



Global and China Semiconductor Equipment Industry Report, 2019-2025

June 2019

STUDY GOAL AND OBJECTIVES

This report provides the industry executives with strategically significant competitor information, analysis, insight and projection on the competitive pattern and key companies in the industry, crucial to the development and implementation of effective business, marketing and R&D programs.

REPORT OBJECTIVES

- ◆ To establish a comprehensive, factual, annually updated and cost-effective information base on market size, competition patterns, market segments, goals and strategies of the leading players in the market, reviews and forecasts.
- ◆ To assist potential market entrants in evaluating prospective acquisition and joint venture candidates.
- ◆ To complement the organizations' internal competitor information gathering efforts with strategic analysis, data interpretation and insight.
- ◆ To suggest for concerned investors in line with the current development of this industry as well as the development tendency.
- ◆ To help company to succeed in a competitive market, and

METHODOLOGY

Both primary and secondary research methodologies were used in preparing this study. Initially, a comprehensive and exhaustive search of the literature on this industry was conducted. These sources included related books and journals, trade literature, marketing literature, other product/promotional literature, annual reports, security analyst reports, and other publications. Subsequently, telephone interviews or email correspondence was conducted with marketing executives etc. Other sources included related magazines, academics, and consulting companies.

INFORMATION SOURCES

The primary information sources include Company Reports, and National Bureau of Statistics of China etc.

Abstract

The semiconductor industry with high technical threshold is advancing speedily. Every generation of products requires unique processes and equipment. With progresses in semiconductor manufacturing processes as well as the expedited iterations of semiconductor manufacturing equipment, the global sales of new semiconductor manufacturing equipment in 2018 will grow by 9.7% to \$61.6 billion, a figure projected to hit \$98.2 billion by 2025, a CAGR of 6.9% between 2018 and 2025.

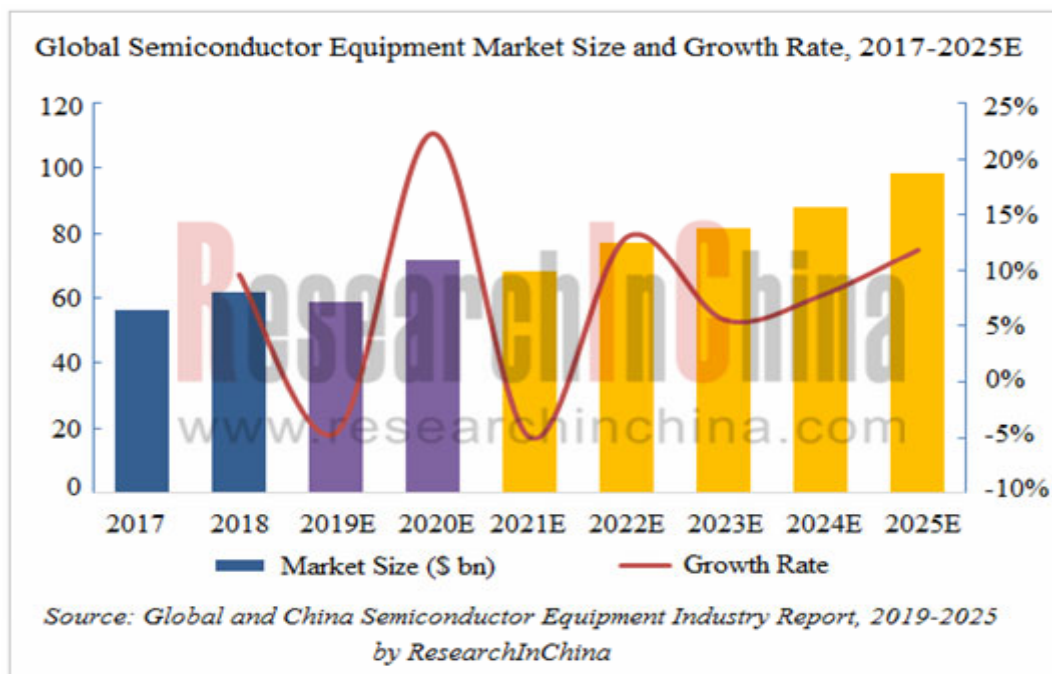
The semiconductor process involves monocrystalline silicon wafer fabrication, IC design, IC manufacturing, IC packaging and testing. The production of monocrystalline silicon wafers needs monocrystalline furnace; and six types of equipment are indispensable to IC manufacturing, including lithography machine, etching machine, thin film equipment, diffusion/ion implantation equipment, wet process equipment, and process detector. Among semiconductor equipment, wafer foundry equipment account for about 80% of procurement, testing equipment 8%, packaging equipment 7%, and silicon wafer plant equipment and others 5%.

Characterizing a rather high concentration, semiconductor equipment manufacturing is a typical capital- and technology-intensive sector with high technical barriers and in want of huge capital and manpower. In 2018, the world's top ten semiconductor equipment vendors commanded a combined 71.4% market share, and the top five giants enjoyed 61.4% market shares together. Of the top ten, ASML comes from the Netherlands and the rest are based in the United States and Japan.

The localization rate of semiconductor equipment in Mainland China is merely 11.5%, and the China-made semiconductor equipment make up roughly 2% of the global market. In 2018, the global sales of semiconductor equipment achieved \$61.6 billion including \$10.1 billion or 16.4% from Chinese Mainland which is the third largest market after Taiwan and South Korea. Yet, there is still a huge technical gap between the semiconductor equipment made in China and foreign peers. In a word, Chinese equipment with low brand awareness is less competitive and take small market shares.

Global and China Semiconductor Equipment Industry Report, 2019-2025 covers the following:

- Global semiconductor industry (the market size of wafer, memory, IC and other industries, production and marketing, competitive landscape, etc.);
- Semiconductor equipment industry (development history, market size, competitive landscape, etc.);
- Semiconductor equipment market segments (lithography equipment, etching equipment, packaging and testing equipment, thin film growth equipment, cleaning equipment, etc.);
- Semiconductor downstream industries including mobile phone, computer and so forth (market size, competitive landscape, development trends, etc.);
- 15 Chinese and foreign vendors like AMAT, ASML and TEL (profile, financials, R&D, production bases, technical characteristics, etc.).



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