

ULVAC

ULTIMATE IN VACUUM

ULVAC, Inc.

Corporate Profile

2023 - 2024

ULVAC

ULVAC, Inc.

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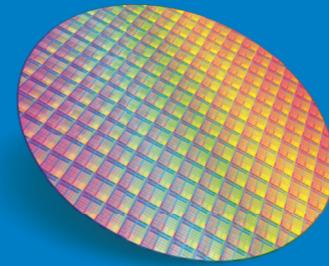
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www.ulvac.co.jp/en

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Aircraft



Semiconductors



Smartphones

Vacuum technology realized in everyday life



Drones



Pharmaceuticals



Packaging Materials



Automobiles



Flat Panel Displays



Food Processing

“Really? Even these?”

You might be surprised to know how many different products are made with vacuum technology. It’s used for everyday items like food, razors, and smartphones, as well as in cutting-edge fields like biotechnology and aerospace. ULVAC continues to seek out the potential of vacuum technology and discover many innovations, because this technology is key to the future development of science and industry. We continue to challenge ourselves to generate new value that meets the needs of the times and enriches our lives.

TOP MESSAGE

Building a flourishing future by creating innovative solutions to deliver industrial and scientific advancements

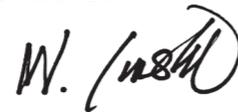
ULVAC was founded in 1952, a time when vacuum technology was not yet widely used in Japan.

We began as a venture company started by young researchers who wanted to contribute to the development of science and industry through vacuum technology.

Since then, our expertise has grown to encompass many aspects of vacuum technology, including vacuum equipment, components, materials, and analytical instruments, enabling the ULVAC of today to provide comprehensive R&D, manufacturing, sales, and customer support services.

With your continued support, ULVAC will continue to pursue innovative solutions to support all sorts of industries.

Setsuo Iwashita
President and CEO




BASIC CORPORATE PHILOSOPHY

ULVAC Group aims to contribute to the development of industries and science by comprehensively utilizing its vacuum and peripheral technologies through the mutual cooperation and collaboration of the Group companies.

ULVAC

Origin of Company Name

'ULVAC' is a combination of 'UL' from 'ultimate' and 'VAC' from 'vacuum,' signifying that we pursue the 'Ultimate in Vacuum Technology.' Seeking to make a dramatic leap forward, we will further develop the ULVAC brand by pursuing the development of new technological fields that complement vacuum technology.

HISTORY

Since our founding over 70 years ago, we have boldly taken up the challenge of creating new technologies in the field of vacuum technology in response to the changing industrial structures of the times, supporting the revival of industry and rapid growth. As the market evolves, we are actively globalizing our operations, with overseas sales now accounting for approximately 70% of our total sales.

The passion those young researchers felt to contribute to the development of science and industry through vacuum technology when they founded this company continues to be passed down in ULVAC's DNA.

1952 | JAPAN VACUUM ENGINEERING CO., LTD. established
| Received the first order of vacuum evaporation equipment for coating automobile parts from ICHIKOH INDUSTRIES (formerly HAKKOSHA)

1955 | Established the Omori Plant and started manufacturing equipment domestically



1959 | Established the Yokohama Plant

1960 | Developed large-scale vacuum equipment for heavy industries, such as vacuum melting furnaces and vacuum distillation equipment

1964 | Established ULVAC's first overseas subsidiary in Hong Kong

1968 | Completed the Chigasaki Head Office/Plant

1972 | Established the Institute for Super Materials as ULVAC's first full-scale research institute

1975 | Received order from IBM for "SYSTEM 731," the world's first computer-controlled, fully automatic vacuum evaporation equipment



1986 | The "MCH Series," the world's first multi-chamber sputtering system, is acclaimed by many semiconductor manufacturers



1988 | The "SHD Series," a sputtering system for manufacturing hard disks, becomes a global hit

1990 | Established the Fuji Susono Plant as a dedicated site for semiconductor production equipment

1992 | Launched the "SMD Series" deposition system for LCD production, which becomes a cornerstone of the Flat Panel Display (FPD) business



1995 | Established a vacuum pump production base in China and a sales/service base in South Korea

2001 | Established the Institute for Semiconductor and Electronics Technologies
| Company name changed to ULVAC, Inc.

