

# Global Atomic Layer Etching (ALE) Market 2024 by Manufacturers, Regions, Type and Application, Forecast to 2030

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## Abstracts

According to our (Global Info Research) latest study, the global Atomic Layer Etching (ALE) market size was valued at USD million in 2023 and is forecast to a readjusted size of USD million by 2030 with a CAGR of % during review period.

Atomic Layer Etching (ALE) is an emerging RIE technique that provides atomic-scale control over the etching process. ALE is a cyclic process that alternates between the exposure of the substrate to reactive gases and the removal of the modified surface layer, enabling precise control of the etching depth and feature dimensions. This technique holds great promise for future applications in nanofabrication, semiconductor manufacturing, and advanced materials research. It is because ALE can achieve even higher precision, selectivity, and uniformity compared to traditional RIE methods.

The Global Info Research report includes an overview of the development of the Atomic Layer Etching (ALE) industry chain, the market status of Nanofabrication (Single Reaction Station, Double Reaction Station), Semiconductor Manufacturing (Single Reaction Station, Double Reaction Station), and key enterprises in developed and developing market, and analysed the cutting-edge technology, patent, hot applications and market trends of Atomic Layer Etching (ALE).

Regionally, the report analyzes the Atomic Layer Etching (ALE) markets in key regions. North America and Europe are experiencing steady growth, driven by government initiatives and increasing consumer awareness. Asia-Pacific, particularly China, leads the global Atomic Layer Etching (ALE) market, with robust domestic demand, supportive policies, and a strong manufacturing base.

### Key Features:

The report presents comprehensive understanding of the Atomic Layer Etching (ALE) market. It provides a holistic view of the industry, as well as detailed insights into individual components and stakeholders. The report analysis market dynamics, trends, challenges, and opportunities within the Atomic Layer Etching (ALE) industry.

The report involves analyzing the market at a macro level:

**Market Sizing and Segmentation:** Report collect data on the overall market size, including the sales quantity (K Units), revenue generated, and market share of different by Type (e.g., Single Reaction Station, Double Reaction Station).

**Industry Analysis:** Report analyse the broader industry trends, such as government policies and regulations, technological advancements, consumer preferences, and market dynamics. This analysis helps in understanding the key drivers and challenges influencing the Atomic Layer Etching (ALE) market.

**Regional Analysis:** The report involves examining the Atomic Layer Etching (ALE) market at a regional or national level. Report analyses regional factors such as government incentives, infrastructure development, economic conditions, and consumer behaviour to identify variations and opportunities within different markets.

**Market Projections:** Report covers the gathered data and analysis to make future projections and forecasts for the Atomic Layer Etching (ALE) market. This may include estimating market growth rates, predicting market demand, and identifying emerging trends.

The report also involves a more granular approach to Atomic Layer Etching (ALE):

**Company Analysis:** Report covers individual Atomic Layer Etching (ALE) manufacturers, suppliers, and other relevant industry players. This analysis includes studying their financial performance, market positioning, product portfolios, partnerships, and strategies.

**Consumer Analysis:** Report covers data on consumer behaviour, preferences, and attitudes towards Atomic Layer Etching (ALE) This may involve surveys, interviews, and analysis of consumer reviews and feedback from different by Application (Nanofabrication, Semiconductor Manufacturing).

**Technology Analysis:** Report covers specific technologies relevant to Atomic Layer Etching (ALE). It assesses the current state, advancements, and potential future developments in Atomic Layer Etching (ALE) areas.

**Competitive Landscape:** By analyzing individual companies, suppliers, and consumers, the report presents insights into the competitive landscape of the Atomic Layer Etching (ALE) market. This analysis helps understand market share, competitive advantages, and potential areas for differentiation among industry players.

**Market Validation:** The report involves validating findings and projections through primary research, such as surveys, interviews, and focus groups.

### Market Segmentation

Atomic Layer Etching (ALE) market is split by Type and by Application. For the period 2019-2030, the growth among segments provides accurate calculations and forecasts for consumption value by Type, and by Application in terms of volume and value.

#### Market segment by Type

Single Reaction Station

Double Reaction Station

#### Market segment by Application

Nanofabrication

Semiconductor Manufacturing

Advanced Materials Research

#### Major players covered

Oxford Instruments

ULVAC

Lam Research

AMEC

SAMCO Inc.

Applied Materials, Inc.

Sentech

SPTS Technologies (KLA company)

GigaLane

CORIAL(Plasma-Therm)

Trion Technology

NAURA

Plasma Etch, Inc.

Tokyo Electron Limited

Nano Vacuum Pty Ltd

Market segment by region, regional analysis covers

North America (United States, Canada and Mexico)

Europe (Germany, France, United Kingdom, Russia, Italy, and Rest of Europe)

Asia-Pacific (China, Japan, Korea, India, Southeast Asia, and Australia)

South America (Brazil, Argentina, Colombia, and Rest of South America)

## Middle East & Africa (Saudi Arabia, UAE, Egypt, South Africa, and Rest of Middle East & Africa)

The content of the study subjects, includes a total of 15 chapters:

Chapter 1, to describe Atomic Layer Etching (ALE) product scope, market overview, market estimation caveats and base year.

Chapter 2, to profile the top manufacturers of Atomic Layer Etching (ALE), with price, sales, revenue and global market share of Atomic Layer Etching (ALE) from 2019 to 2024.

Chapter 3, the Atomic Layer Etching (ALE) competitive situation, sales quantity, revenue and global market share of top manufacturers are analyzed emphatically by landscape contrast.

