

Initiatives to Achieve Integrated MONODZUKURI

Since Fiscal 2015, the ULVAC Group has engaged in developing strategies to increase production efficiency under the theme of moving from "vitalization to integration to become 'One ULVAC.'"

By improving work efficiency in the next process through "Front Loading**" activities, by identifying all risks before work is conducted, such as technical reviews before orders are received, through simulations and inspections, and considering responses to them, we limit instances of nonconformity and greatly increase quality. By integrating with our domestic production assignees, we have streamlined our design organizations and conducted optimal positioning, and we have greatly increased overall production efficiency by enhancing the upstream portion of our production processes.

"Front Loading" activities will be the source of our profits, so from Fiscal 2016 onward, we will ensure that "Front Loading" is more thoroughly implemented, while increasing the efficiency of the activities themselves.

Furthermore, with regard to procurement of parts, we have promoted sharing of procurement information with domestic manufacturing assignees and the introduction of an electronic procurement system, while also achieving a reduction in the number of hours spent on procurement, as well as a reduction in printing expenses and communication expenses.

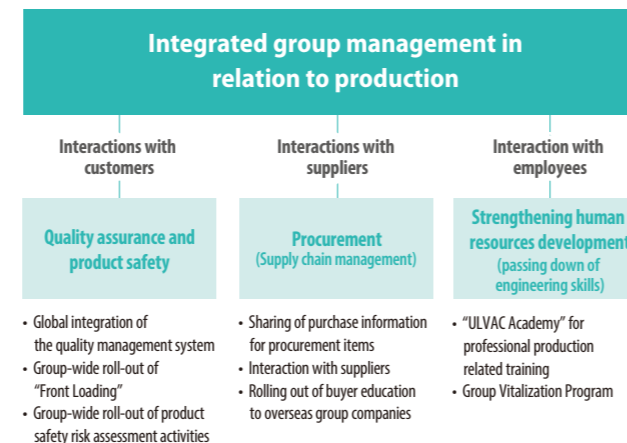
We have also introduced this procurement system at overseas production sites, and by sharing procurement data, we are gradually implementing centralized production cost management and understanding the production costs for each location.

With regard to the professional development of the personnel who support MONODZUKURI we have conducted professional production related training, such as manufacturing professional training, and promoted instructor development, as well as the uptake of training worldwide, in order to be able to pass down our engineering skills to the next generation. Furthermore, we have prepared for the launch of the "ULVAC Academy", which begins with the launch of e-Learning.

Handing down engineering skills to the next generation has always been an issue for manufacturers. We aim to improve engineering skills for everyone on site, not just technicians, and we are promoting training to this end.

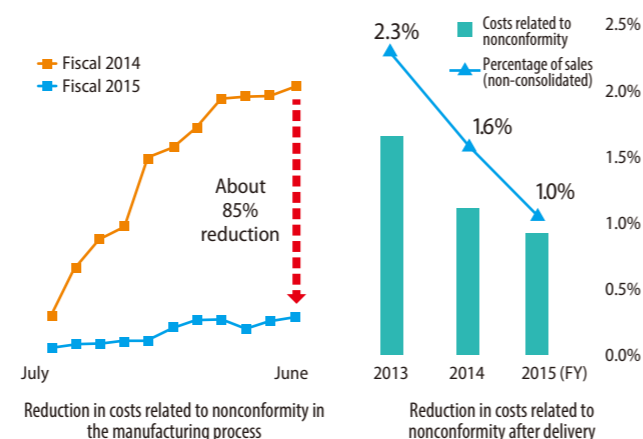
**1 "Front Loading" refers to accelerating the work process by placing extra load (loading) on the initial phase of work (front). Doing this allows us to work out any issues in the early stages and produce higher quality.

Integrated group management in relation to production



Results of "Front Loading" activities

In order to enhance "Front Loading" activities, we are creating engineering and skills-based links between our sales department, technology department, design department, and manufacturing department, as well as sharing our experience, know-how and related information and data. We are also putting effort into activities to reflect each of our successes in our upstream development and design processes. Looking forward, we will implement training and up-skilling with direct control over our overseas quality assurance members to deliver ULVAC quality that meets the needs of globalization throughout the world. In Fiscal 2015, we were able to make quality improvements through activities that create quality through "Front Loading" and greatly contribute to improvements in the earnings structure.



Interactions with Customers

Quality assurance and product safety

The ULVAC Group is engaging in initiatives to meet customer expectations for high-quality and safe "ULVAC quality" products through quality assurance activities, centered around "Front Loading".

ULVAC Group Quality Policy

"Product quality assurance strengthens our customers' confidence in ULVAC." The ULVAC group is committed to elaborate ULVAC quality through "Front Loading" in development and to offer products and services with needs from all parts of the world, and keep developing as the customers' everlasting partner.

Action Policies

- We comply with all rules and procedures.
- We do not deliver any nonconforming products to the next process.
- We observe delivery times leading to the next process.
- We commit to the production budget.

Quality Management System

The ULVAC Group has a integrated quality management system

We maintain ULVAC quality for the ULVAC Group's products by strictly managing and evaluating conformity with the usage policy of the ULVAC trademark.

In Fiscal 2016, which is the final year of our 3-year plan, we will aim for further improvements in quality of the products of each company in the ULVAC Group, and aim to merge the ISO 9001 certification of 37 group companies, as well as promoting "integration" of the quality management system.

The ULVAC Group's quality management system



At the next stage, each company in the ULVAC Group is proceeding with implementation of the 2015 edition of ISO 9001, with the aim of realizing an effective quality management system that is unified with our business activities, which is the intent of the ISO9001:2015.

Product Safety

Ensuring a corporate culture that values safety and quality above all else

We have been promoting the implementation of risk assessment activities, company-wide product safety education, and SA**1 development at ULVAC and throughout the Group. Also, personnel with SA qualifications conduct an assessment of the adequacy of product safety through risk assessment at each stage, from confirmation of specifications through design and manufacture, centered around activities to "produce quality through "Front Loading". The results are then used as items for confirmation in the design review (DR0 - DR5) and quality inspections at each stage. ULVAC's product safety initiatives such as these received the Mukaidono Safety Awards**2 encouragement prize, having been evaluated as contributing to the improvement, progress, and spread of safety for MONODZUKURI.

Going forward, we will continue to promote SA development throughout the group, and hope to increase customer satisfaction by contributing to safe and secure MONODZUKURI.



**1 SA (Safety Assessor) qualifications are based on a third-party assessment of mechanical safety knowledge and ability under international safety standards. They are granted under the auspices of the Nippon Electric Control Equipment Industries Association (NECA), and certified by Japan Certification Corporation (JC).

**2 This prize is named after Dr. Mukaidono, a professor emeritus at Meiji University, who received the Prime Minister's Commendation on Contributors to Public Safety. It is granted to organizations or individuals for contributions to the improvement, progress, and spread of safety in the MONODZUKURI industry.