

# Semiconductor Dielectric Etching Equipment Market Report by Type (Wet Etching Equipment, Dry Etching Equipment), Application (Foundries, Integrated Device Manufacturers (IDMs)), and Region 2024-2032

https://marketpublishers.com/r/SF8F2F9B3944EN.html

Date: January 2024

Pages: 140

Price: US\$ 3,899.00 (Single User License)

ID: SF8F2F9B3944EN

## **Abstracts**

The global semiconductor dielectric etching equipment market size reached US\$ 1.3 Billion in 2023. Looking forward, IMARC Group expects the market to reach US\$ 1.8 Billion by 2032, exhibiting a growth rate (CAGR) of 3.26% during 2024-2032. The significant expansion in the electronics industry, the rising demand for semiconductors, and the increasing penetration of smart devices represent some of the key factors driving the market.

Semiconductor dielectric etching equipment (SDEE) refers to specialized apparatus that is employed to polish and remove various dielectric substances, such as photo-resist mask, silicon oxide, and silicon nitride, during the semiconductor manufacturing procedure. It includes wet and dry etching equipment, which is used with numerous chemicals. In some instances, carbon monoxide is also utilized in the dielectric etching procedure due to higher profile control. These products help carve out varying physical features, including high aspect ratio (HAR), deep trenches, and large cavities. SDEE offers more precision during operations, automates processes, reduces work hazards, and is easier to dispose.

Semiconductor Dielectric Etching Equipment Market Trends:

The significant expansion in the electronics sector and the increasing purchase of various high-performance consumer electronic products, such as smartphones, tablets, and desktops, represent a major factor driving the market toward growth. This can be further attributed to the ongoing trend of miniaturizing semiconductor circuits, which is facilitating the demand for dielectric etching equipment. Additionally, the recent



industrial automation across the globe has prompted original equipment manufacturers (OEMs) to widely use the product to fabricate flat panel display screens and not-and (NAND) flash memory, which is acting as another growth-inducing factor. In line with this, significant technological advancements, such as the developments in the dielectric etching equipment capabilities to optimize the semiconductor production operations, are supporting the market growth. Moreover, the large-scale integration of machine learning (ML), artificial intelligence (Al) capabilities, Internet of Things (IoT), and automotive sensors to offer more precision is favoring the market growth. Furthermore, the continuous development of autonomous vehicles has further intensified the usage of semiconductors in vehicles, which is propelling the market growth. The market is also being driven by the widespread adoption of fin-shaped field effect transistor (FinFET) architecture. Since FinFET design uses dielectric etching as one of the major etching steps in its designing process, this is expected to facilitate the demand for semiconductor dielectric etching equipment. Other factors, such as the recent mergers and acquisitions (M&A) amongst key players, recent innovations to introduce more effective product variants, and extensive research and development (R&D) activities, are creating a positive outlook for the market.

## Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each segment of the global semiconductor dielectric etching equipment market, along with forecasts at the global, regional, and country level from 2024-2032. Our report has categorized the market based on type and application.

Type Insights:

Wet Etching Equipment
Dry Etching Equipment

The report has also provided a detailed breakup and analysis of the semiconductor dielectric etching equipment market based on the type. This includes wet and dry etching equipment. According to the report, dry etching equipment represented the largest segment.

**Application Insights:** 

**Foundries** 

Integrated Device Manufacturers (IDMs)



A detailed breakup and analysis of the semiconductor dielectric etching equipment market based on the application has also been provided in the report. This includes foundries and integrated device manufacturers (IDMs). According to the report, IDMs accounted for the largest market share.

## Regional Insights:

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

Others

Middle East and Africa

The report has also provided a comprehensive analysis of all the major regional markets that include North America (the United States and Canada); Asia Pacific (China, Japan, India, South Korea, Australia, Indonesia, and others); Europe (Germany, France, the United Kingdom, Italy, Spain, Russia, and others); Latin America (Brazil, Mexico, and others); and the Middle East and Africa. According to the report, Asia Pacific was the largest market for semiconductor dielectric etching equipment. Some of the factors driving the Asia Pacific semiconductor dielectric etching equipment market



included extensive research and development (R&D) activities, the increasing demand for smart devices, and significant technological advancements.