Chapter 4, the Atomic Layer Etching (ALE) breakdown data are shown at the regional level, to show the sales quantity, consumption value and growth by regions, from 2019 to 2030.

Chapter 5 and 6, to segment the sales by Type and application, with sales market share and growth rate by type, application, from 2019 to 2030.

Chapter 7, 8, 9, 10 and 11, to break the sales data at the country level, with sales quantity, consumption value and market share for key countries in the world, from 2017 to 2023. and Atomic Layer Etching (ALE) market forecast, by regions, type and application, with sales and revenue, from 2025 to 2030.

Chapter 12, market dynamics, drivers, restraints, trends and Porters Five Forces analysis.

Chapter 13, the key raw materials and key suppliers, and industry chain of Atomic Layer Etching (ALE).

Chapter 14 and 15, to describe Atomic Layer Etching (ALE) sales channel, distributors, customers, research findings and conclusion.

## Contents

### 1 MARKET OVERVIEW

- 1.1 Product Overview and Scope of Atomic Layer Etching (ALE)
- 1.2 Market Estimation Caveats and Base Year
- 1.3 Market Analysis by Type
  - 1.3.1 Overview: Global Atomic Layer Etching (ALE) Consumption Value by Type: 2019 Versus 2023 Versus 2030
  - 1.3.2 Single Reaction Station
  - 1.3.3 Double Reaction Station
- 1.4 Market Analysis by Application
  - 1.4.1 Overview: Global Atomic Layer Etching (ALE) Consumption Value by Application: 2019 Versus 2023 Versus 2030
  - 1.4.2 Nanofabrication
  - 1.4.3 Semiconductor Manufacturing
  - 1.4.4 Advanced Materials Research
- 1.5 Global Atomic Layer Etching (ALE) Market Size & Forecast
  - 1.5.1 Global Atomic Layer Etching (ALE) Consumption Value (2019 & 2023 & 2030)
  - 1.5.2 Global Atomic Layer Etching (ALE) Sales Quantity (2019-2030)
  - 1.5.3 Global Atomic Layer Etching (ALE) Average Price (2019-2030)

### 2 MANUFACTURERS PROFILES

- 2.1 Oxford Instruments
  - 2.1.1 Oxford Instruments Details
  - 2.1.2 Oxford Instruments Major Business
  - 2.1.3 Oxford Instruments Atomic Layer Etching (ALE) Product and Services
  - 2.1.4 Oxford Instruments Atomic Layer Etching (ALE) Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
  - 2.1.5 Oxford Instruments Recent Developments/Updates
- 2.2 ULVAC
  - 2.2.1 ULVAC Details
  - 2.2.2 ULVAC Major Business
  - 2.2.3 ULVAC Atomic Layer Etching (ALE) Product and Services
  - 2.2.4 ULVAC Atomic Layer Etching (ALE) Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
  - 2.2.5 ULVAC Recent Developments/Updates
- 2.3 Lam Research

- 2.3.1 Lam Research Details
- 2.3.2 Lam Research Major Business
- 2.3.3 Lam Research Atomic Layer Etching (ALE) Product and Services
- 2.3.4 Lam Research Atomic Layer Etching (ALE) Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
- 2.3.5 Lam Research Recent Developments/Updates
- 2.4 AMEC
  - 2.4.1 AMEC Details
  - 2.4.2 AMEC Major Business
  - 2.4.3 AMEC Atomic Layer Etching (ALE) Product and Services
  - 2.4.4 AMEC Atomic Layer Etching (ALE) Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
  - 2.4.5 AMEC Recent Developments/Updates
- 2.5 SAMCO Inc.
  - 2.5.1 SAMCO Inc. Details
  - 2.5.2 SAMCO Inc. Major Business
  - 2.5.3 SAMCO Inc. Atomic Layer Etching (ALE) Product and Services
  - 2.5.4 SAMCO Inc. Atomic Layer Etching (ALE) Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
  - 2.5.5 SAMCO Inc. Recent Developments/Updates
- 2.6 Applied Materials, Inc.
  - 2.6.1 Applied Materials, Inc. Details
  - 2.6.2 Applied Materials, Inc. Major Business
  - 2.6.3 Applied Materials, Inc. Atomic Layer Etching (ALE) Product and Services
  - 2.6.4 Applied Materials, Inc. Atomic Layer Etching (ALE) Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
  - 2.6.5 Applied Materials, Inc. Recent Developments/Updates
- 2.7 Sentech
  - 2.7.1 Sentech Details
  - 2.7.2 Sentech Major Business
  - 2.7.3 Sentech Atomic Layer Etching (ALE) Product and Services
  - 2.7.4 Sentech Atomic Layer Etching (ALE) Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
  - 2.7.5 Sentech Recent Developments/Updates
- 2.8 SPTS Technologies (KLA company)
  - 2.8.1 SPTS Technologies (KLA company) Details
  - 2.8.2 SPTS Technologies (KLA company) Major Business
  - 2.8.3 SPTS Technologies (KLA company) Atomic Layer Etching (ALE) Product and Services



2.8.4 SPTS Technologies (KLA company) Atomic Layer Etching (ALE) Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.8.5 SPTS Technologies (KLA company) Recent Developments/Updates

2.9 GigaLane

2.9.1 GigaLane Details

2.9.2 GigaLane Major Business

2.9.3 GigaLane Atomic Layer Etching (ALE) Product and Services

2.9.4 GigaLane Atomic Layer Etching (ALE) Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.9.5 GigaLane Recent Developments/Updates

