

Quality assurance guidelines

ZEON KASEI CO., LTD.
Environmental Safety & Quality Assurance Dept.
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Introduction

The products of ZEON KASEI CO., LTD. (hereinafter referred to as "our Company") are widely used by the general public as they are incorporated into the products of the Company's customers. Some of them are important for product safety. The individual raw materials, materials, and purchased products that make up our Company's products also play an important role in the safety and performance of our Company's products. We think that it is necessary to further strengthen the quality assurance system from the viewpoint of product liability. We hope that our business partners will understand our policy and work together to establish and maintain a quality assurance system that can guarantee the excellence required by our Company.

1. Applicability

These guidelines are a summary of matters that require your understanding and cooperation in order to ensure the quality assurance of products delivered to our company. They include requirements for environmental and quality management systems and requirements for quality assurance and control, product safety, and non-conforming product management of products delivered to our company.

In addition, when our Company provides guidance to business partners, these guidelines shall be followed."

2. Normative References

- (1) ISO14001:2015
- (2) ISO9001:2015
- (3) IATF16949:2016

3. Terms and definitions

Terms and definitions are based on terms and definitions in the cited standards.

4. Environmental Management System

Guideline requirement items	Guideline requirements	
1. Environment and safety system	(1) Environmental safety policy, goal setting	Management should set long-term and annual environmental and safety policies and targets, and disseminate/promote them to all employees. Also, grasp their track record and take measures for improvement if necessary.
	(2) Environmental safety issues setting	Set improvement tasks related to environment and safety, assign a person in charge of promotion, clarify the means and action plans for achievement, and continuously implement them.
	(3) Legal compliance system	Clarify, keep up-to-date, and maintain environmental safety laws and regulations that directly relate to the organization.
	(4) System for complying with external requirements	Management shall understand and maintain the external environmental requirements that it has decided to accept.
2. Evaluation of environmental aspects	(1) Chemical substance management	Evaluate the impact on the environment of chemical substances, including controlled chemical substances in products specified by our company, and appropriately manage non-use or use/discharge.
	(2) Assessment of other environmental aspects	Evaluate the environmental impact of the following items and make efforts towards improvement. <ul style="list-style-type: none"> • Air pollution • Water pollution • Noise and vibration • Waste • Soil pollution • Energy (use of electricity, gas, fuel, etc)
	(3) Environmental emergency response	Identify emergencies and establish emergency response procedures and mechanisms. Also, conduct regular training and review.
3. Enlightenment/education	(1) Safety activities	Conduct the following workplace safety activities on a regular or appropriate basis: <ul style="list-style-type: none"> • Near miss • Morning assembly, danger prediction activity • Hold safety awareness rallies, etc., to raise safety awareness by factory top.
	(2) New employee education	Educate new employees and transferred employees according to the procedures at the time of acceptance and evaluate the proficiency level.
	(3) Education when work content changes	When the work content is changed, confirm the content and the safety of the work after the change, and provide the necessary instruction over the change.
	(4) Environmental education	Clarify who will be engaged in work that may have a significant impact on the environment, provide Separate training for new employees, and keep records.
4. Organizing	(1) Organizing tools and materials	From the standpoint of workability and safety, tools, materials, and products must be managed in three stages, and maintained in a state where there is no risk of them protruding into the aisle or collapsing.
	(2) Cleaning	In addition to regularly cleaning the work area and aisles, take timely action in areas that require repairs, equipment, or facilities that require repairs, and maintain the area to avoid conditions that can lead to slipping, stumbling, wetness, and scattering of powder.