2004 | Completed new Chigasaki Head Office/Plant buildings



| Listed stock on the First Section of the Tokyo Stock Exchange
| Established a production base for full-scale vacuum equipment in Suzhou, China

2005 | Established a large-scale production base for large-size FPD production equipment in South Korea

2006 | Established a production subsidiary for large-size FPD production equipment in Taiwan

2007 | Established the Chiba Tomisato Plant for the development and manufacturing of materials
| Received order for integrated production line for thin-film solar cells (TFSCs)

2011 | Established the Korea Institute for Super Materials in South Korea

2015 | Established the Future Technology Research Laboratory

2016 | Began manufacturing production equipment for large-size displays at ULVAC (SUZHOU) CO., LTD.

2018 | Established the ULVAC-Osaka University Joint Research Laboratory for Future Technology at Osaka University

2021 | Established the ULVAC Advanced Technology Collaborative Research Cluster at the Tokyo Institute of Technology

2022 | Celebrated 70th anniversary of the company's founding



FPD*¹ Production Equipment



ULVAC is recognized as the global leader in sputtering systems for liquid crystal display applications. We provide state-of-the-art vacuum technology for organic LED production equipment and develop next-generation display technologies. We also provide solutions from R&D to manufacturing, sales and support to our FPD customers for TVs, smartphones, PCs, and tablets.

*1 FPD: Flat Panel Display



- Liquid crystal display production equipment
- Organic LED production equipment
- Evaporation roll coater

Semiconductor and Electronic Device Production Equipment



We are beginning to see a new socio-industrial structure as a result of IoT, a network of many objects connected to the Internet; big data, in which huge amounts of data are analyzed to generate new value; generative AI, which has been made possible thanks to advanced high-speed information processing technology; and next-generation automobile technologies such as autonomous driving and EVs, which are evolving at an ever faster pace. In support of such technological innovations, we pursue R&D and innovate technology and production to help customers worldwide develop and/or produce products such as memory, logic, power and analog semiconductors, MEMS, communication devices, and optoelectronics.



- Semiconductor production equipment (memory, logic, etc.)
- Electronic device production equipment (power semiconductors, MEMS, communication devices, optoelectronics, etc.)
- Advanced packaging production equipment (WL-CSP, FoPLP, etc.)

Components



Our lives are surrounded by products produced by vacuum technology and cryogenic technology. For example, these technologies are essential in the manufacture of products such as smartphones and electronic components. ULVAC provides high value-added products to the satisfaction of customers around the globe, ranging from vacuum pumps necessary to create a vacuum to vacuum gauges that measure vacuum (pressure), process gas monitors that identify gas type, and helium leak detectors that check for leaks to maintain the vacuum, as well as power supplies, cryopumps, cryogenic equipment, and other parts for vacuum equipment.



- Vacuum pumps
- Vacuum gauges
- Helium leak detectors
- Process gas monitors
- Deposition controllers
- Power supplies
- Vacuum valves
- Vacuum transfer robots
- Cryopumps
- Cryogenic equipment

Industrial Equipment



Since its founding, ULVAC has always contributed to the development of various industries, including the heavy steel and metal industries as well as the automobile and home appliance industries, by providing equipment and technologies in keeping with the times. Today, we are making full use of the fundamental technologies we have cultivated so far to provide vacuum melting and vacuum sintering furnaces for rare earth magnets used in EV drive motors, vacuum sintering furnaces for manufacturing tantalum capacitors, vacuum brazing furnaces for manufacturing heat exchanger parts, and diffusion furnaces for manufacturing silicon wafers. In the field of life sciences, we provide a variety of solutions for a wide range of industries and fields, including lyophilizers for pharmaceuticals and centrifugal thin film evaporators for pharmaceutical ingredients.



- Vacuum heat treatment furnaces
- Vacuum brazing furnaces
- Vacuum melting furnaces
- Lyophilizers
- Micropowderdry™ systems
- Centrifugal thin film evaporators
- Automatic He leak test systems



CORPORATE DATA

As of June 30th, 2023

Name	ULVAC, Inc.
Head Office	2500 Hagisono, Chigasaki, Kanagawa, Japan
Established	August 23, 1952
Capital	20,873,042,500 JPY
Net sales	Consolidated 227.528 billion JPY (Non-consolidated 94.25 billion JPY)
Number of Employees	Consolidated 6,264 (Non-consolidated 1,710)
Business Areas	Develops, manufactures, sells, and provides customer support for vacuum equipment, peripheral devices, vacuum components, and materials for the flat panel display, semiconductor, electronic, electric, metal, machinery, automobile, chemical, food product, and medical product industries, as well as universities and research labs, and engages in the import and export of various equipment. Additionally, provides research guidance and technical advice on vacuum technologies in general.