2.10 CORIAL(Plasma-Therm)

2.10.1 CORIAL(Plasma-Therm) Details

2.10.2 CORIAL(Plasma-Therm) Major Business

2.10.3 CORIAL(Plasma-Therm) Atomic Layer Etching (ALE) Product and Services

2.10.4 CORIAL(Plasma-Therm) Atomic Layer Etching (ALE) Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.10.5 CORIAL(Plasma-Therm) Recent Developments/Updates

2.11 Trion Technology

2.11.1 Trion Technology Details

2.11.2 Trion Technology Major Business

2.11.3 Trion Technology Atomic Layer Etching (ALE) Product and Services

2.11.4 Trion Technology Atomic Layer Etching (ALE) Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.11.5 Trion Technology Recent Developments/Updates

2.12 NAURA

2.12.1 NAURA Details

2.12.2 NAURA Major Business

2.12.3 NAURA Atomic Layer Etching (ALE) Product and Services

2.12.4 NAURA Atomic Layer Etching (ALE) Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.12.5 NAURA Recent Developments/Updates

2.13 Plasma Etch, Inc.

2.13.1 Plasma Etch, Inc. Details

2.13.2 Plasma Etch, Inc. Major Business

2.13.3 Plasma Etch, Inc. Atomic Layer Etching (ALE) Product and Services

2.13.4 Plasma Etch, Inc. Atomic Layer Etching (ALE) Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.13.5 Plasma Etch, Inc. Recent Developments/Updates

2.14 Tokyo Electron Limited



- 2.14.1 Tokyo Electron Limited Details
- 2.14.2 Tokyo Electron Limited Major Business
- 2.14.3 Tokyo Electron Limited Atomic Layer Etching (ALE) Product and Services
- 2.14.4 Tokyo Electron Limited Atomic Layer Etching (ALE) Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
- 2.14.5 Tokyo Electron Limited Recent Developments/Updates
- 2.15 Nano Vacuum Pty Ltd
  - 2.15.1 Nano Vacuum Pty Ltd Details
  - 2.15.2 Nano Vacuum Pty Ltd Major Business
  - 2.15.3 Nano Vacuum Pty Ltd Atomic Layer Etching (ALE) Product and Services
  - 2.15.4 Nano Vacuum Pty Ltd Atomic Layer Etching (ALE) Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
  - 2.15.5 Nano Vacuum Pty Ltd Recent Developments/Updates

### **3 COMPETITIVE ENVIRONMENT: ATOMIC LAYER ETCHING (ALE) BY MANUFACTURER**

- 3.1 Global Atomic Layer Etching (ALE) Sales Quantity by Manufacturer (2019-2024)
- 3.2 Global Atomic Layer Etching (ALE) Revenue by Manufacturer (2019-2024)
- 3.3 Global Atomic Layer Etching (ALE) Average Price by Manufacturer (2019-2024)
- 3.4 Market Share Analysis (2023)
  - 3.4.1 Producer Shipments of Atomic Layer Etching (ALE) by Manufacturer Revenue (\$MM) and Market Share (%): 2023
  - 3.4.2 Top 3 Atomic Layer Etching (ALE) Manufacturer Market Share in 2023
  - 3.4.2 Top 6 Atomic Layer Etching (ALE) Manufacturer Market Share in 2023
- 3.5 Atomic Layer Etching (ALE) Market: Overall Company Footprint Analysis
  - 3.5.1 Atomic Layer Etching (ALE) Market: Region Footprint
  - 3.5.2 Atomic Layer Etching (ALE) Market: Company Product Type Footprint
  - 3.5.3 Atomic Layer Etching (ALE) Market: Company Product Application Footprint
- 3.6 New Market Entrants and Barriers to Market Entry
- 3.7 Mergers, Acquisition, Agreements, and Collaborations

### **4 CONSUMPTION ANALYSIS BY REGION**

- 4.1 Global Atomic Layer Etching (ALE) Market Size by Region
  - 4.1.1 Global Atomic Layer Etching (ALE) Sales Quantity by Region (2019-2030)
  - 4.1.2 Global Atomic Layer Etching (ALE) Consumption Value by Region (2019-2030)
  - 4.1.3 Global Atomic Layer Etching (ALE) Average Price by Region (2019-2030)
- 4.2 North America Atomic Layer Etching (ALE) Consumption Value (2019-2030)

- 4.3 Europe Atomic Layer Etching (ALE) Consumption Value (2019-2030)
- 4.4 Asia-Pacific Atomic Layer Etching (ALE) Consumption Value (2019-2030)
- 4.5 South America Atomic Layer Etching (ALE) Consumption Value (2019-2030)
- 4.6 Middle East and Africa Atomic Layer Etching (ALE) Consumption Value (2019-2030)

## **5 MARKET SEGMENT BY TYPE**

- 5.1 Global Atomic Layer Etching (ALE) Sales Quantity by Type (2019-2030)
- 5.2 Global Atomic Layer Etching (ALE) Consumption Value by Type (2019-2030)
- 5.3 Global Atomic Layer Etching (ALE) Average Price by Type (2019-2030)

## **6 MARKET SEGMENT BY APPLICATION**

- 6.1 Global Atomic Layer Etching (ALE) Sales Quantity by Application (2019-2030)
- 6.2 Global Atomic Layer Etching (ALE) Consumption Value by Application (2019-2030)
- 6.3 Global Atomic Layer Etching (ALE) Average Price by Application (2019-2030)

