecommunications, and industrial automation.

To keep up with this heightened demand, semiconductor manufacturers are actively increasing their production capacities. According to the U.S. Bureau of Labor Statistics, employment for semiconductor processing technicians is expected to rise by 6% from 2021 to 2031, reflecting the industry's growth trajectory. As manufacturing scales up, there is a heightened need for high-quality tubing and fittings, which play a critical role in maintaining production efficiency and product integrity in semiconductor manufacturing. This growing demand aligns closely with the broader expansion of the semiconductor sector.

In terms of product types, fittings accounted for a substantial portion of the market in 2023, reaching USD 1.9 billion and forecasted to grow at a CAGR of 8.5% through 2032. Fittings are vital in semiconductor fabrication facilities, as they ensure the integrity and performance of tubing systems, which are essential for controlling contamination and guaranteeing reliable processes. Ultra-high purity (UHP) fittings, made from specialized materials to minimize outgassing and particle generation, are becoming increasingly popular due to the stringent purity standards required for semiconductor production, particularly in gas and chemical delivery systems.

The market's distribution channels are dominated by indirect sales, which captured a 62.7% share in 2023 and are expected to grow at a CAGR of 8.5% through 2032. Indirect distribution enables manufacturers to leverage established distributor networks to reach a broader customer base, including various semiconductor equipment makers. Distributors bring regional expertise, a wide range of product offerings, and easier access to tubing and fittings in multiple regions, ensuring consistent supply as global semiconductor manufacturing facilities expand.

The U.S. held around 80.4% of the semiconductor tubing and fittings market in 2023, with an anticipated CAGR of 8.6% through 2032. This growth is driven by public and private investments supporting local chip production, which increases the demand for high-purity tubing and precise fittings. Strict contamination control and safety standards further influence the market, prompting manufacturers to adopt advanced, corrosion-resistant materials that withstand high temperatures and maintain cleanliness critical to semiconductor production.

## Contents

### Report Content

#### **CHAPTER 1 METHODOLOGY & SCOPE**

- 1.1 Market scope & definition
- 1.2 Base estimates & calculations
- 1.3 Forecast parameters
- 1.4 Data sources
  - 1.4.1 Primary
  - 1.4.2 Secondary
    - 1.4.2.1 Paid sources
    - 1.4.2.2 Public sources

#### **CHAPTER 2 EXECUTIVE SUMMARY**

- 2.1 Industry synopsis, 2021 - 2032

#### **CHAPTER 3 INDUSTRY INSIGHTS**

- 3.1 Industry ecosystem analysis
  - 3.1.1 Factors affecting the value chain
  - 3.1.2 Profit margin analysis
  - 3.1.3 Disruptions
  - 3.1.4 Future outlook
  - 3.1.5 Manufacturers
  - 3.1.6 Distributors
- 3.2 Supplier landscape
- 3.3 Profit margin analysis
- 3.4 Key news & initiatives
- 3.5 Regulatory landscape
- 3.6 Impact forces
  - 3.6.1 Growth drivers
    - 3.6.1.1 Increasing demand for semiconductor
    - 3.6.1.2 Technological advancements in semiconductor production
    - 3.6.1.3 Increasing miniaturization of electronics
  - 3.6.2 Industry pitfalls & challenges
    - 3.6.2.1 Stringent industry standards and regulations

- 3.6.2.2 Volatility in raw material prices
- 3.7 Growth potential analysis
- 3.8 Porter's analysis
- 3.9 PESTEL analysis

## **CHAPTER 4 COMPETITIVE LANDSCAPE, 2023**

- 4.1 Introduction
- 4.2 Company market share analysis
- 4.3 Competitive positioning matrix
- 4.4 Strategic outlook matrix

## **CHAPTER 5 SEMICONDUCTOR TUBING & FITTINGS MARKET ESTIMATES & FORECAST, BY PRODUCT TYPE, 2021 – 2032, (USD BILLION) (THOUSAND UNITS)**

