

New Mid-term Management Plan: Breakthrough 2022

Under the previous mid-term management plan, ULVAC tackled promoting business growth and enhancing the power of value creation in readiness for change in the market environment.

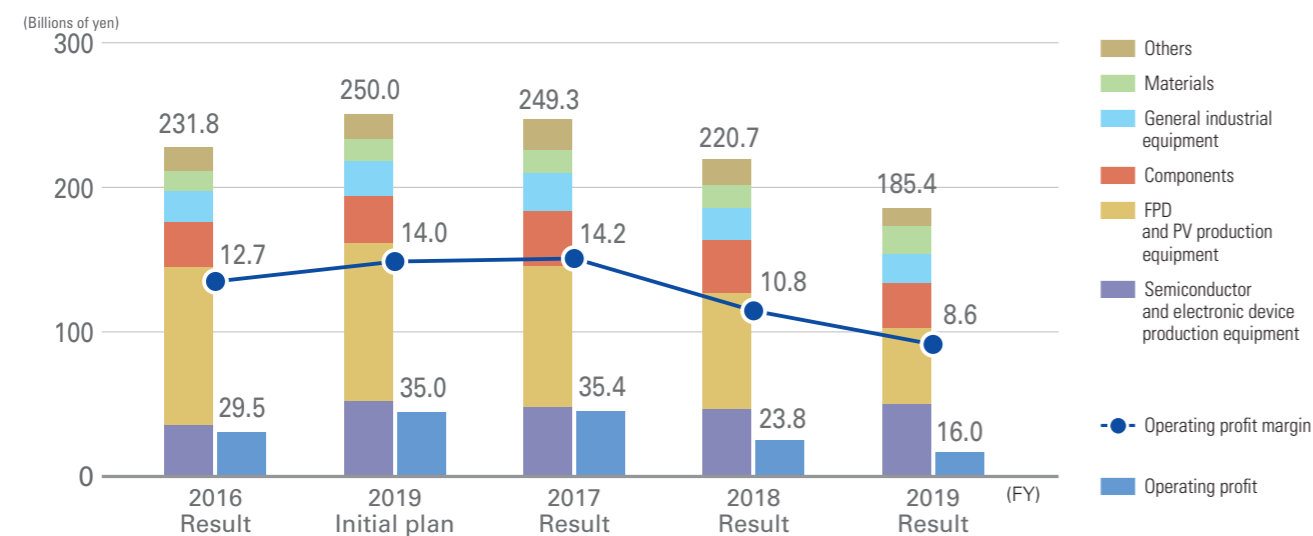
The basic policy of the new mid-term management plan is to promote selection and concentration of investment in development for growth, focused on the semiconductor and electronic equipment business, and pursue profit-oriented management through structural change. With this policy, ULVAC will emphasize strengthening the growing business, strengthening research and development, and enhancing manufacturing capabilities in order to improve profitability.

Review of the previous mid-term management plan

Under the previous mid-term management plan, ULVAC aimed to achieve highly profitable corporate management by comprehensively utilizing vacuum technology, maximizing synergy, and cooperating with global business partners. We also emphasized human resources development for the next leap forward and a corporate culture that relishes challenges. With regard to promoting business growth, in the FPD business, we secured an overwhelming market share for sputtering equipment used in the manufacture of large LCDs for TVs. Leveraging ULVAC's strengths, we also began development of next-generation OLED production equipment. In the semiconductor and electronic equipment business, we entered the logic field, which was something we had long aspired to do, and steadily expanded the equipment business for electronic devices, such as communication and power devices. At the Advanced Electronics Equipment Division, which is in charge of this equipment business for electronic devices, production efficiency has been an issue because a wide variety of equipment is offered to meet diverse customer needs. By promoting manufacturing

innovation, we have achieved productivity improvement. Regarding global expansion, joint development with leading companies and advanced research institutions worldwide has increased. For enhancing the power of value creation, we emphasized enhancing marketing and original technology and product development, which led to achievements such as entry to the logic field and investment in PCRAM. Moreover, we promoted modularization of electronic device production equipment.