## **7 NORTH AMERICA**

- 7.1 North America Atomic Layer Etching (ALE) Sales Quantity by Type (2019-2030)
- 7.2 North America Atomic Layer Etching (ALE) Sales Quantity by Application (2019-2030)
- 7.3 North America Atomic Layer Etching (ALE) Market Size by Country
  - 7.3.1 North America Atomic Layer Etching (ALE) Sales Quantity by Country (2019-2030)
  - 7.3.2 North America Atomic Layer Etching (ALE) Consumption Value by Country (2019-2030)
  - 7.3.3 United States Market Size and Forecast (2019-2030)
  - 7.3.4 Canada Market Size and Forecast (2019-2030)
  - 7.3.5 Mexico Market Size and Forecast (2019-2030)

## **8 EUROPE**

- 8.1 Europe Atomic Layer Etching (ALE) Sales Quantity by Type (2019-2030)
- 8.2 Europe Atomic Layer Etching (ALE) Sales Quantity by Application (2019-2030)
- 8.3 Europe Atomic Layer Etching (ALE) Market Size by Country
  - 8.3.1 Europe Atomic Layer Etching (ALE) Sales Quantity by Country (2019-2030)
  - 8.3.2 Europe Atomic Layer Etching (ALE) Consumption Value by Country (2019-2030)
  - 8.3.3 Germany Market Size and Forecast (2019-2030)

- 8.3.4 France Market Size and Forecast (2019-2030)
- 8.3.5 United Kingdom Market Size and Forecast (2019-2030)
- 8.3.6 Russia Market Size and Forecast (2019-2030)
- 8.3.7 Italy Market Size and Forecast (2019-2030)

## **9 ASIA-PACIFIC**

- 9.1 Asia-Pacific Atomic Layer Etching (ALE) Sales Quantity by Type (2019-2030)
- 9.2 Asia-Pacific Atomic Layer Etching (ALE) Sales Quantity by Application (2019-2030)
- 9.3 Asia-Pacific Atomic Layer Etching (ALE) Market Size by Region
  - 9.3.1 Asia-Pacific Atomic Layer Etching (ALE) Sales Quantity by Region (2019-2030)
  - 9.3.2 Asia-Pacific Atomic Layer Etching (ALE) Consumption Value by Region (2019-2030)
  - 9.3.3 China Market Size and Forecast (2019-2030)
  - 9.3.4 Japan Market Size and Forecast (2019-2030)
  - 9.3.5 Korea Market Size and Forecast (2019-2030)
  - 9.3.6 India Market Size and Forecast (2019-2030)
  - 9.3.7 Southeast Asia Market Size and Forecast (2019-2030)
  - 9.3.8 Australia Market Size and Forecast (2019-2030)

## **10 SOUTH AMERICA**

- 10.1 South America Atomic Layer Etching (ALE) Sales Quantity by Type (2019-2030)
- 10.2 South America Atomic Layer Etching (ALE) Sales Quantity by Application (2019-2030)
- 10.3 South America Atomic Layer Etching (ALE) Market Size by Country
  - 10.3.1 South America Atomic Layer Etching (ALE) Sales Quantity by Country (2019-2030)
  - 10.3.2 South America Atomic Layer Etching (ALE) Consumption Value by Country (2019-2030)
  - 10.3.3 Brazil Market Size and Forecast (2019-2030)
  - 10.3.4 Argentina Market Size and Forecast (2019-2030)

## **11 MIDDLE EAST & AFRICA**

- 11.1 Middle East & Africa Atomic Layer Etching (ALE) Sales Quantity by Type (2019-2030)
- 11.2 Middle East & Africa Atomic Layer Etching (ALE) Sales Quantity by Application (2019-2030)

### 11.3 Middle East & Africa Atomic Layer Etching (ALE) Market Size by Country

#### 11.3.1 Middle East & Africa Atomic Layer Etching (ALE) Sales Quantity by Country (2019-2030)

#### 11.3.2 Middle East & Africa Atomic Layer Etching (ALE) Consumption Value by Country (2019-2030)

#### 11.3.3 Turkey Market Size and Forecast (2019-2030)

#### 11.3.4 Egypt Market Size and Forecast (2019-2030)

#### 11.3.5 Saudi Arabia Market Size and Forecast (2019-2030)

#### 11.3.6 South Africa Market Size and Forecast (2019-2030)

## 12 MARKET DYNAMICS

### 12.1 Atomic Layer Etching (ALE) Market Drivers

### 12.2 Atomic Layer Etching (ALE) Market Restraints

### 12.3 Atomic Layer Etching (ALE) Trends Analysis

### 12.4 Porters Five Forces Analysis

#### 12.4.1 Threat of New Entrants

#### 12.4.2 Bargaining Power of Suppliers

#### 12.4.3 Bargaining Power of Buyers

#### 12.4.4 Threat of Substitutes

#### 12.4.5 Competitive Rivalry

## 13 RAW MATERIAL AND INDUSTRY CHAIN

### 13.1 Raw Material of Atomic Layer Etching (ALE) and Key Manufacturers

### 13.2 Manufacturing Costs Percentage of Atomic Layer Etching (ALE)

### 13.3 Atomic Layer Etching (ALE) Production Process

### 13.4 Atomic Layer Etching (ALE) Industrial Chain

## 14 SHIPMENTS BY DISTRIBUTION CHANNEL

### 14.1 Sales Channel

#### 14.1.1 Direct to End-User

#### 14.1.2 Distributors

### 14.2 Atomic Layer Etching (ALE) Typical Distributors

### 14.3 Atomic Layer Etching (ALE) Typical Customers

## 15 RESEARCH FINDINGS AND CONCLUSION

## **16 APPENDIX**

16.1 Methodology

16.2 Research Process and Data Source

16.3 Disclaimer

## List Of Tables

### LIST OF TABLES

Table 1. Global Atomic Layer Etching (ALE) Consumption Value by Type, (USD Million), 2019 & 2023 & 2030