- 5.1 Key trends
- 5.2 Tubing
  - 5.2.1 Metal tubing
    - 5.2.1.1 Stainless steel tubing
    - 5.2.1.2 Copper tubing
    - 5.2.1.3 Aluminum tubing
    - 5.2.1.4 Others
  - 5.2.2 Fluoropolymer tubing
    - 5.2.2.1 PTFE
    - 5.2.2.2 PFA
    - 5.2.2.3 Others (PEEK, FEP, etc.)
  - 5.2.3 Quartz tubing
  - 5.2.4 Composite tubing
  - 5.2.5 Specialty polymer tubing
- 5.3 Fittings
  - 5.3.1 Compression fittings
  - 5.3.2 Flare fittings
  - 5.3.3 Face Seal fittings
  - 5.3.4 Weld fittings
  - 5.3.5 Ultra-High Purity (UHP) fittings
  - 5.3.6 Quick-connect fittings
  - 5.3.7 Threaded fittings
  - 5.3.8 Others

## **CHAPTER 6 SEMICONDUCTOR TUBING & FITTINGS MARKET ESTIMATES & FORECAST, BY PROCESS, 2021 – 2032, (USD BILLION) (THOUSAND UNITS)**

- 6.1 Key trends
- 6.2 Front-end processes
- 6.3 Back-end processes

## **CHAPTER 7 SEMICONDUCTOR TUBING & FITTINGS MARKET ESTIMATES & FORECAST, BY EQUIPMENT, 2021 – 2032, (USD BILLION) (THOUSAND UNITS)**

- 7.1 Key trends
- 7.2 Semiconductor design equipment
- 7.3 Mask/reticle Mfg. equipment
- 7.4 Wafer manufacturing/processing equipment
- 7.5 Surface conditioning/ clean and dry
- 7.6 Assembly & packaging equipment
- 7.7 Test / inspection equipment
- 7.8 Fab facility & related equipment
- 7.9 Thermal processing equipment
- 7.10 Deposition equipment
- 7.11 Others (CVD & CMP, handlers, sputter, etc.)

## **CHAPTER 8 SEMICONDUCTOR TUBING & FITTINGS MARKET ESTIMATES & FORECAST, BY DISTRIBUTION CHANNEL, 2021 – 2032, (USD BILLION) (THOUSAND UNITS)**

- 8.1 Key trends
- 8.2 Direct sales
- 8.3 Indirect sales

## **CHAPTER 9 SEMICONDUCTOR TUBING & FITTINGS MARKET ESTIMATES & FORECAST, BY REGION, 2021 – 2032, (USD BILLION) (THOUSAND UNITS)**

- 9.1 Key trends
- 9.2 North America
  - 9.2.1 U.S.
  - 9.2.2 Canada
- 9.3 Europe

- 9.3.1 Germany
- 9.3.2 UK
- 9.3.3 France
- 9.3.4 Italy
- 9.3.5 Spain
- 9.3.6 Russia
- 9.4 Asia Pacific
  - 9.4.1 China
  - 9.4.2 India
  - 9.4.3 Japan
  - 9.4.4 South Korea
  - 9.4.5 Australia
- 9.5 Latin America
  - 9.5.1 Brazil
  - 9.5.2 Mexico
- 9.6 MEA
  - 9.6.1 Saudi Arabia
  - 9.6.2 UAE
  - 9.6.3 South Africa

## **CHAPTER 10 COMPANY PROFILES**

- 10.1 Aignep S.p.A.
- 10.2 Camozzi Automation S.p.A.
- 10.3 Eisele Pneumatics GmbH & Co. KG
- 10.4 Entegris, Inc.
- 10.5 FITOK Group Co., Ltd.
- 10.6 Fujikin Incorporated
- 10.7 IMI Precision Engineering
- 10.8 KITZ Corporation
- 10.9 MKS Instruments, Inc.
- 10.10 Parker-Hannifin Corporation
- 10.11 PISCO Co., Ltd.
- 10.12 Saint-Gobain Performance Plastics Corporation
- 10.13 SMC Corporation
- 10.14 Swagelok Company
- 10.15 Valex Corporation

## I would like to order

Product name: Semiconductor Tubing and Fittings Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2024 – 2032

Product link: <https://marketpublishers.com/r/SBDCABF8E591EN.html>

Price: US\$ 4,850.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/SBDCABF8E591EN.html>