Materials



We provide high-quality, high-efficiency advanced materials for vacuum technology. We develop, manufacture, and sell thin film materials (mainly sputtering targets) used in deposition processes for semiconductor/electronic devices and FPDs, contributing to the development and production of our customers' state-of-the-art devices. In the field of high-performance materials, we develop high-melting-point metal (e.g., tantalum, niobium) parts for electronic devices and accelerators and for the chemical and medical industries, and also melt, process, and manufacture parts made from high-melting-point metals that are difficult to work with, according to customer requirements.



- Sputtering target materials
- High-melting-point metal materials and components
- Nano-metal inks

Surface Analysis Instruments, Mask Blanks*, etc.



We provide technologies derived from our vacuum manufacturing equipment in many industries. In our analytical equipment line, we develop, manufacture, and sell surface analysis instruments mainly to research institutions. In our control system line, we manufacture and sell drive control devices for industrial machinery primarily to the automobile industry. We also develop, manufacture, and sell mask blanks for semiconductors and large-size mask blanks for FPDs, which are key components in the lithography process necessary to manufacture of semiconductors.

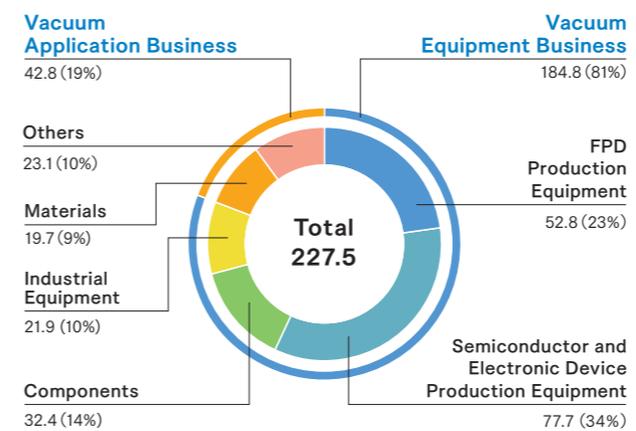
*2 Mask blanks: Substrates that hold the master patterns in the manufacture of semiconductor integrated circuits



- Surface analysis instruments
- Mask blanks, etc.

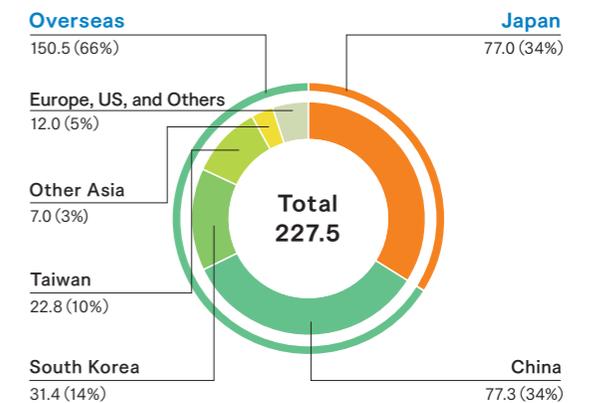
Net sales by business segment

(in billion JPY)



Net sales by region

(in billion JPY)