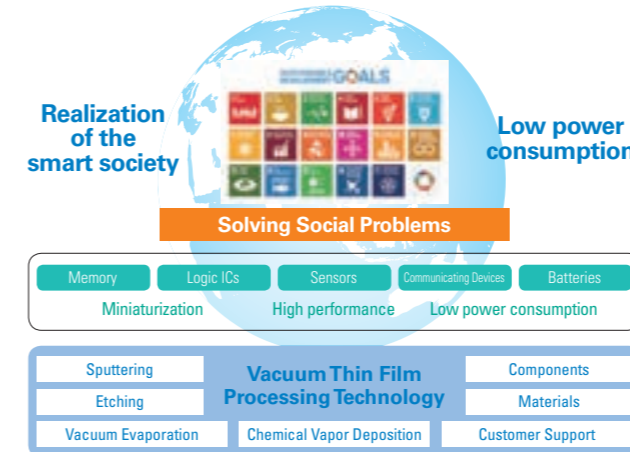
Regarding strengthening of the management base, ULVAC promoted human resources development centering on the next generation of leaders while at the same time we promoted globalization of the management team by appointing three more directors who are not Japanese nationals. In order to revise and improve the management style of Group companies, motivated young managers with a challenging spirit were promoted to top management. We also began strengthening the information system infrastructure. Regarding financial soundness, the equity ratio improved from 40.2% to 54.6%.



In FY 2017, net sales and operating profit (margin) virtually reached the FY 2019 targets. Thus, we upwardly revised the FY 2019 targets to net sales of ¥265.0 billion and operating profit of ¥38.0 billion. However in FY 2018 and FY 2019, net sales and operating profit (margin) fell short of the targets owing to a sharp decline in FPD sales and a drop in investment in semiconductor memories following the previous brisk investment as well as the impact of COVID-19 in FY 2019.

Technological Innovation for the Smart Society Realization and Lower Power Consumption while Pursuing Growth by Seizing Opportunities Created by Change

Technological innovation to underpin the emerging smart society through miniaturization and achieving high performance and low power consumption



Contributing to miniaturization, high performance, and low power consumption required for realization of the smart society

Progress toward realization of the smart society is accelerating with the emergence of IoT, AR/VR, autonomous driving, biometrics, remote medicine, and smart agriculture.

In particular, the COVID-19 pandemic has spurred digital transformation, including remote work, online education, and remote medicine, while the shift to a data-driven society is also accelerating.

Realization of the smart society is highly dependent on numerous semiconductor and electronic devices. For various sensors as well as for the communication devices receiving and sending data obtained from them, and also for the batteries that drive them, higher performance, multifunctionality, miniaturization, and lower cost are required. Furthermore, to handle the exponentially increasing amounts of data, larger storage capacity and faster processing are required for servers and edge computing, and further miniaturization of logic CPUs and memory is underway to respond to these needs.

Meanwhile, the progress of the smart society will result in a sharp increase in power consumption due to the use of numerous semiconductor and electronic devices. Thus, it is critically important to reduce the power consumption of various devices as well as of CPUs and memory.

ULVAC's advantages

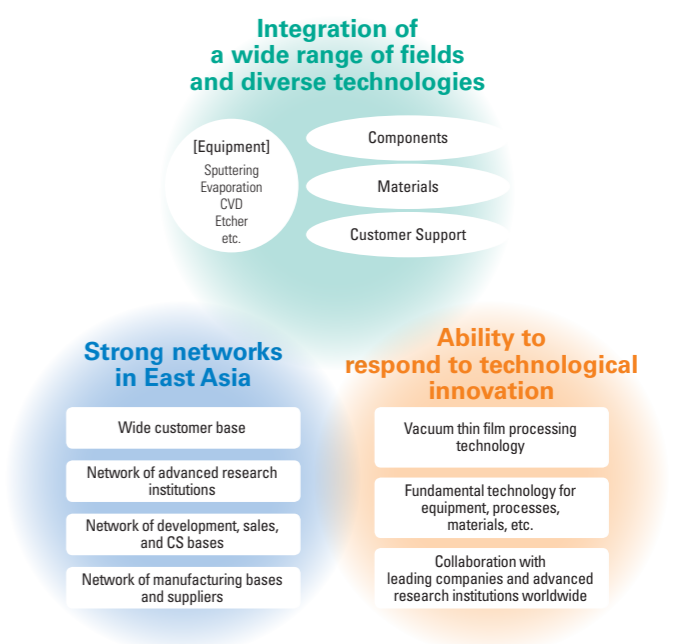
ULVAC's advantages are largely attributable to its involvement across a wide range of fields and diverse technologies, including vacuum deposition equipment such as sputtering and evaporation, components such as vacuum pumps, and materials used as film deposition targets, as well as its strength in customer support.