## Competitive Landscape:

The report has also provided a comprehensive analysis of the competitive landscape in the global semiconductor dielectric etching equipment market. Detailed profiles of all major companies have also been provided. Some of the companies covered include Advanced Micro-Fabrication Equipment Inc. China, Applied Materials Inc., Hitachi High-Technologies Corporation (Hitachi Ltd), Lam Research Corporation, Mattson Technology, Oxford Instruments, SPTS Technologies Ltd. (KLA Corporation), Tokyo Electron Limited, etc.

## Key Questions Answered in This Report:

How has the global semiconductor dielectric etching equipment market performed so far and how will it perform in the coming years?

What are the drivers, restraints, and opportunities in the global semiconductor dielectric etching equipment market?

What are the key regional markets?

Which countries represent the most attractive semiconductor dielectric etching equipment market?

What is the breakup of the market based on the type?

What is the breakup of the market based on the application?

What is the competitive structure of the global semiconductor dielectric etching equipment market?

Who are the key players/companies in the global semiconductor dielectric etching equipment market?



## **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 SEMICONDUCTOR DIELECTRIC ETCHING EQUIPMENT MARKET

- 5.1 Market Overview
- 5.2 Market Performance
- 5.3 Impact of COVID-19
- 5.4 Market Forecast

## **6 MARKET BREAKUP BY TYPE**

- 6.1 Wet Etching Equipment
  - 6.1.1 Market Trends
  - 6.1.2 Market Forecast
- 6.2 Dry Etching Equipment
  - 6.2.1 Market Trends



#### 6.2.2 Market Forecast

#### 7 MARKET BREAKUP BY APPLICATION

- 7.1 Foundries
  - 7.1.1 Market Trends
  - 7.1.2 Market Forecast
- 7.2 Integrated Device Manufacturer (IDMs)
  - 7.2.1 Market Trends
  - 7.2.2 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
    - 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 DRIVERS, RESTRAINTS, AND OPPORTUNITIES

- 9.1 Overview
- 9.2 Drivers
- 9.3 Restraints
- 9.4 Opportunities

#### 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 Advanced Micro-Fabrication Equipment Inc. China
    - 13.3.1.1 Company Overview
    - 13.3.1.2 Product Portfolio
    - 13.3.1.3 Financials
  - 13.3.2 Applied Materials Inc.
    - 13.3.2.1 Company Overview
    - 13.3.2.2 Product Portfolio
    - 13.3.2.3 Financials
    - 13.3.2.4 SWOT Analysis
  - 13.3.3 Hitachi High-Technologies Corporation (Hitachi Ltd)
    - 13.3.3.1 Company Overview



- 13.3.3.2 Product Portfolio
- 13.3.4 Lam Research 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 Mattson Technology
  - 13.3.5.1 Company Overview
  - 13.3.5.2 Product Portfolio
- 13.3.6 Oxford Instruments
  - 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 SPTS Technologies Ltd. (KLA Corporation)
  - 13.3.7.1 Company Overview
  - 13.3.7.2 Product Portfolio
- 13.3.8 Tokyo Electron Limited
  - 13.3.8.1 Company Overview
  - 13.3.8.2 Product Portfolio
  - 13.3.8.3 Financials
  - 13.3.8.4 SWOT Analysis



## **List Of Tables**

#### LIST OF TABLES

Table 1: Global: Semiconductor Dielectric Etching Equipment Market: Key Industry Highlights, 2023 & 2032

Table 2: Global: Semiconductor Dielectric Etching Equipment Market Forecast: Breakup by Type (in Million US\$), 2024-2032

Table 3: Global: Semiconductor Dielectric Etching Equipment Market Forecast: Breakup by Application (in Million US\$), 2024-2032

Table 4: Global: Semiconductor Dielectric Etching Equipment Market Forecast: Breakup by Region (in Million US\$), 2024-2032

Table 5: Global: Semiconductor Dielectric Etching Equipment Market: Competitive Structure

Table 6: Global: Semiconductor Dielectric Etching Equipment Market: Key Players



## **List Of Figures**

#### LIST OF FIGURES

Figure 1: Global: Semiconductor Dielectric Etching Equipment Market: Major Drivers and Challenges