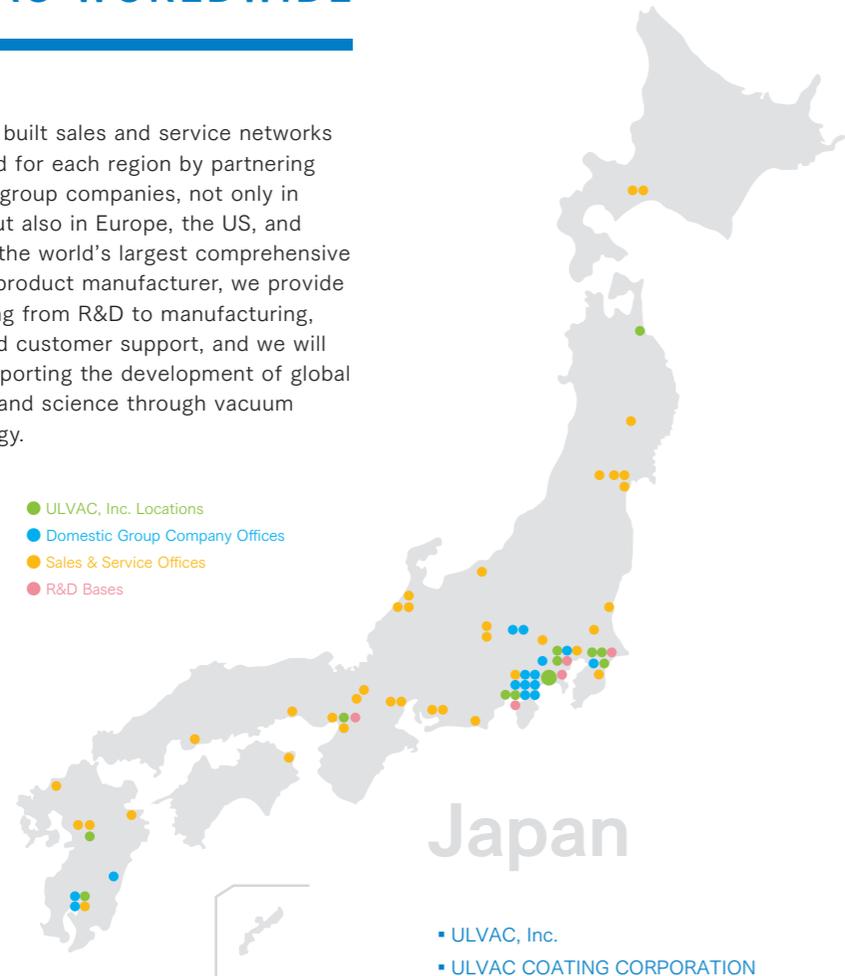


The figures indicated above are rounded off to the nearest unit, so the totals of the items may not match.

ULVAC WORLDWIDE

We have built sales and service networks optimized for each region by partnering with our group companies, not only in Japan, but also in Europe, the US, and Asia. As the world's largest comprehensive vacuum product manufacturer, we provide everything from R&D to manufacturing, sales, and customer support, and we will keep supporting the development of global industry and science through vacuum technology.

- ULVAC, Inc. Locations
- Domestic Group Company Offices
- Sales & Service Offices
- R&D Bases



Japan

- ULVAC, Inc.
- ULVAC COATING CORPORATION
- ULVAC KIKO, Inc.
- ULVAC-PHI, Inc.
- ULVAC CRYOGENICS INCORPORATED
- SHOWA SHINKU CO., LTD.
- ULVAC TECHNO, Ltd.
- ULVAC EQUIPMENT SALES, Inc.
- TIGOLD CORPORATION
- NISSIN SEIGYO Co., LTD.
- FINE SURFACE TECHNOLOGY CO., LTD.

Global Network



Europe

- ULVAC GmbH



Asia

- ULVAC (CHINA) HOLDING CO., LTD.
- ULVAC (Shanghai) Trading Co., Ltd.
- ULVAC (NINGBO) CO., LTD.
- ULVAC (SUZHOU) CO., LTD.
- ULVAC Research Center SUZHOU Co., Ltd.
- ULVAC Orient (Chengdu) Co., Ltd.
- ULVAC ORIENT TEST AND MEASUREMENT TECHNOLOGY (CHENGDU) CO., LTD.
- ULVAC CRYOGENICS (NINGBO) INCORPORATED
- ULVAC Automation Technology (Shanghai) Corporation
- ULVAC (Shenyang) Co., Ltd.
- ULVAC Materials (Suzhou) Co., Ltd.
- ULVAC Tianma Electric (Jingjiang) Co., Ltd.
- ULVAC VACUUM EQUIPMENT (SHANGHAI) CO., LTD.
- ULVAC Coating Technology (HEFEI) Co., Ltd.

- ULVAC SINGAPORE PTE LTD
- ULVAC (THAILAND) LTD.
- ULVAC MALAYSIA SDN. BHD.
- ULVAC SINGAPORE PTE LTD, India Branch



North America

- ULVAC Technologies, Inc.
- Physical Electronics USA, Inc.

- ULVAC KOREA, Ltd.
- Pure Surface Technology, Ltd.
- ULVAC CRYOGENICS KOREA INCORPORATED

- ULVAC TAIWAN INC.
- ULTRA CLEAN PRECISION TECHNOLOGIES CORP.
- ULVAC SOFTWARE CREATIVE TECHNOLOGY, CO., LTD.
- ULVAC Materials Taiwan, Inc.
- ULVAC AUTOMATION TAIWAN Inc.
- ULCOAT TAIWAN, Inc.