Results of IMS Initiative in 2016
and Initiative Plan of 2017 for HORIBA Group in Japan

HORIBA

Integrated Management System (IMS) ^{※1}

Integrated Management System (IMS)

HORIBA's four group companies in Japan (HORIBA, Ltd., HORIBA STEC Co., Ltd., HORIBA Techno Service Co., Ltd., and HORIBA Advanced Techno Co., Ltd.) upgraded to the 2015 version of ISO 9001 and ISO 14001 in March 2017.

These companies have been implementing a system to comprehensively identify risks and opportunities in terms of quality, environment, and occupational safety and health from multiple perspectives. Since 2016, "My Department's Situation Clarification Sheet" is used to effectively ascertain the current situation regarding the roles of each department, internal and external issues, laws and regulations of particular importance, customer needs, and requirements for the top management and stakeholders.

Through these initiatives, we are stepping up the operation of the group IMS in cooperation with management.

※1.IMS（Integrated Management System）: Management system integrating ISO 9001（Quality）, ISO 14001（Environment）, OHSAS 18001（Occupational health and safety）, ISO 39001（Road traffic safety）, and ISO 22301（Business continuity）standards, as one system.

Business Continuity Management System ※2

Business Continuity Management System

The HORIBA Group has been operating the ISO 22301 international business continuity management system in both medical and semiconductor fields. The Aso Factory (Nishihara, Kumamoto Prefecture) of HORIBA STEC Co., Ltd. was hit by the Kumamoto Earthquake that occurred in April 2016. The factory's high voltage power receiving unit was damaged, cutting power of factory facilities and production equipment. In addition, parts of the walls and ceiling in the factory building fell, and equipment and fixtures fell from some shelves and broke.

Despite the damage from the earthquake, the Aso Factory resumed the production of medical and semiconductor products nine days after the earthquake. Factory operation was fully restored one month after the earthquake. In June of that year, the highest production was achieved.

The factory was able to resume its business as a result of using recovery scenarios based on ISO 22301. We are now reinforcing the business continuity system of the HORIBA Group based on our experience of the Kumamoto Earthquake.

※2.ISO 22301:2012 international business continuity management system standard
This management system is used by various companies and organizations to develop measures and respond efficiently and effectively to possible disasters, accidents, or other events, such as an earthquake, fire, IT system failure, financial crisis, bankruptcy of business partners, and pandemic of a new strain of influenza.

2016 IMS Target Initiative Results for HORIBA Group

The HORIBA Group sets "Group IMS targets" to ensure the effectiveness of the IMS.They consist of five categories: ①Quality, ②Safety Management, ③Health Management, ④Environment Management, and ⑤Risk Management.

◎=Above expectations, ○=As expected, △=Below expectations

Category	Theme		Group IMS Target	Initiative	Result
①【Quality management】	❶Balanced division (prevention, assessment, and loss costs) and reduction of quality costs		(1) Less product warranty costs (※3) than 2015 (less loss costs)	・Reduce failure costs, especially the product warranty costs for warranty after shipment	△
			(2) Understanding of the quality costs of each group company and factory		△
	❷Construction of the factory quality assurance framework		(1) BIWAKO Factory: Construction of framework to double productivity and reduce lead time by one-third	・Shorter lead time based on engine exhaust gas measurement systems as a model case ・Improvement of the specification document system ・Launch of designless and in-house assembly	◎
			(2) Aso Factory: Establishment of the Group's core factory system for mass production (stable quality / cost reduction)	・Following the Kumamoto Earthquake, a new system is underway by reviewing the production system	○
②【Safety management】	Safety Declaration and Action Guideline: adherence to the action plan	❶ Factory equipment safety	(1) Risk assessment and safety measures for development or relocation of a business base due to redevelopment of the Kisshoin district	・Reduction of irregular risks by the JHA (※4) process	○
			(2) Safety check for safe operation of the Biwako Factory		○
		❷ Industrial accident prevention	(1) Zero work-related accidents, work-related traffic accidents, occupational illnesses, and commuting accidents	・Reduction of risks by designating a time for risk assessment to enhance safety ・Workplace safety patrols conducted by the top management	△
			(2) Zero accidents during irregular work		○
		❸ Product safety	(1) Zero defects that may lead to injury or fire	・Prevention of recurrence by holding a "past trouble report" meeting	△
			(2) Confirmation of completion of past corrective actions		○
		❹ Service safety	(1) Zero injuries	・Establish a service quality team to confirm field work safety through patrols ・Additional education on cases of past accidents	△
			(2) Confirmation of completion of past corrective actions		○
		❺ Traffic safety	(1) Zero fatal accidents/causing of accidents resulting in injuries	・Analysis of monthly drive data by using each company's own drive recorders ・Provision of guidance to drivers who caused near-miss incidents	△
			(2) Efforts to realize zero accidents damaging physical objects (damaging other people's property or own vehicle)		△

(※3) Product warranty costs: Costs incurred within the product warranty period
(※4) JHA (Job Hazard Analysis): Risk assessment for each task