	(3) Waste	Dispose of unnecessary items, sort waste (recyclable waste, industrial waste, general) in the manner according to the local custom or regulations at the indicated location, and clean the installation location regularly.
5. Maintenance of machinery equipment, tools, etc., prevention of danger	(1) Maintenance of machinery and equipment	Carry out systematic inspection and maintenance of mechanical equipment, etc., and if there is an abnormality such as an abnormal noise, take measures according to the procedure.
	(2) Maintenance of tools, etc	Regularly maintain tools, etc., and record the results of the maintenance. In addition, maintain the tools in the state without abnormalities such as cracks and chips.
	(3) Operation chief	In accordance with the laws and regulations related to occupational safety, please set the necessary person responsible for the work (example below) and take measures such as posting. <ul style="list-style-type: none"> •Boiler, etc. •Power press •Woodworking machine •Organic solvent •Specified chemical substances defined as substances that are highly likely to cause health problems in the local labor safety law.
	(4) Qualified personnel	In accordance with laws and regulations related to occupational safety, ensure that qualified personnel (licenses, skill training, completion of special education, etc.) are engaged in the necessary work (example below), and to secure replacement personnel. <ul style="list-style-type: none"> •Boiler, pressure vessel handling •Operation of cranes, mobile cranes, etc., slinging work •Forklift operation •Welding (arc, gas)
6. Security management	(1) Safety device	Identify dangerous places, such as rotating objects and drive parts, and install covers and safety enclosures.
	(2) Use of protective equipment	Identify tasks that require protective equipment such as safety belts, safety shoes, and dust masks, and enforce appropriate usage.
	(3) Response when using Organic solvents, etc.	Standardize safety measures for using organic solvents, etc., clean the equipment after use, and ensure ventilation, etc., appropriately.
	(4) Response in emergencies such as fires	Establish an emergency response procedure and prepare supplies (fire extinguishers, stretchers, etc.). Also, conduct regular training and review.
	(5) Hazard identification	Identify accidents and occupational safety hazards through risk assessment, and strive to eliminate or reduce hazards based on the risk assessment.
	(6) Non-routine work	Decide on a procedure for dealing with non-routine work, and carry it out accordingly.
	(7) Change management	Clarify and document procedures for responding to changes in work content, management methods, etc., and implement them as determined.
	(8) Security emergency response	Identify security emergencies, establish emergency response procedures and mechanisms, and conduct regular trainings and reviews.
7. Work environment management	(1) Work environment measurement	Measure the working environment as many times and as often as required by law, and if corrective action is required for the management category, be sure to implement it, as required by labor and safety laws of each country.

8. Labour accident	(1) Labour accident response	Make sure to implement recurrence prevention measures for places where occupational accidents have occurred in the past, and verify their effectiveness from the perspective of effectiveness.
9. Security / environmental abnormality	(1) Security/environmental abnormality response	Make sure to implement recurrence prevention measures for areas where security or environmental abnormalities have occurred in the past, and verify their effectiveness.
10. Consignee (outsource, subcontract)	(1) Environmental audit	Execute contracts with a contractor, such as an industrial waste disposal company, and systematically grasp the implementation status through audits, etc.

5. Quality Management System

Guideline requirement items		Guideline requirements
1. Quality Assurance System	(1) Setting quality policies and targets	Management should set long-term and annual environmental and safety policies and targets, and promote them to all employees. In addition, grasp the performance and confirm that the operation proceeds as prescribed and take necessary countermeasures.
	(2) Target management of quality defect reduction	The company has established items related to quality defects, such as the rate of defective products, the number of repairs, the number of claims, and the number of process defects. The company has set reduction targets for these items and are implementing systematic measures on an ongoing basis.
	(3) Quality Assurance Organization	The company has an independent division for quality assurance promotion. The person in charge is assigned and the person promotes quality assurance.
	(4) Responsibilities and authority	The responsibilities, authorities, and division of duties of each organization are documented and are exercised accordingly.
2. Rules, procedures and standards related to quality assurance	(1) Development of rules and procedures	Procedures for issuing rules and guidelines necessary for quality assurance activities have been established, and all of them have been prepared and documented. The decision maker is also defined.
	(2) Preparation of standards, specifications, and drawings	All standards, specifications, and drawings indicating guarantee levels are prepared and the latest version is maintained.
	(3) Preparation of work standards	The standard documents necessary for performing work, such as work standards and work instructions, are prepared and the latest version is maintained.
	(4) Laws, international standards, national standards, and customer specifications	The company clarifies and keeps track of necessary laws, international standards, national standards, and customer specifications.
	(5) Establishment, revision and abolition	Procedures for the establishment, revision and abolition of regulations, procedures, quality standards and other documents are defined in documents and implemented.
3. Management of purchased goods	(1) Specifications of purchased goods	Quality specifications are documented for all purchased goods required to ensure product quality and are presented to suppliers. Alternatively, receive delivery specifications, quality specifications, SDS, etc.
	(2) Evaluation of purchased goods	Establish the acceptance procedures (including acceptance inspections) for all purchased items necessary to ensure product quality, execute them as prescribed, and record the execution.
	(3) Evaluation and audit of business partners	Establish evaluation criteria and procedures for the quality, price, and delivery response of suppliers, conduct regular evaluations and utilize them in selecting suppliers.
	(4) Audits of business partners	The company conducts regular factory audits on the safety and quality of our business partners and uses them for improvement, correction, and evaluation.
4. Identity management and traceability	(1) Identification and labeling	Clarify and document methods and criteria for identifying all items from materials to finished products and execute them as prescribed.
	(2) Status identification of inspection and test	Clarify and document the methods and criteria for identifying and labeling inspected and uninspected products, and execute them as prescribed.
	(3) Manufacturing history tracking	The lot number is displayed on the product, and the manufacturing history can be grasped by tracing back to the manufacturing state and raw materials used.
5. Manufacturing Process Control	(1) Compliance with work standards	Regularly check whether the actual working method and details match the work standard and maintain the state of compliance.
	(2) Process control based on QC process diagrams	The QC process chart is prepared, QC is executed based on said chart, and results are recorded.