Figure 2: Global: Semiconductor Dielectric Etching Equipment Market: Sales Value (in Billion US\$), 2018-2023

Figure 3: Global: Semiconductor Dielectric Etching Equipment Market Forecast: Sales Value (in Billion US\$), 2024-2032

Figure 4: Global: Semiconductor Dielectric Etching Equipment Market: Breakup by Type (in %), 2023

Figure 5: Global: Semiconductor Dielectric Etching Equipment Market: Breakup by Application (in %), 2023

Figure 6: Global: Semiconductor Dielectric Etching Equipment Market: Breakup by Region (in %), 2023

Figure 7: Global: Semiconductor Dielectric Etching Equipment (Wet Etching Equipment) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 8: Global: Semiconductor Dielectric Etching Equipment (Wet Etching Equipment) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 9: Global: Semiconductor Dielectric Etching Equipment (Dry Etching Equipment) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 10: Global: Semiconductor Dielectric Etching Equipment (Dry Etching

Equipment) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 11: Global: Semiconductor Dielectric Etching Equipment (Foundries) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 12: Global: Semiconductor Dielectric Etching Equipment (Foundries) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 13: Global: Semiconductor Dielectric Etching Equipment (Integrated Device Manufacturer (IDMs)) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 14: Global: Semiconductor Dielectric Etching Equipment (Integrated Device Manufacturer (IDMs)) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 15: North America: Semiconductor Dielectric Etching Equipment Market: Sales Value (in Million US\$), 2018 & 2023

Figure 16: North America: Semiconductor Dielectric Etching Equipment Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 17: United States: Semiconductor Dielectric Etching Equipment Market: Sales Value (in Million US\$), 2018 & 2023

Figure 18: United States: Semiconductor Dielectric Etching Equipment Market Forecast:



Sales Value (in Million US\$), 2024-2032

Figure 19: Canada: Semiconductor Dielectric Etching Equipment Market: Sales Value (in Million US\$), 2018 & 2023

Figure 20: Canada: Semiconductor Dielectric Etching Equipment Market Forecast:

Sales Value (in Million US\$), 2024-2032

Figure 21: Asia-Pacific: Semiconductor Dielectric Etching Equipment Market: Sales Value (in Million US\$), 2018 & 2023

Figure 22: Asia-Pacific: Semiconductor Dielectric Etching Equipment Market Forecast:

Sales Value (in Million US\$), 2024-2032

Figure 23: China: Semiconductor Dielectric Etching Equipment Market: Sales Value (in Million US\$), 2018 & 2023

Figure 24: China: Semiconductor Dielectric Etching Equipment Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 25: Japan: Semiconductor Dielectric Etching Equipment Market: Sales Value (in Million US\$), 2018 & 2023

Figure 26: Japan: Semiconductor Dielectric Etching Equipment Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 27: India: Semiconductor Dielectric Etching Equipment Market: Sales Value (in Million US\$), 2018 & 2023

Figure 28: India: Semiconductor Dielectric Etching Equipment Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 29: South Korea: Semiconductor Dielectric Etching Equipment Market: Sales Value (in Million US\$), 2018 & 2023

Figure 30: South Korea: Semiconductor Dielectric Etching Equipment Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 31: Australia: Semiconductor Dielectric Etching Equipment Market: Sales Value (in Million US\$), 2018 & 2023

Figure 32: Australia: Semiconductor Dielectric Etching Equipment Market Forecast:

Sales Value (in Million US\$), 2024-2032

Figure 33: Indonesia: Semiconductor Dielectric Etching Equipment Market: Sales Value (in Million US\$), 2018 & 2023

Figure 34: Indonesia: Semiconductor Dielectric Etching Equipment Market Forecast:

Sales Value (in Million US\$), 2024-2032

Figure 35: Others: Semiconductor Dielectric Etching Equipment Market: Sales Value (in Million US\$), 2018 & 2023

Figure 36: Others: Semiconductor Dielectric Etching Equipment Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 37: Europe: Semiconductor Dielectric Etching Equipment Market: Sales Value (in Million US\$), 2018 & 2023



