ULVAC's Vision About ULVAC **ULVAC's Visior**

ULVAC's Strengths



Research and Development

Ongoing value creation from a medium- to long-term perspective

Having positioned promotion of creation and cocreation of innovation with vacuum technology as the core as materiality, ULVAC is promoting development of technologies that contribute to realization of a sustainable society. Semiconductors and sophisticated electronic devices are essential for addressing social issues such as climate change and other environmental concerns. We are promoting development to ensure that the Group's vacuum thin film processing technology becomes a core technology for manufacturing these devices. So, to realize the above, our development structure leverages business partnerships with various companies and research institutions. We are also laying the foundation for long-term sustainable growth underpinned by the latest technologies. Specifically, we will endeavor to respond swiftly to the progress from 5G to 6G and IoT in line with the proliferation of global network infrastructure and the emergence of the digital society while flexibly addressing social issues, such as global warming and climate change.



- Advanced logic
- NAND/DRAM
- Next-generation batteries
- Power devices
- Electronic devices (MEMS, sensors)
- Optical devices (µOLED, µLED)
- Packaging (WLP, PLP)





Collaborative Research Cluster at Tokyo Institute

On September 22, 2021, ULVAC, Inc. and Tokyo Institute of Technology (hereinafter "Tokyo Tech") established the ULVAC Advanced Technology Collaborative Research Cluster (hereinafter the "Collaborative Research Cluster") on the Ookayama Campus of Tokyo Tech. ULVAC and Tokyo Tech have achieved results through ad hoc research cooperation, but to further strengthen the collaboration between the company and the university as partners at the organizational level, we set up the Collaborative Research Cluster with the support of the Tokyo Tech Open Innovation Platform.

Combining Tokyo Tech's plasma diagnostics technology and Al technology, the Collaborative Research Cluster aims to improve the performance of plasma processing equipment by measuring plasma conditions that could not be measured previously. The synergy created by laboratories from different fields working together is expected to produce new research results that cannot be obtained through ad hoc collaborative research. Additionally, leveraging this organization-toorganization collaboration will lead to a wide range of positive outcomes, not only in joint research but also in fields such as personnel development, leading to future growth of both ULVAC and Tokyo Tech



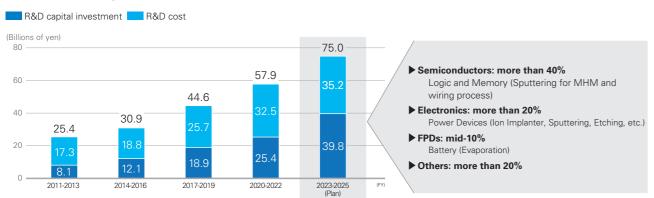


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Progress and Plan for R&D Investment

¥75.0 billion in R&D investment (R&D capital investment and R&D cost) is planned centering on semiconductor and electronic device production equipment, which is a growing field, for the three years covered by the mid-term management plan.

R&D investment (3-year total)



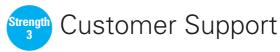
Global Network

Networks offering solutions to support industrial development worldwide

ULVAC's Strategy

ULVAC has established optimal networks covering development, sales, manufacturing, and services not only for Japan but also for East Asia. To spur development by capitalizing on the global development system, ULVAC is promoting joint development with leading companies and research institutions around the world.



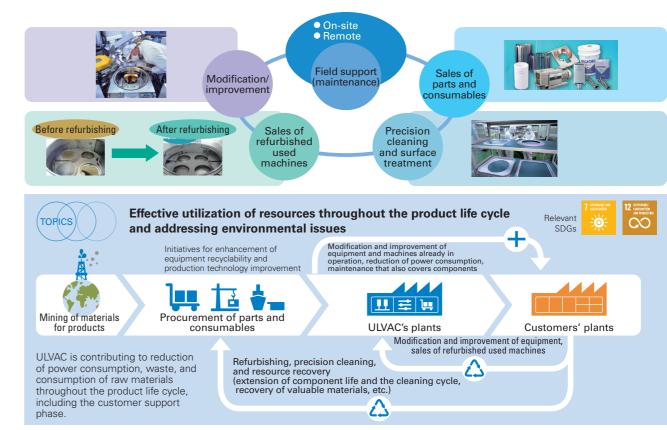


Hyeon-gok Plant Tainan Plant

Suzhou Plant

ULVAC's customer support solutions pool the Group's know-how

Our customer support network in Japan and around the world underpins our customers' production operations in a manner that meets their needs throughout the product life cycle. We offer comprehensive maintenance services covering components and make proposals for modification and improvement. Furthermore, by using information on customer needs as feedback for the development of new equipment, we aim to offer even more sophisticated vacuum technologies and services. We will also expand remote customer support packages utilizing IoT equipment.



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