	(3) Implementation of process tests	Process testing procedures have been defined and procedures for handling cases that exceed the control limits are defined and implemented accordingly.
	(4) Securing process capability	On a daily basis, trend control is carried out using control charts, and process capability is periodically evaluated. The improvement activities are implemented and promoted to achieve 1.33 or more.
	(5) Process change control	The management method and standards at the time of process change (4M) are clarified and documented, and our Company is contacted in advance. The process change control is implemented accordingly and is recorded.
6. Facilities Management	(1) Maintenance and management of facilities	Facilities that affect quality, their maintenance methods, and standards are clarified. Daily and periodic inspections are carried out and the results are recorded.
	(2) Treatment of equipment failure	For facilities that affect quality, standardize the methods of dealing with malfunctions when they are discovered, and keep a record of the results of actions.
	(3) Preventive maintenance of facilities	Preventive maintenance has been implemented for all equipment affecting quality.
7. Inspection and testing	(1) Independence of inspection	The company has an inspection and judgment division independent of the manufacturing division.
	(2) Qualification of inspectors	The qualification requirements for inspectors are clarified, education and training are conducted, and all inspectors are qualified.
	(3) Final inspection	Clarify the pass/fail judgment criteria for product inspections, including all inspections from the receipt of raw materials to finished products, and the person in charge, and carry out product inspections as prescribed.
	(4) Evaluation of initial products (initial product management)	The definition, evaluation method, and standards of the initial product are clarified, and evaluation is carried out.
	(5) Records of inspections and tests	The results of inspections and tests are recorded on a prescribed form and confirmed by the person in charge.
8. Control of inspection, measurement and testing equipment	(1) Selection of measuring	Select a measuring instrument that has the accuracy required for product quality assurance, and install it in an appropriate location.
	(2) Inspection of measuring	Clarify the items and criteria for daily and periodic inspections of measuring instruments, implement them systematically, and keep records.
	(3) Calibration of measuring instruments	Calibration methods and standards for measuring instruments are clearly defined and implemented. Records are kept and the status of calibration is displayed.
9. Control of non-conforming product	(1) Disposal of nonconforming products (received goods)	Clarify the procedure for measures, including confirmation of details, isolation identification, and the person in charge when there is a nonconformity in the received product, implement the measures as prescribed, and keep records.
	(2) Disposal of nonconforming products (products)	When there is a nonconformity in the product, clarify the procedure for measures, including confirmation of the details, isolation identification, and the person in charge, implement the measures as prescribed, and keep records.
10. Corrective and preventive actions	(1) Corrective actions for external claims	Clarify the corrective action procedure, including the confirmation of the details when an external complaint occurs, the person in charge and his authority, implement it and confirm the effect, and keep a record. In addition, analyze the information and reflect it in the next year's policy.
	(2) Corrective actions for in-house abnormalities	Clarify the procedures for corrective action including confirmation of the details when an internal abnormality occurs, the person in charge and authority, implement and confirm the effect, and keep a record of them.
	(3) Preventive measures	The results of corrective actions for external claims and internal abnormalities are shared in other divisions. Preventive measures are taken and records are kept.
11. Storage, packaging and delivery of products	(1) Handling and storage of products	The standards for handling and storing methods to prevent deterioration, damage, and incorrect shipping of the product are clearly defined and enforced.
	(2) Product packaging	The packaging materials and methods used to satisfy customer requirements are clearly defined and implemented.

	(3) Shipment of products	The company has devised measures to prevent the incorrect shipment of products and have implemented first in first out.
	(4) Provision of product safety information	A system has been established for preparing SDS for products, and the latest version of the safe handling information is provided at the time of sale.
	(5) Issuance of yellow cards	A system has been established to create yellow cards for products, and the latest version is always carried with them when they are delivered.
	(6) Evaluation of warehouse and transportation companies	Evaluate the storage and transportation status of the warehouse and transportation companies on a regular basis, and use the results for selection and improvement.
12. Records and internal audits	(1) Management of quality records	Set the quality-related records to be stored and managed and the storage period, and implement them as determined.
	(2) Internal quality audit	The company has a system to examine the status of quality control, and it is implemented regularly.
	(3) Quality meeting	The company holds regular meetings to communicate and discuss the status of quality control, and keeps the minutes.
13. Education, training and statistical methods	(1) Education and training of workers	Conduct regular education and training based on the plan and keep records of it.
	(2) Small-group activities	Small group (QC circle) activities have been carried out, and their results have been improved.
	(3) Use of statistical methods	Statistical methods and computers are utilized for process improvement in addition to process analysis, resulting in improved results.
14. Contractors (outsourcing, subcontracting)	(1) Quality audit	In addition to exchanging quality-related contracts and quality specifications, systematically grasp the status of process management and provide guidance.