Figure 38: Europe: Semiconductor Dielectric Etching Equipment Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 39: Germany: Semiconductor Dielectric Etching Equipment Market: Sales Value (in Million US\$), 2018 & 2023

Figure 40: Germany: Semiconductor Dielectric Etching Equipment Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 41: France: Semiconductor Dielectric Etching Equipment Market: Sales Value (in Million US\$), 2018 & 2023

Figure 42: France: Semiconductor Dielectric Etching Equipment Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 43: United Kingdom: Semiconductor Dielectric Etching Equipment Market: Sales Value (in Million US\$), 2018 & 2023

Figure 44: United Kingdom: Semiconductor Dielectric Etching Equipment Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 45: Italy: Semiconductor Dielectric Etching Equipment Market: Sales Value (in Million US\$), 2018 & 2023

Figure 46: Italy: Semiconductor Dielectric Etching Equipment Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 47: Spain: Semiconductor Dielectric Etching Equipment Market: Sales Value (in Million US\$), 2018 & 2023

Figure 48: Spain: Semiconductor Dielectric Etching Equipment Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 49: Russia: Semiconductor Dielectric Etching Equipment Market: Sales Value (in Million US\$), 2018 & 2023

Figure 50: Russia: Semiconductor Dielectric Etching Equipment Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 51: Others: Semiconductor Dielectric Etching Equipment Market: Sales Value (in Million US\$), 2018 & 2023

Figure 52: Others: Semiconductor Dielectric Etching Equipment Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 53: Latin America: Semiconductor Dielectric Etching Equipment Market: Sales Value (in Million US\$), 2018 & 2023

Figure 54: Latin America: Semiconductor Dielectric Etching Equipment Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 55: Brazil: Semiconductor Dielectric Etching Equipment Market: Sales Value (in Million US\$), 2018 & 2023

Figure 56: Brazil: Semiconductor Dielectric Etching Equipment Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 57: Mexico: Semiconductor Dielectric Etching Equipment Market: Sales Value (in



Million US\$), 2018 & 2023

Figure 58: Mexico: Semiconductor Dielectric Etching Equipment Market Forecast: Sales

Value (in Million US\$), 2024-2032

Figure 59: Others: Semiconductor Dielectric Etching Equipment Market: Sales Value (in

Million US\$), 2018 & 2023

Figure 60: Others: Semiconductor Dielectric Etching Equipment Market Forecast: Sales

Value (in Million US\$), 2024-2032

Figure 61: Middle East and Africa: Semiconductor Dielectric Etching Equipment Market:

Sales Value (in Million US\$), 2018 & 2023

Figure 62: Middle East and Africa: Semiconductor Dielectric Etching Equipment Market:

Breakup by Country (in %), 2023

Figure 63: Middle East and Africa: Semiconductor Dielectric Etching Equipment Market

Forecast: Sales Value (in Million US\$), 2024-2032

Figure 64: Global: Semiconductor Dielectric Etching Equipment Industry: Drivers,

Restraints, and Opportunities

Figure 65: Global: Semiconductor Dielectric Etching Equipment Industry: Value Chain

Analysis

Figure 66: Global: Semiconductor Dielectric Etching Equipment Industry: Porter's Five

Forces Analysis



#### I would like to order

Product name: Semiconductor Dielectric Etching Equipment Market Report by Type (Wet Etching

Equipment, Dry Etching Equipment), Application (Foundries, Integrated Device

Manufacturers (IDMs)), and Region 2024-2032

Product link: https://marketpublishers.com/r/SF8F2F9B3944EN.html

Price: US\$ 3,899.00 (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 <a href="https://marketpublishers.com/r/SF8F2F9B3944EN.html">https://marketpublishers.com/r/SF8F2F9B3944EN.html</a>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:	
Last name:	
Email:	
Company:	
Address:	
City:	
Zip code:	
Country:	
Tel:	
Fax:	
Your message:	
	**All fields are required
	Custumer signature

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <a href="https://marketpublishers.com/docs/terms.html">https://marketpublishers.com/docs/terms.html</a>

To place an order via fax simply print this form, fill in the information below



and fax the completed form to +44 20 7900 3970