

ULVAC's Businesses

ULVAC has provided many products and technologies in a broad range of industries to meet the needs of our customers and the market.
At present, ULVAC operates in 6 business areas.

Vacuum equipment business

FPD and PV production equipment

ULVAC is involved with a range of FPD*1 and PV*2 manufacturing technologies, and in addition to the development of production equipment, we provide global solutions through the development of materials.

*1 FPD: Abbreviation for "flat panel display"

*2 PV: Abbreviation for "photovoltaic," which refers to solar power generation

Main Products

FPD production equipment

- LCD production equipment
- OLED production equipment
- Roll Coater

PV production equipment

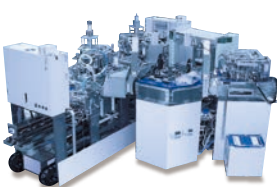
- Crystalline silicon solar cell production equipment
- Compound solar cell production equipment

Sputtering equipment, Vacuum evaporation equipment, CVD equipment, Ion implantation equipment, Encapsulation equipment for OLED, etc.

LCD production equipment

Proportion of net sales per business segment

43%



OLED production equipment

Product Use

- Thin-film deposition during the manufacture of LCD and OLED panels
- Luminescent layer deposition, etc., during the manufacture of OLED panels

- Thin-film deposition during the manufacture of solar cells
- Thin-film deposition for various types of films

Components

As a comprehensive vacuum product manufacturer, ULVAC is also dedicated to the development of components. ULVAC pursues cutting-edge vacuum technology while providing a wide variety of product lineup, from vacuum pumps and measurement and analysis equipment, to components, such as power generators for various types of deposition equipment and vacuum valves.

Main Products

- Vacuum pumps
- Vacuum gauges
- Helium leak detectors
- Process gas monitors
- Spectroscopic ellipsometers
- Stylus profilers

- EB, RF, and DC power generator
- Vacuum valves
- Deposition controllers
- Vacuum transfer robots

Main Customers

- FPD, semiconductor and electronic device manufacturers
- Vacuum equipment manufacturers
- The general manufacturing industry
- Research institutions, universities, and public agencies

Product Use

- Evacuation and pressure measurement of the vacuum chambers of vacuum equipment
- Evacuation of vacuum suction lines
- Testing for leaks from vacuums using He
- Analysis within vacuums

Proportion of net sales per business segment

13%



Leak detector



Cryo pump



Dry vacuum pump

Semiconductor and electronic device production equipment

Higher integration and higher performance are demanded at low cost for next-generation semiconductors and high-performance devices. ULVAC develops this type of hyperfine semiconductor and electronic device technology and delivers new technologies and products to the world, one after another, to support the progress of society.

Main Products

- Semiconductor production equipment
- LED production equipment
- Electronic device production equipment
- Optical film deposition equipment

Sputtering equipment, vacuum evaporation equipment, CVD equipment, etching equipment, ashing equipment, ion implantation equipment, annealing equipment, etc.

Product Use

- Thin-film deposition during the manufacture of semiconductors, etc.
- Thin-film deposition and microfabrication, etc., during the manufacture of electronic devices.



Sputtering equipment for electronic devices



Sputtering equipment for semiconductors

Proportion of net sales per business segment

16%

Industrial equipment

ULVAC has a long history of producing vacuum equipment for industrial uses, and has been involved in this business sector since the 1950s, in the dawn of vacuum technology. Now, ULVAC leverages the fundamental technology that it has developed up to this point to provide a variety of solutions in a range of industries and sectors, such as automobiles, pharmaceuticals, and food.

Main Products

- Vacuum heat-treating furnaces
- Vacuum brazing furnaces
- Vacuum melting furnaces
- Rare-earth magnet production equipment
- Vacuum freeze-drying equipment
- Vacuum distillation equipment
- Automatic leak testers

Main Customers

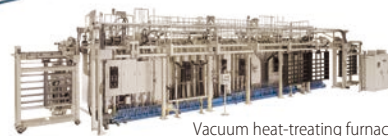
- The heat treating industry
- Automotive parts manufacturers
- High performance magnet manufacturers
- Chemical manufacturers
- Pharmaceutical and food manufacturers

Product Use

- Heat treatment
- Vacuum brazing of heat exchangers for automobiles, etc.
- Vacuum melting and vacuum sintering for the manufacture of high-performance magnets
- Manufacture of freeze-dried food and pharmaceuticals



Vacuum melting furnace



Vacuum heat-treating furnace

Proportion of net sales per business segment

11%

Vacuum application business

Materials

ULVAC provides electronics materials, such as sputtering targets, for a range of manufacturing sectors. Also, in the high-performance materials sector, ULVAC provides integrated manufacturing and precision processing technology for titanium, tantalum, zirconium, and niobium, etc.

Main Products

- Sputtering target materials
- Production of high-melting-point active metal materials and components
- Nano-metal inks

Main Customers

- FPD (LCD and OLED) panel manufacturers
- Semiconductor and electronic device manufacturers
- Research institutions, universities, and government agencies

Product Use

- Target materials for the deposition of thin films using the sputtering method
- Acceleration cavities for superconducting accelerators, etc.
- Wiring formation through the ink-jet method



Sputtering target materials for FPD production equipment

Proportion of net sales per business segment

8%

Analysis equipment, controllers, mask blanks, etc.

ULVAC provides technology derived from production equipment that utilizes vacuums to a range of different industrial sectors.

Main Products

- Surface analyzers
- Mask blanks, etc.

Main Customers

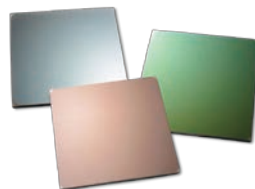
- Research institutions, universities, and public agencies
- FPD, semiconductor, and photomask manufacturers

Product Use

- Analysis and observation of solid surface composition and properties
- Photomasks for lithography process when manufacturing FPDs and semiconductors



X-ray photoelectron spectroscopy equipment



Mask blanks

Proportion of net sales per business segment

9%