In East Asia, centering on Japan, China, South Korea, and Taiwan, where the world's manufacturers of semiconductors, electronic devices, and panels are concentrated, ULVAC has a broad customer base; a network of relationships with advanced research institutions; a network of development, sales, and customer support bases; and a network of production bases and suppliers.

In addition, vacuum thin film processing technology; underlying fundamental technologies for equipment, processes, materials, etc.; and collaboration with the world's leading companies and advanced research institutions enable ULVAC to respond to technological innovation.

By leveraging these advantages, ULVAC intends to lead technological innovation geared to realization of the smart society and low power consumption so as to contribute to society while growing the business.

Leveraging ULVAC's Advantages for Growth



New Mid-term Management Plan: Breakthrough 2022

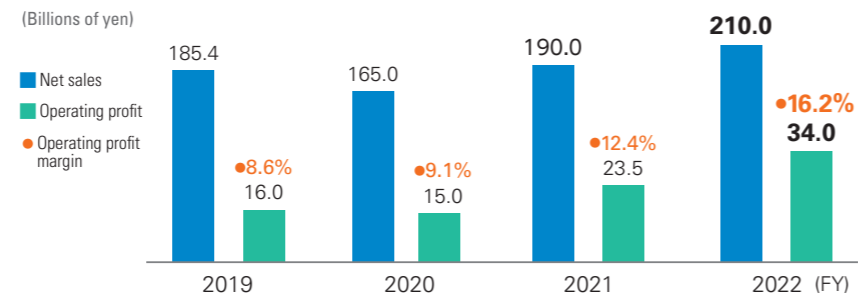
The basic policy of the new mid-term management plan is twofold: "investment in development for growth (selection and concentration)" and "profit-oriented management through structural change." To achieve the goals of the plan, ULVAC will strengthen research and development capabilities so as to develop products attuned to technological innovation in growing markets, such as those for semiconductors and electronic devices. We will promote horizontal deployment of manufacturing innovations that achieved good results in the advanced electronics equipment business across other businesses and Group companies, in order to enhance productivity throughout the processes from engineering and design to production and thus improve profitability. We will also implement initiatives to enhance the efficiency of Group management.

Basic Policy

- Investment in development for growth (selection and concentration)
- Profit-oriented management through structural change

Quantitative targets

- Targets for FY 2022**
- Net sales ¥210.0 billion
 - Gross profit margin 35% or above
 - Operating profit margin 16% or above
 - ROE 13% or above
 - Operating CF ¥29.0 billion



1 Strengthening the Growing Business

- Expand investment for development in the semiconductor and electronic device fields
- Enhance components, materials, and customer support

In the semiconductor field, we have entered the logic market. Moreover, we intend to apply the logic miniaturization process to other processes and to secure its adoption by other companies. We also intend to enter the segment for equipment used in a new memory process. In the electronic device field, our aim is to expand orders received for modularization equipment by responding to an increase in investment in power semiconductors, communication devices, sensors, etc. and to grow in the China market. With regard to FPD, we will develop mass-production technology for large-substrate OLEDs. We will also promote further strengthening of components, materials, and customer support, which constitute our stable base.

Semiconductor	<ul style="list-style-type: none"> New entry into the logic miniaturization process → Growth through application to other processes and adoption by other companies Resumption of memory investment and entry into new processes
Electronic Device	<ul style="list-style-type: none"> Expansion of proposed equipment through modularization Strengthening development, sales and support systems in China
FPD	<ul style="list-style-type: none"> Development for mass production of large-substrate OLEDs Transformation to a profitable structure
Components Materials Customer Support	<ul style="list-style-type: none"> Sales expansion in the semiconductor and electronics fields Growth in parallel with equipment sales in China

2 Strengthening Research and Development

- Strengthen product development in response to technological innovation in growing markets

We will strengthen product development in response to technological innovation in the semiconductor and electronic device fields, which will be pillars for growth from now on. Selection and concentration in growth fields will be promoted through integration of laboratories and sharing of technology and product roadmaps with customers. We will also strengthen the global development system, including promotion of joint development of cutting-edge technologies with leading companies worldwide.

