Quality Assurance and Product Safety

The ULVAC Group is engaging in initiatives worldwide to meet customer expectations for high-level, safe ULVAC quality through assurance activities centered on Front Loading.¹

**ULVAC Group Quality Policy**

*Product quality assurance strengthens our customers’ confidence in ULVAC.*

The ULVAC group is committed to promote ULVAC quality through front-loading in all business processes including development, sales, production and service and through offering products and services which include value from all parts of the world.

Each employee within the ULVAC group strives to ensure that their personal efforts contribute to the creation of value necessary to maintain the customer as an everlasting partner.

Global Integrated Certification for ISO 9001 and ISO 14001

As of the end of December 2017, 38 ULVAC Group companies had completed integrated certification for the 2015 versions of ISO quality and environmental management systems. We have aligned quality policies groupwide and conduct activities to address quality issues and deploy improvements globally.

**ULVAC Group’s Comprehensive Quality Management System**

The ULVAC Group promotes quality creation by implementing Front Loading in all business processes. At ULVAC, the term Front Loading refers to activities to solve problems and resolve issues in the concept design phase prior to order-taking by reflecting technologies cultivated to respond to change in needs and seeds.

**Product Safety Activities**

To deliver safe and secure ULVAC brand products to markets around the world, qualified safety assessors² play a leading role in product safety assessments and continuously engage in activities to verify the required safety and quality at the drawing release and product shipment phases. Whereas our activities to promote product safety systems have been centered on Japan, in the current fiscal year we have shifted the emphasis to promotion overseas in line with the gaining of global integration for quality management systems. With the aim of establishing a framework in which each Group company assures safety and quality of its products to realize swift provision of products, ULVAC is promoting product safety activities throughout the Group, which will lead to greater customer satisfaction.

![Diagram](Image)

**Year-on-year comparison of costs related to nonconformity after delivery (non-consolidated)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cost Ratio (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>2.3</td>
</tr>
<tr>
<td>2014</td>
<td>1.6</td>
</tr>
<tr>
<td>2015</td>
<td>0.9</td>
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<tr>
<td>2016</td>
<td>0.9</td>
</tr>
<tr>
<td>2017</td>
<td>0.6</td>
</tr>
<tr>
<td>2018</td>
<td>0.9</td>
</tr>
</tbody>
</table>

In fiscal 2018, the ratio of costs related to nonconformity to net sales deteriorated by 0.3 percentage points from the previous fiscal year. This is the result of our vigorous verification of development to meet increasingly stringent market requirements. Accumulated knowledge is shared throughout the Group to achieve comprehensive quality management.

**Value Chain**

- Value Chain
- Product
- Process
- Design
- Parts manufacturing
- Installation
- Services
- Logistics
- Communication
- Procurement

**Number of qualified safety assessors in the ULVAC Group**

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>80</td>
</tr>
<tr>
<td>2016</td>
<td>60</td>
</tr>
<tr>
<td>2017</td>
<td>40</td>
</tr>
<tr>
<td>2018</td>
<td>20</td>
</tr>
</tbody>
</table>

*1 Front Loading* ordinarily refers to arranging or planning so that a large portion of work occurs in the initial phase. At ULVAC, it is an activity to create quality by identifying issues as soon as possible.

*2 Safety Assessor (SA) Qualification is a qualification scheme based on third-party certification of machine safety knowledge and competence under international safety standards.*

Procurement

Suppliers are important partners of ULVAC for MONODZUKURI. By linking procurement activities with development and design activities based on the information flow, the ULVAC Group is working to enhance efficiency of the entire supply chain, including suppliers, from the development and design phases while always being conscious of the environment and society.

**Procurement Policy**

ULVAC has established, observes, and promotes the Basic Procurement Policy. In fiscal 2018, ULVAC reviewed and revised the Basic Procurement Policy and established the Purchasing Code of Conduct to maintain “sound, good relationships with business partners and affiliates,” and strive to renew the thorough understanding of employees engaged in purchasing.

Regarding “promoting CSR procurement,” which is an item added to the revised Basic Procurement Policy, in July 2015, we conducted a questionnaire survey on CSR targeting our major suppliers in terms of the amount of transactions, with a view to ensuring that the operation of the supply chain contributes to the fulfillment of social responsibility.

Moreover, ULVAC conducts self-assessment and for that purpose refers to the RBA Code of Conduct, a set of social, environmental and ethical industry standards issued by the Responsible Business Alliance (RBA).

**Global Production Bases**

Taking advantage of their proximity to customers, ULVAC’s principal production bases conduct local procurement and seek to optimize procurement as part of their ongoing efforts to establish a global supply chain. Previously, when suppliers delivered parts for overseas production, all cargo was shipped via ULVAC’s Chigasaki Plant.

With the introduction of a new transfer center, suppliers can now directly deliver parts to the center where all the processes from acceptance of delivery to export procedures are handled in an integrated manner, resulting in a great reduction of transportation distances in the supply chain and consequently lower energy consumption and lower exhaust gas emissions.

**Global Logistics**

Recognized for legal compliance concerning customs clearance procedures and self-management of cargo security, ULVAC is certified by Japan Customs as an authorized economic operator (AEO).

To simplify and expedite export customs clearance and prevent trade incidents, ULVAC holds meetings of the Export/Import Management Committee and implements trade risk management.

**Communication with Suppliers**

ULVAC holds operations briefing meetings once a year as a forum for ULVAC management to directly explain to suppliers the business environment and prospects and supplier meetings three times a year for the person in charge to communicate production plans in a timely manner.

At supplier meetings, ULVAC notified the revision of the Basic Procurement Policy mentioned above as well as initiatives concerning the RBA Code of Conduct and the questionnaire survey. Moreover, in order to reflect suppliers’ proposals for improvement of parts manufacturing methods in products and production, we hold technology exchange meetings in which design engineers and personnel in charge of purchasing also participate, as well as new product briefings, as necessary.

**Relevant SDGs**

- SDG 8: Decent Work and Economic Growth
- SDG 9: Industry, Innovation and Infrastructure
- SDG 11: Sustainable Cities and Communities
- SDG 12: Responsible Consumption and Production
- SDG 13: Climate Action
- SDG 16: Peace, Justice, and Strong Institutions
- SDG 17: Partnership for the Goals

*1 AEO post-clearance audit by Yokohama Customs
*2 Workshop on trade risk management