Table 2. Global Atomic Layer Etching (ALE) Consumption Value by Application, (USD Million), 2019 & 2023 & 2030

Table 3. Oxford Instruments Basic Information, Manufacturing Base and Competitors

Table 4. Oxford Instruments Major Business

Table 5. Oxford Instruments Atomic Layer Etching (ALE) Product and Services

Table 6. Oxford Instruments Atomic Layer Etching (ALE) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 7. Oxford Instruments Recent Developments/Updates

Table 8. ULVAC Basic Information, Manufacturing Base and Competitors

Table 9. ULVAC Major Business

Table 10. ULVAC Atomic Layer Etching (ALE) Product and Services

Table 11. ULVAC Atomic Layer Etching (ALE) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 12. ULVAC Recent Developments/Updates

Table 13. Lam Research Basic Information, Manufacturing Base and Competitors

Table 14. Lam Research Major Business

Table 15. Lam Research Atomic Layer Etching (ALE) Product and Services

Table 16. Lam Research Atomic Layer Etching (ALE) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 17. Lam Research Recent Developments/Updates

Table 18. AMEC Basic Information, Manufacturing Base and Competitors

Table 19. AMEC Major Business

Table 20. AMEC Atomic Layer Etching (ALE) Product and Services

Table 21. AMEC Atomic Layer Etching (ALE) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 22. AMEC Recent Developments/Updates

Table 23. SAMCO Inc. Basic Information, Manufacturing Base and Competitors

Table 24. SAMCO Inc. Major Business

Table 25. SAMCO Inc. Atomic Layer Etching (ALE) Product and Services

Table 26. SAMCO Inc. Atomic Layer Etching (ALE) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 27. SAMCO Inc. Recent Developments/Updates



Table 28. Applied Materials, Inc. Basic Information, Manufacturing Base and Competitors
Table 29. Applied Materials, Inc. Major Business
Table 30. Applied Materials, Inc. Atomic Layer Etching (ALE) Product and Services
Table 31. Applied Materials, Inc. Atomic Layer Etching (ALE) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2019-2024)
Table 32. Applied Materials, Inc. Recent Developments/Updates
Table 33. Sentech Basic Information, Manufacturing Base and Competitors
Table 34. Sentech Major Business
Table 35. Sentech Atomic Layer Etching (ALE) Product and Services
Table 36. Sentech Atomic Layer Etching (ALE) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2019-2024)
Table 37. Sentech Recent Developments/Updates
Table 38. SPTS Technologies (KLA company) Basic Information, Manufacturing Base and Competitors
Table 39. SPTS Technologies (KLA company) Major Business
Table 40. SPTS Technologies (KLA company) Atomic Layer Etching (ALE) Product and Services
Table 41. SPTS Technologies (KLA company) Atomic Layer Etching (ALE) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2019-2024)
Table 42. SPTS Technologies (KLA company) Recent Developments/Updates
Table 43. GigaLane Basic Information, Manufacturing Base and Competitors
Table 44. GigaLane Major Business
Table 45. GigaLane Atomic Layer Etching (ALE) Product and Services
Table 46. GigaLane Atomic Layer Etching (ALE) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2019-2024)
Table 47. GigaLane Recent Developments/Updates
Table 48. CORIAL(Plasma-Therm) Basic Information, Manufacturing Base and Competitors
Table 49. CORIAL(Plasma-Therm) Major Business
Table 50. CORIAL(Plasma-Therm) Atomic Layer Etching (ALE) Product and Services
Table 51. CORIAL(Plasma-Therm) Atomic Layer Etching (ALE) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2019-2024)
Table 52. CORIAL(Plasma-Therm) Recent Developments/Updates
Table 53. Trion Technology Basic Information, Manufacturing Base and Competitors
Table 54. Trion Technology Major Business



Table 55. Trion Technology Atomic Layer Etching (ALE) Product and Services

Table 56. Trion Technology Atomic Layer Etching (ALE) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 57. Trion Technology Recent Developments/Updates

Table 58. NAURA Basic Information, Manufacturing Base and Competitors

Table 59. NAURA Major Business

Table 60. NAURA Atomic Layer Etching (ALE) Product and Services

Table 61. NAURA Atomic Layer Etching (ALE) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 62. NAURA Recent Developments/Updates

Table 63. Plasma Etch, Inc. Basic Information, Manufacturing Base and Competitors

Table 64. Plasma Etch, Inc. Major Business

Table 65. Plasma Etch, Inc. Atomic Layer Etching (ALE) Product and Services

Table 66. Plasma Etch, Inc. Atomic Layer Etching (ALE) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 67. Plasma Etch, Inc. Recent Developments/Updates

Table 68. Tokyo Electron Limited Basic Information, Manufacturing Base and Competitors

Table 69. Tokyo Electron Limited Major Business

Table 70. Tokyo Electron Limited Atomic Layer Etching (ALE) Product and Services

Table 71. Tokyo Electron Limited Atomic Layer Etching (ALE) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 72. Tokyo Electron Limited Recent Developments/Updates