2016 IMS Target Initiative Results for HORIBA Group

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Category	Theme	Group IMS Target	Initiative	Result
③【Health management】	❶Occupational health	(1) Maintaining zero health problems caused by exhaust, waste water, toxic substances, radiation, or chemical substances	・Provision of education on the handling of chemicals and blood ・Revision of the radiation work management standard, measurement of work environments, periodic inspection of workplaces	○
	❷Health promotion	(1) Maintaining 100% health checkup participation	・Provision of a free gynecological exam as part of general check-ups for all ages ・Provision of thorough explanations from the Health Management Department to whom it is suggested that they have follow-up tests done	○
		(2) Higher second test participation rate than the previous term		
	❸Mental health	(1) Fewer employees who develop mental problems than 2015	・Enhancement of counseling for departments and bases where environmental changes are anticipated ・Analysis of stress check	△
		(2) Fewer employees who redevelop mental problems than 2015		○
④【Environment Management】	❶ Energy and resource saving	(1) 1% increase in energy use efficiency from 2015	・Displaying energy usage at HORIBA Group production sites on the digital signage to increase awareness of energy conservation	△
		(2) Expand Activities to reduce waste materials	・Providing instructions to ensure thorough sorting of waste to handle valuable objects appropriately	○
	❷Maintenance and enhancement of product environmental performance	(1) More energy and resource saving	・Eco-design for all applicable models	○
		(2) Early submission of information on chemical substances contained in products	・Expansion of the scope of chemical investigation	○
		(3) Compliance with the EU RoHS Directive for products subject to the CE Declaration of Conformity	・Investigation on compliance with the EU RoHS Directive for applicable parts	○
⑤【Risk management】	❶Information security/confidential information management	(1) Prevention of information security incidents	・Provision of information security education to all employees ・Strengthening of the spam email filter block ・Provision of training on targeted attack emails	△
		(2) Review of the information management regulations and their implementation	・Thorough designation and classification of confidential information	○
	❷Business continuity	(1) Business continuity practices and creation of a business continuity restoration scenario	・Application of lessons learned from the Kumamoto Earthquake	○
		(2) Expansion of the ISO 22301 BCMS (※5) certification coverage	・Expansion of certification coverage to the semiconductor business in order to respond to customer requests	○

(※5) BCMS：Business Continuity Management System

2017 IMS Target Action Plan for HORIBA Group

Category	Theme			Group IMS Target
①【Quality management】	❶Balanced division（prevention, assessment, and loss costs）and reduction of quality costs			（1）Improvement of quality costs per factory in each group company: Medium- to long-term target: Preventive costs ≥ Appraisal costs ≥ Failure costs
				（2）Reduction of failure costs from 2016
	❷Improvement of factory safety and quality			（1）BIWAKO Factory: Shorter lead times of order reception, design, production, and installation
				（2）Aso Factory: Establishment of the Group's core factory system for mass production (stable quality / cost reduction)
	❸Achievement of triple zero			（1）Zero major complaints, zero major accidents, zero violations of laws and regulations
②【Safety management】	Safety Declaration and Action Guideline: adherence to the action plan	❶Factory equipment safety		（1）Zero accidents incidental to development/relocation of bases ・Risk assessment and taking of safety measures for the redevelopment of the Kyoto Factory area ・Implementation of safety measures for the 5th term Aso Factory construction work
		❷Industrial accident prevention		（1）Zero work-related accidents, work-related traffic accidents, occupational illnesses, and commuting accidents
				（2）Zero accidents during irregular work
		❸Product safety		（1）Zero complaints regarding injury, fire, environmental contamination
				（2）Confirmation of completion of past corrective actions
		❹Service safety		（1）Zero injuries
				（2）Confirmation of completion of past corrective actions
		❺Traffic safety		（1）Zero fatal accidents/causing of accidents resulting in injuries
				（2）Efforts to realize zero accidents damaging physical objects (damaging other people's property or own vehicle)
③【Health management】	❶Occupational health			（1）Maintaining zero health problems caused by exhaust, discharged (waste) water, toxic substances, radiation, or chemical substances
	❷Health promotion			（1）Maintaining 100% health checkup participation
				（2）Higher second test participation rate than the previous term
	❸Mental health			（1）Fewer employees who develop mental problems than 2016
				（2）Fewer employees who redevelop mental problems than 2016
④【Environment Management】	❶Energy and resource saving			（1）1% increase in energy use efficiency from 2016
				（2）Expand Activities to reduce waste materials
	❷Environmental accident prevention			（1）Zero environmental accidents
	❸Maintenance and enhancement of product environmental performance			（1）More energy and resource saving
				（2）Early submission of information on chemical substances contained in products
				（3）Compliance with the EU RoHS Directive for products subject to the CE Declaration of Conformity
⑤【Risk management】	❶Information security/confidential information management			（1）Prevention of information security incidents
	❷Business continuity			（1）Reconstruction of a business continuity system based on experience
				（2）Expansion of risk coverage (management, pandemic)