Strengthen product development in response to technological innovation in growing markets

- Shift investment into the development of semiconductors and electronics
- Strengthen global development system
- Shift in emphasis from process development to product development
- Integration of laboratories
- Share technology and product roadmaps with customers

Semiconductor and Electronic Device: FPD

5.5 : 4.5 → 6 : 4 → 7 : 3

Logic (MHM), PCRAM
High-density mounting ashing
Etching for communication devices Optical film sputter
G10.5 sputter for large TVs
Magnetic levitation transport for large substrates

Selection and concentration
Shifting focus to product development

Year	R&D investment (Billions of yen)
2011-2013	25.4
2014-2016	30.9
2017-2019	44.6
2020-2022 (FY)	50.0

3 Enhancing Manufacturing Capabilities

- Improve profitability by enhancing productivity throughout the processes from engineering and design to production

Enhancing Manufacturing Capabilities

- Technical Design Reform**: Improving the completeness of technical drawings, Enhancing design value engineering
- Procurement Reform**: Integration of purchasing systems, Global supply chain redevelopment
- Business process standardization**: Improvement of productivity and business management
- Strengthening the Information System Infrastructure**
- Production Process Reform**: Specialization of production sites, Improving manufacturing productivity

Legend: Man-hours (50% reduction), Manufacturing lead time (50% reduction), Procurement cost reduction

We will promote manufacturing innovations throughout the processes from engineering and design to production and procurement in order to improve profitability through enhancement of productivity, including a 50% reduction in man-hours and manufacturing lead time, as well as reduction of procurement costs. Regarding technical design reform, we will work to enhance the degree of completeness of technical drawings and strengthen value engineering at the design phase by clarifying the equipment concept and the design philosophy in advance and grasping the specifications required by customers early so as to achieve design that can shorten the production process and reduce the unit cost of parts and the manufacturing burden. As for production process reform, we will pursue specialization of individual production bases by eliminating duplication of production so as to enhance productivity. With respect to procurement reform, we aim to reduce procurement costs by developing a global supply chain through integration of production bases' purchasing organizations. We will also promote strengthening of the information system infrastructure to realize business process standardization and sharing of production information in real time so as to enhance productivity.

4 Enhancing Group Management Efficiency

- Promote business unit-based management
- Strengthen management of Group companies that have their own products

Regarding Group management, we will promote business unit-based management to enhance management efficiency. We will also strive to spur growth of Group companies that have their own products.

5 Strengthening the Management Base

Business and organizational transformation → Achievement of growth

Goals	Measures, etc.
Human resources development and activation <ul style="list-style-type: none"> Cultivating human resources with initiative who are constantly challenging Creating a framework and environment in which diverse human resources can play active roles 	<ul style="list-style-type: none"> Nurturing of the next-generation leaders Visualization of human capital Diversity
Strengthening of the information system infrastructure <ul style="list-style-type: none"> Sharing of Group management information and faster management decision-making Improvement of productivity and business management 	[Total investment of ¥3.5 billion over 5 years] <ul style="list-style-type: none"> Business process standardization Global and optimal procurement (Efficient ordering)
Strengthening of the financial base <ul style="list-style-type: none"> Enhancement of development investment capabilities Improvement of capital efficiency Further strengthening of the financial structure 	<ul style="list-style-type: none"> Further improvement of capital efficiency by strengthening cash flow management Aim to achieve ROE of 13% or higher and operating cash flow of ¥29.0 billion while maintaining financial stability (Estimated equity ratio: 60%)

In order to ensure R&D and manufacturing capabilities are strengthened, it is necessary to change conventional ways of doing work. As well as developing human resources with initiative who are predisposed to change, we will endeavor to create a framework and environment in which diverse human resources can play active roles. Moreover, we will promote strengthening of the information system infrastructure, which will support sharing of Group management information and faster management decision-making and enhancement of productivity. Regarding the financial base, we will strengthen cash flow management in order to enhance our ability to invest in development in growing fields and to further improve capital efficiency.