Table 73. Nano Vacuum Pty Ltd Basic Information, Manufacturing Base and Competitors

Table 74. Nano Vacuum Pty Ltd Major Business

Table 75. Nano Vacuum Pty Ltd Atomic Layer Etching (ALE) Product and Services

Table 76. Nano Vacuum Pty Ltd Atomic Layer Etching (ALE) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 77. Nano Vacuum Pty Ltd Recent Developments/Updates

Table 78. Global Atomic Layer Etching (ALE) Sales Quantity by Manufacturer (2019-2024) & (K Units)

Table 79. Global Atomic Layer Etching (ALE) Revenue by Manufacturer (2019-2024) & (USD Million)

Table 80. Global Atomic Layer Etching (ALE) Average Price by Manufacturer

(2019-2024) & (US\$/Unit)

Table 81. Market Position of Manufacturers in Atomic Layer Etching (ALE), (Tier 1, Tier 2, and Tier 3), Based on Consumption Value in 2023

Table 82. Head Office and Atomic Layer Etching (ALE) Production Site of Key Manufacturer

Table 83. Atomic Layer Etching (ALE) Market: Company Product Type Footprint

Table 84. Atomic Layer Etching (ALE) Market: Company Product Application Footprint

Table 85. Atomic Layer Etching (ALE) New Market Entrants and Barriers to Market Entry

Table 86. Atomic Layer Etching (ALE) Mergers, Acquisition, Agreements, and Collaborations

Table 87. Global Atomic Layer Etching (ALE) Sales Quantity by Region (2019-2024) & (K Units)

Table 88. Global Atomic Layer Etching (ALE) Sales Quantity by Region (2025-2030) & (K Units)

Table 89. Global Atomic Layer Etching (ALE) Consumption Value by Region (2019-2024) & (USD Million)

Table 90. Global Atomic Layer Etching (ALE) Consumption Value by Region (2025-2030) & (USD Million)

Table 91. Global Atomic Layer Etching (ALE) Average Price by Region (2019-2024) & (US\$/Unit)

Table 92. Global Atomic Layer Etching (ALE) Average Price by Region (2025-2030) & (US\$/Unit)

Table 93. Global Atomic Layer Etching (ALE) Sales Quantity by Type (2019-2024) & (K Units)

Table 94. Global Atomic Layer Etching (ALE) Sales Quantity by Type (2025-2030) & (K Units)

Table 95. Global Atomic Layer Etching (ALE) Consumption Value by Type (2019-2024) & (USD Million)

Table 96. Global Atomic Layer Etching (ALE) Consumption Value by Type (2025-2030) & (USD Million)

Table 97. Global Atomic Layer Etching (ALE) Average Price by Type (2019-2024) & (US\$/Unit)

Table 98. Global Atomic Layer Etching (ALE) Average Price by Type (2025-2030) & (US\$/Unit)

Table 99. Global Atomic Layer Etching (ALE) Sales Quantity by Application (2019-2024) & (K Units)

Table 100. Global Atomic Layer Etching (ALE) Sales Quantity by Application (2025-2030) & (K Units)

Table 101. Global Atomic Layer Etching (ALE) Consumption Value by Application (2019-2024) & (USD Million)

Table 102. Global Atomic Layer Etching (ALE) Consumption Value by Application (2025-2030) & (USD Million)

Table 103. Global Atomic Layer Etching (ALE) Average Price by Application (2019-2024) & (US\$/Unit)

Table 104. Global Atomic Layer Etching (ALE) Average Price by Application (2025-2030) & (US\$/Unit)

Table 105. North America Atomic Layer Etching (ALE) Sales Quantity by Type (2019-2024) & (K Units)

Table 106. North America Atomic Layer Etching (ALE) Sales Quantity by Type (2025-2030) & (K Units)

Table 107. North America Atomic Layer Etching (ALE) Sales Quantity by Application (2019-2024) & (K Units)

Table 108. North America Atomic Layer Etching (ALE) Sales Quantity by Application (2025-2030) & (K Units)

Table 109. North America Atomic Layer Etching (ALE) Sales Quantity by Country (2019-2024) & (K Units)

Table 110. North America Atomic Layer Etching (ALE) Sales Quantity by Country (2025-2030) & (K Units)

Table 111. North America Atomic Layer Etching (ALE) Consumption Value by Country (2019-2024) & (USD Million)

Table 112. North America Atomic Layer Etching (ALE) Consumption Value by Country (2025-2030) & (USD Million)

Table 113. Europe Atomic Layer Etching (ALE) Sales Quantity by Type (2019-2024) & (K Units)

Table 114. Europe Atomic Layer Etching (ALE) Sales Quantity by Type (2025-2030) & (K Units)

Table 115. Europe Atomic Layer Etching (ALE) Sales Quantity by Application (2019-2024) & (K Units)

Table 116. Europe Atomic Layer Etching (ALE) Sales Quantity by Application (2025-2030) & (K Units)

Table 117. Europe Atomic Layer Etching (ALE) Sales Quantity by Country (2019-2024) & (K Units)

Table 118. Europe Atomic Layer Etching (ALE) Sales Quantity by Country (2025-2030) & (K Units)

Table 119. Europe Atomic Layer Etching (ALE) Consumption Value by Country (2019-2024) & (USD Million)

Table 120. Europe Atomic Layer Etching (ALE) Consumption Value by Country

(2025-2030) & (USD Million)

Table 121. Asia-Pacific Atomic Layer Etching (ALE) Sales Quantity by Type  
(2019-2024) & (K Units)

