

# Entegris comes to Taiwan for the grand opening of the Kaohsiung Facility! Why does Entegris stay close to TSMC despite geopolitical tensions?

Entegris, one of TSMC's key suppliers, opens its largest global manufacturing facility in Kaohsiung today (May 10th). Why does Entegris continue to invest in Taiwan amidst geopolitical tensions? What are the merits?

## Where 2 nanometers are, there are suppliers! Entegris' mature and advanced manufacturing process is all inclusive

TSMC's key chemical supplier Entegris opens its manufacturing facility in Kaohsiung on May 10th, covering 54,000 square meters, making it Entegris' largest manufacturing facility in the world. Entegris President, CEO and Chair of the Board of Directors, Bertrand Loy and Entegris Taiwan Country President, Alvin Hsieh, provide an update regarding the facility's current status and revenue expectations.

Entegris is an American leading supplier of advanced materials and process solutions to many wafer foundries such as TSMC, Samsung Electronics, UMC and Micron and others. Its products include specialty chemicals, photoresist materials, EUV (Extreme Ultraviolet) photomask containers. Entegris, along with Taiwan's Gudeng Precision, are the world's only two photomask suppliers.



During a media interview, Loy comments that Entegris has four main divisions: Speciality Chemicals and Engineered Materials, Advanced Planarization Solutions, Microcontamination Control, and Advancec Materials Handling.

Alvin Hsieh adds that Entegris' products in Taiwan, including slurries, chemical drum containers and filters, are the world's most advanced products. He states that chemicals affect advanced process yields significantly compared to those of legacy processes. **And Entegris' goal in Taiwan is indeed to aim for the 2nm and even more advanced processes.**

Hsieh elaborates that while in the past, there are research and development teams located in Taiwan, there is a significant time lag between the completion of development to the actual production and completion of delivery, increasing the time required for a development cycle. By committing in Kaohsiung to build a manufacturing facility, research and development and sales and production are brought into the same region, allowing for accelerated development and close service to customers such as TSMC, creating a significant advantage.

However, he proceeds to state that the Kaohsiung facility is also capable of producing 28nm and below products, implying that 3nm, 2nm and even more advanced process products will be supplied by this particular facility.

Furthermore, Entegris' investment will also benefit local suppliers. Loy points out that Entegris will strive to increase

the proportion of domestic procurement. Hsieh simultaneously adds that nearly 60% of all chemical and almost all gas suppliers are domestic Taiwan suppliers.

## Full operation will generate up to USD 500 million of revenue. Japan and Korean foundries depend on Taiwan

Loy states that by the end of the year, Entegris will have invested up to USD 500 million in the facility, expanding the production capacity of advanced liquid filters, high purity chemical drums and advanced deposition materials. The facility will be equipped with multiple advanced technology and processes to decrease waste generation, water usage and power consumption, all the while increasing the ratio of renewable energy used.

When asked about operation goals, Loy states that Entegris aims to reach full capacity by 2025. And by reaching full capacity, the facility will be able to contribute USD 500 million in global sales revenue, “This facility does not only supply customers in Taiwan but also those in Japan, Korea and Singapore.”



Entegris Kaohsiung facility boasts automation and advanced manufacturing capabilities, providing the highest quality solution while minimizing waste generation.



Entegris currently has 720 full-time employees in Taiwan.

Currently, Entegris has around 720 full-time employees with around 160 of them in the Kaohsiung facility. The number is expected to reach 200 employees by the end of the year. Alvin Hsieh comments that by 2025, Entegris will create another 200 job opportunities and by then Entegris will have up to 1,000 employees in Taiwan.

Entegris has also begun cultivating their own talents, collaborating with National Taiwan University and National Tsing Hua University on STEM scholarship programs, providing five students 3-year sponsorship per university. Each one of the 10 students is expected to receive USD 5,000 scholarship annually.