+357 96 030922
info@marketpublishers.com

Global Semiconductor Gas Abatement Systems Supply, Demand and Key Producers, 2026-2032

https://marketpublishers.com/r/G6F01793BE9AEN.html
Date: April 2026
Pages: 155
Price: US$ 4,480.00 (Single User License)
ID: G6F01793BE9AEN

Abstracts

The global Semiconductor Gas Abatement Systems market size is expected to reach $ 3607 million by 2032, rising at a market growth of 9.3% CAGR during the forecast period (2026-2032).

Semiconductor Gas Abatement Systems are core “sub-fab” assets that sit at the intersection of environmental compliance, fab safety, and tool uptime economics. Their purpose is straightforward: convert or remove hazardous and high-GWP exhaust streams generated by semiconductor processing, while ensuring stable downstream ducting and utilities operation. In practice, the product is purchased and managed like mission-critical infrastructure rather than discretionary “green equipment.” The decision lens is engineering-commercial: destruction/removal efficiency by gas family, flow margin and transient handling, energy and water intensity, salt formation and corrosion control, preventive maintenance cadence, availability metrics, and integration with pumps, valves, and monitoring. As greenhouse gas accounting frameworks and emissions reduction targets tighten, Semiconductor Gas Abatement Systems continue to move from optional add-ons to baseline requirements for ramping advanced processes at volume.

Competitive structure is characterized by “top-heavy concentration with a meaningful long tail,” reinforced by M&A and portfolio consolidation. On a 2025 revenue basis, the top five suppliers—Ebara, GST (Global Standard Technology), Atlas Copco (Edwards and CSK brands), Shanghai Shengjian Technology, and Busch Group—collectively account for ~59.4% of global market revenue and ~56.7% of global shipments. Individually, 2025 revenue shares are approximately 13.9% (Ebara), 13.3% (GST), 12.4% (Atlas Copco), 10.9% (Shanghai Shengjian), and 9.0% (Busch Group). The remaining “Others” bucket still represents ~10% of revenue, which is commercially

+357 96 030922
info@marketpublishers.com

important: it signals persistent room for regional specialists and niche technology players where local service speed, qualification history, and process-specific gas handling differentiate outcomes. The recent consolidation wave is strategically logical—platform suppliers broaden abatement lineups, strengthen regional manufacturing footprints, and deepen aftermarket pull-through from media, catalyst packs, and service contracts.

Regionally, demand is overwhelmingly Asia-centric and continues to skew further in that direction. In 2025, Asia-Pacific shipments are 14,832 sets, or ~75.4% of global demand, while North America and Europe represent ~10.9% and ~11.0%, respectively. By 2032, Asia-Pacific reaches 25,941 sets, lifting its share toward ~77%–78%, reflecting sustained wafer capacity expansion and process intensity in the region. Supply, however, remains globally distributed: 2025 production volume is led by Europe (5,880 sets) and Japan (4,273 sets), with China (3,100), North America (2,696), and South Korea (2,524) as other major manufacturing bases. Looking forward, China's production volume rises to 5,809 sets by 2032, delivering the fastest 2026–2032 production CAGR in the dataset (~9.7%), which is a clear indicator of accelerating localization and regional redundancy in the supply chain. This "Asia demand / multi-pole supply" configuration keeps lead time, spares localization, and field service coverage as decisive commercial battlegrounds.

By technology type, 2025 revenue mix shows a diversified market rather than a single dominant mechanism. Combustion-wash remains the largest category at US$446.96M (~26.1%), followed by Dry at US$405.10M (~23.7%), Catalytic at US$296.73M (~17.4%), and Plasma-wet at US$289.21M (~16.9%). Wet contributes US$189.05M (~11.1%) and Others US$82.22M (~4.8%). Growth differentials across 2026–2032 are meaningful: Dry (~10.6% CAGR) and Catalytic (~10.2%) outgrow Combustion-wash (~7.9%), consistent with increasing attention to utility efficiency, water constraints, and high-complexity gas families. Plasma-wet, while already material, tends to behave as a "performance upgrade lever" tied to advanced process exhaust requirements and reliability engineering, supported by new product introductions and planned mass production timelines among leading suppliers.

By application, 2025 demand is anchored in deposition and etch, with deposition taking the revenue lead. CVD and ALD represent US$654.50M (~38.3%), Plasma Etching US$530.48M (~31.0%), Ion Implantation US$206.07M (~12.1%), and EPI US$189.75M (~11.1%), while Others account for US$128.47M (~7.5%). Over 2026–2032, CVD and ALD lead growth at ~10.5% CAGR, reflecting increasing deposition intensity and tool counts in advanced device architectures, while Plasma Etching grows at ~8.2%, more

+357 96 030922
info@marketpublishers.com

weighted toward installed-base upgrades, performance tightening, and stability improvements. Taken together across supplier, region, type, and application, Semiconductor Gas Abatement Systems are evolving into a platform business defined by integrated delivery, localized service execution, and lifecycle monetization through consumables and uptime-linked service models.