Table 122. Asia-Pacific Atomic Layer Etching (ALE) Sales Quantity by Type  
(2025-2030) & (K Units)

Table 123. Asia-Pacific Atomic Layer Etching (ALE) Sales Quantity by Application  
(2019-2024) & (K Units)

Table 124. Asia-Pacific Atomic Layer Etching (ALE) Sales Quantity by Application  
(2025-2030) & (K Units)

Table 125. Asia-Pacific Atomic Layer Etching (ALE) Sales Quantity by Region  
(2019-2024) & (K Units)

Table 126. Asia-Pacific Atomic Layer Etching (ALE) Sales Quantity by Region  
(2025-2030) & (K Units)

Table 127. Asia-Pacific Atomic Layer Etching (ALE) Consumption Value by Region  
(2019-2024) & (USD Million)

Table 128. Asia-Pacific Atomic Layer Etching (ALE) Consumption Value by Region  
(2025-2030) & (USD Million)

Table 129. South America Atomic Layer Etching (ALE) Sales Quantity by Type  
(2019-2024) & (K Units)

Table 130. South America Atomic Layer Etching (ALE) Sales Quantity by Type  
(2025-2030) & (K Units)

Table 131. South America Atomic Layer Etching (ALE) Sales Quantity by Application  
(2019-2024) & (K Units)

Table 132. South America Atomic Layer Etching (ALE) Sales Quantity by Application  
(2025-2030) & (K Units)

Table 133. South America Atomic Layer Etching (ALE) Sales Quantity by Country  
(2019-2024) & (K Units)

Table 134. South America Atomic Layer Etching (ALE) Sales Quantity by Country  
(2025-2030) & (K Units)

Table 135. South America Atomic Layer Etching (ALE) Consumption Value by Country  
(2019-2024) & (USD Million)

Table 136. South America Atomic Layer Etching (ALE) Consumption Value by Country  
(2025-2030) & (USD Million)

Table 137. Middle East & Africa Atomic Layer Etching (ALE) Sales Quantity by Type  
(2019-2024) & (K Units)

Table 138. Middle East & Africa Atomic Layer Etching (ALE) Sales Quantity by Type  
(2025-2030) & (K Units)

Table 139. Middle East & Africa Atomic Layer Etching (ALE) Sales Quantity by  
Application (2019-2024) & (K Units)

Table 140. Middle East & Africa Atomic Layer Etching (ALE) Sales Quantity by Application (2025-2030) & (K Units)

Table 141. Middle East & Africa Atomic Layer Etching (ALE) Sales Quantity by Region (2019-2024) & (K Units)

Table 142. Middle East & Africa Atomic Layer Etching (ALE) Sales Quantity by Region (2025-2030) & (K Units)

Table 143. Middle East & Africa Atomic Layer Etching (ALE) Consumption Value by Region (2019-2024) & (USD Million)

Table 144. Middle East & Africa Atomic Layer Etching (ALE) Consumption Value by Region (2025-2030) & (USD Million)

Table 145. Atomic Layer Etching (ALE) Raw Material

Table 146. Key Manufacturers of Atomic Layer Etching (ALE) Raw Materials

Table 147. Atomic Layer Etching (ALE) Typical Distributors

Table 148. Atomic Layer Etching (ALE) Typical Customers

## LIST OF FIGURE

s

Figure 1. Atomic Layer Etching (ALE) Picture

Figure 2. Global Atomic Layer Etching (ALE) Consumption Value by Type, (USD Million), 2019 & 2023 & 2030

Figure 3. Global Atomic Layer Etching (ALE) Consumption Value Market Share by Type in 2023

Figure 4. Single Reaction Station Examples

Figure 5. Double Reaction Station Examples

Figure 6. Global Atomic Layer Etching (ALE) Consumption Value by Application, (USD Million), 2019 & 2023 & 2030

Figure 7. Global Atomic Layer Etching (ALE) Consumption Value Market Share by Application in 2023

Figure 8. Nanofabrication Examples

Figure 9. Semiconductor Manufacturing Examples

Figure 10. Advanced Materials Research Examples

Figure 11. Global Atomic Layer Etching (ALE) Consumption Value, (USD Million): 2019 & 2023 & 2030

Figure 12. Global Atomic Layer Etching (ALE) Consumption Value and Forecast (2019-2030) & (USD Million)

Figure 13. Global Atomic Layer Etching (ALE) Sales Quantity (2019-2030) & (K Units)

Figure 14. Global Atomic Layer Etching (ALE) Average Price (2019-2030) & (US\$/Unit)

Figure 15. Global Atomic Layer Etching (ALE) Sales Quantity Market Share by Manufacturer in 2023



Figure 16. Global Atomic Layer Etching (ALE) Consumption Value Market Share by Manufacturer in 2023

Figure 17. Producer Shipments of Atomic Layer Etching (ALE) by Manufacturer Sales Quantity (\$MM) and Market Share (%): 2023

Figure 18. Top 3 Atomic Layer Etching (ALE) Manufacturer (Consumption Value) Market Share in 2023

Figure 19. Top 6 Atomic Layer Etching (ALE) Manufacturer (Consumption Value) Market Share in 2023

Figure 20. Global Atomic Layer Etching (ALE) Sales Quantity Market Share by Region (2019-2030)

Figure 21. Global Atomic Layer Etching (ALE) Consumption Value Market Share by Region (2019-2030)

Figure 22. North America Atomic Layer Etching (ALE) Consumption Value (2019-2030) & (USD Million)

Figure 23. Europe Atomic Layer Etching (ALE) Consumption Value (2019-2030) & (USD Million)

Figure 24. Asia-Pacific Atomic Layer Etching (ALE) Consumption Value (2019-2030) & (USD Million)

Figure 25. South America Atomic Layer Etching (ALE) Consumption Value (2019-2030) & (USD Million)

Figure 26. Middle East & Africa Atomic Layer Etching (ALE) Consumption Value (2019-2030) & (USD Million)

Figure 27. Global Atomic Layer Etching (ALE) Sales Quantity Market Share by Type (2019-2030)

Figure 28. Global Atomic Layer Etching (ALE) Consumption Value Market Share by Type (2019-2030)

Figure 29. Global Atomic Layer Etching (ALE) Average Price by Type (2019-2030) & (US\$/Unit)

Figure 30. Global Atomic Layer Etching (ALE) Sales Quantity Market Share by Application (2019-2030)

Figure 31. Global Atomic Layer Etching (ALE) Consumption Value Market Share by Application (2019-2030)

Figure 32. Global Atomic Layer Etching (ALE) Average Price by Application (2019-2030) & (US\$/Unit)

Figure 33. North America Atomic Layer Etching (ALE) Sales Quantity Market Share by Type (2019-2030)

Figure 34. North America Atomic Layer Etching (ALE) Sales Quantity Market Share by Application (2019-2030)

Figure 35. North America Atomic Layer Etching (ALE) Sales Quantity Market Share by

Country (2019-2030)

Figure 36. North America Atomic Layer Etching (ALE) Consumption Value Market Share by Country (2019-2030)

Figure 37. United States Atomic Layer Etching (ALE) Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 38. Canada Atomic Layer Etching (ALE) Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 39. Mexico Atomic Layer Etching (ALE) Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 40. Europe Atomic Layer Etching (ALE) Sales Quantity Market Share by Type (2019-2030)

Figure 41. Europe Atomic Layer Etching (ALE) Sales Quantity Market Share by Application (2019-2030)

Figure 42. Europe Atomic Layer Etching (ALE) Sales Quantity Market Share by Country (2019-2030)

Figure 43. Europe Atomic Layer Etching (ALE) Consumption Value Market Share by Country (2019-2030)

Figure 44. Germany Atomic Layer Etching (ALE) Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 45. France Atomic Layer Etching (ALE) Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 46. United Kingdom Atomic Layer Etching (ALE) Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 47. Russia Atomic Layer Etching (ALE) Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 48. Italy Atomic Layer Etching (ALE) Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 49. Asia-Pacific Atomic Layer Etching (ALE) Sales Quantity Market Share by Type (2019-2030)

Figure 50. Asia-Pacific Atomic Layer Etching (ALE) Sales Quantity Market Share by Application (2019-2030)

Figure 51. Asia-Pacific Atomic Layer Etching (ALE) Sales Quantity Market Share by Region (2019-2030)

Figure 52. Asia-Pacific Atomic Layer Etching (ALE) Consumption Value Market Share by Region (2019-2030)

Figure 53. China Atomic Layer Etching (ALE) Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 54. Japan Atomic Layer Etching (ALE) Consumption Value and Growth Rate (2019-2030) & (USD Million)



Figure 55. Korea Atomic Layer Etching (ALE) Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 56. India Atomic Layer Etching (ALE) Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 57. Southeast Asia Atomic Layer Etching (ALE) Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 58. Australia Atomic Layer Etching (ALE) Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 59. South America Atomic Layer Etching (ALE) Sales Quantity Market Share by Type (2019-2030)

Figure 60. South America Atomic Layer Etching (ALE) Sales Quantity Market Share by Application (2019-2030)

Figure 61. South America Atomic Layer Etching (ALE) Sales Quantity Market Share by Country (2019-2030)

Figure 62. South America Atomic Layer Etching (ALE) Consumption Value Market Share by Country (2019-2030)

Figure 63. Brazil Atomic Layer Etching (ALE) Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 64. Argentina Atomic Layer Etching (ALE) Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 65. Middle East & Africa Atomic Layer Etching (ALE) Sales Quantity Market Share by Type (2019-2030)

Figure 66. Middle East & Africa Atomic Layer Etching (ALE) Sales Quantity Market Share by Application (2019-2030)

Figure 67. Middle East & Africa Atomic Layer Etching (ALE) Sales Quantity Market Share by Region (2019-2030)

Figure 68. Middle East & Africa Atomic Layer Etching (ALE) Consumption Value Market Share by Region (2019-2030)

Figure 69. Turkey Atomic Layer Etching (ALE) Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 70. Egypt Atomic Layer Etching (ALE) Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 71. Saudi Arabia Atomic Layer Etching (ALE) Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 72. South Africa Atomic Layer Etching (ALE) Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 73. Atomic Layer Etching (ALE) Market Drivers

Figure 74. Atomic Layer Etching (ALE) Market Restraints

Figure 75. Atomic Layer Etching (ALE) Market Trends

Figure 76. Porters Five Forces Analysis

Figure 77. Manufacturing Cost Structure Analysis of Atomic Layer Etching (ALE) in 2023

Figure 78. Manufacturing Process Analysis of Atomic Layer Etching (ALE)

Figure 79. Atomic Layer Etching (ALE) Industrial Chain

Figure 80. Sales Quantity Channel: Direct to End-User vs Distributors

Figure 81. Direct Channel Pros & Cons

Figure 82. Indirect Channel Pros & Cons

Figure 83. Methodology

Figure 84. Research Process and Data Source

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