This report studies the global Semiconductor Gas Abatement Systems production, demand, key manufacturers, and key regions.

This report is a detailed and comprehensive analysis of the world market for Semiconductor Gas Abatement Systems and provides market size (US$ million) and Year-over-Year (YoY) Growth, considering 2025 as the base year. This report explores demand trends and competition, as well as details the characteristics of Semiconductor Gas Abatement Systems that contribute to its increasing demand across many markets.

Highlights and key features of the study

Global Semiconductor Gas Abatement Systems total production and demand, 2021-2032, (Units)

Global Semiconductor Gas Abatement Systems total production value, 2021-2032, (USD Million)

Global Semiconductor Gas Abatement Systems production by region & country, production, value, CAGR, 2021-2032, (USD Million) & (Units), (based on production site)

Global Semiconductor Gas Abatement Systems consumption by region & country, CAGR, 2021-2032 & (Units)

U.S. VS China: Semiconductor Gas Abatement Systems domestic production, consumption, key domestic manufacturers and share

Global Semiconductor Gas Abatement Systems production by manufacturer, production, price, value and market share 2021-2026, (USD Million) & (Units)

Global Semiconductor Gas Abatement Systems production by Technology, production, value, CAGR, 2021-2032, (USD Million) & (Units)

+357 96 030922
info@marketpublishers.com

Global Semiconductor Gas Abatement Systems production by Process, production, value, CAGR, 2021-2032, (USD Million) & (Units)

This report profiles key players in the global Semiconductor Gas Abatement Systems market based on the following parameters - company overview, production, value, price, gross margin, product portfolio, geographical presence, and key developments. Key companies covered as a part of this study include Ebara, Atlas Copco (Edwards and CSK brands), GST (Global Standard Technology), Shanghai Shengjian Technology, Busch Group, DAS Environmental Expert, CS Clean Solutions, Kanken Techno, Beijing Jingyi Automation Equipment, Unisem, etc.

This report also provides key insights about market drivers, restraints, opportunities, new product launches or approvals.

Stakeholders would have ease in decision-making through various strategy matrices used in analyzing the World Semiconductor Gas Abatement Systems market

Detailed Segmentation:

Each section contains quantitative market data including market by value (US$ Millions), volume (production, consumption) & (Units) and average price (US$/Unit) by manufacturer, by Technology, and by Process. Data is given for the years 2021-2032 by year with 2025 as the base year, 2026 as the estimate year, and 2027-2032 as the forecast year.

Global Semiconductor Gas Abatement Systems Market, By Region:

United States

China

Europe

Japan

South Korea

ASEAN

India

Rest of World

Global Semiconductor Gas Abatement Systems Market, Segmentation by Technology:

Combustion-wash Type

Dry Type

Catalytic Type

Wet Type

Plasma-wet Type

Others

Global Semiconductor Gas Abatement Systems Market, Segmentation by Deployment:

Integrated Type

Standalone Type

Global Semiconductor Gas Abatement Systems Market, Segmentation by End-use Manufacturing:

Logic/Foundry

Memory (DRAM/HBM, 3D NAND)

Display/LED/Solar

Others

Global Semiconductor Gas Abatement Systems Market, Segmentation by Process:

Plasma Etching

CVD and ALD

EPI

Ion Implantation

Others

Companies Profiled:

Ebara

Atlas Copco (Edwards and CSK brands)

GST (Global Standard Technology)

Shanghai Shengjian Technology

Busch Group

DAS Environmental Expert

CS Clean Solutions

Kanken Techno

Beijing Jingyi Automation Equipment

Unisem

Ecosys Abatement

CECO Environmental

Highvac

Nippon Sanso (Mitsubishi Chemical)

Anguil Environmental Systems

Resonac (formerly Showa Denko)

Key Questions Answered:

1. How big is the global Semiconductor Gas Abatement Systems market?
2. What is the demand of the global Semiconductor Gas Abatement Systems market?
3. What is the year over year growth of the global Semiconductor Gas Abatement Systems market?
4. What is the production and production value of the global Semiconductor Gas Abatement Systems market?
5. Who are the key producers in the global Semiconductor Gas Abatement Systems market?
6. What are the growth factors driving the market demand?

+357 96 030922
info@marketpublishers.com

Contents

8 MARKET ANALYSIS BY PROCESS

9 COMPANY PROFILES

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

List Of Tables

LIST OF TABLES

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

List Of Figures

LIST OF FIGURES

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

Market Publishers

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Global Semiconductor Gas Abatement Systems Supply, Demand and Key Producers, 2026-2032

Product link: https://marketpublishers.com/r/G6F01793BE9AEN.html

Price: US$ 4,480.00 (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/G6F01793BE9AEN.html