



Quality

Basic Approach

The JXTG Group believes that the provision of high-quality, safe, and reliable products and services that provide customer satisfaction is an important element in gaining the trust of our customers and achieving sustainable growth. Based on this approach, we have stipulated product and service quality in our Group Code of Conduct.

Each Group company has established its own quality management policies according to the nature of its business and works to continuously improve quality from a customer-oriented perspective based on these policies.

JXTG Group Code of Conduct (excerpt)

6. Product and service quality

- (1) We always conduct our business activities with a spirit of innovation and a willingness to take on challenges.
- (2) We strive to contribute to the solution of domestic and international social issues and gain customer satisfaction and trust by developing and providing innovative technology and useful products and services.
- (3) We comply with domestic and international standards for the products and services we provide. We perform quality control and risk management, covering areas such as safety, security, environment and health. We also strive to provide a stable supply of goods and services, even in the event of emergencies.
- (4) We always provide our customers with appropriate and clear labels and explanations on our products and services, and we respond promptly and sincerely to customer inquiries.
- (5) In the event of malfunctions in our products or services, we strive to conduct exhaustive investigations and implement measures to prevent recurrence.

JXTG Nippon Oil & Energy Group Quality Policy

We seek to earn the trust and satisfaction of our customers by adopting a customer-oriented perspective and adhering to the following.

1. Provide products and services that are safe and can be used with peace of mind;
2. Maintain and continuously strive to enhance the quality of our products and services; and
3. Provide customers with accurate information that is easy to understand.

JX Nippon Mining & Metals Basic Quality Policy

1. Correctly grasp the requirements of customers and society in order to offer products and services that customers can trust and that satisfy their needs.
2. Improve and maintain quality at all processes from development, design, and production to delivery, while paying due attention to safety and environmental conservation.
3. Establish a quality management system, carry out continual improvements, and develop human resources.
4. Comply with all pertinent laws and regulations of Japan and other countries, and provide customers and society with accurate information on quality.

Structure

The JXTG Group positions quality as a priority field for CSR activities. Our Group companies regularly oversee, evaluate, and share information about the status of quality-related initiatives.

Many of our business sites in Japan and overseas have obtained ISO 9001 certification, a global standard for quality management systems.

Business Sites with ISO 9001 Certification

JXTG Nippon Oil & Energy	Sendai Refinery; Chiba Refinery; Kawasaki Refinery; Negishi Refinery; Sakai Refinery; Wakayama Refinery; Mizushima Refinery; Marifu Refinery; Oita Refinery; Muroran Plant; Kawasaki Plant; Yokohama Plant; Chita Plant; Sodegaura Terminal; Osaka Refinery, Osaka International Refining Company, Limited; Kashima Refinery, Kashima Oil Co., Ltd.; Advanced Polymers Business Unit; CF Composites Unit
JX Nippon Oil & Gas Exploration	Nakajo Field Office
JX Nippon Mining & Metals	Domestic Hitachi Works (Copper Foil Dept.); Isohara Works; Kurami Works; JX Nippon Exploration and Development Co., Ltd.; Pan Pacific Copper Co., Ltd. (Hibi Smelter, Saganoseki Smelter & Refinery, Hitachi Refinery); Hibi Kyodo Smelting Co., Ltd.; Japan Copper Casting Co., Ltd.; JX Nippon Coil Center Co., Ltd.; JX Metals Trading Co., Ltd. (Takatsuki Plant); Ichinoseki Foil Manufacturing Co., Ltd.; JX Metals Precision Technology Co., Ltd. (Tatebayashi Works, Esashi Works, Nasu Works, Kakegawa Works); Toho Titanium Co., Ltd. (Headquarters, Chigasaki Plant, Hitachi Plant, Yahata Plant, Wakamatsu Plant, Kurobe Plant)
	Overseas Nippon Mining & Metals (Suzhou) Co., Ltd.; Nikko Fuji Precision (Wuxi) Co., Ltd.; Nikko Metals Shanghai Co., Ltd.; Nikko Metals Taiwan Co., Ltd.; JX Nippon Mining & Metals Philippines, Inc.; Materials Service Complex Malaysia Sdn. Bhd.; JX Nippon Mining & Metals USA, Inc.; JX Nippon Mining & Metals Korea Co., Ltd.
NIPPO CORPORATION	Head office, Hokkaido branch, Tohoku branch, Kanto Daiichi branch, Kanto Daini branch, Hoku-shinetsu branch, Chubu branch, Kansai branch, Shikoku branch, Chugoku branch, Kyushu branch, Architect Department

Initiatives at Manufacturing Sites

Thorough preventive measures are carried out at JXTG Nippon Oil & Energy refineries and plants to eliminate quality-related issues.

Standardization of Quality Management and Assurance Procedures

Although all of our refineries and plants have obtained ISO 9001 certification, we focused on ISO 9001 requirements for the manufacture of oil and petrochemical products to develop the Quality Management System, which has been implemented at all sites.

One of the features of this system is that risk assessments and risk reduction measures are performed to prevent quality-related issues from occurring. Employees at all manufacturing sites learn quality risk analysis methods, enabling them to identify risks and take appropriate measures to address those risks, thus contributing to the achievement of proactive, highly effective quality management.

Information Sharing about Quality Complaints and Issues

Information about quality complaints and issues that have occurred at refineries and plants is shared via databases with other refineries and plants, and measures to prevent recurrence are discussed and implemented, thus contributing to the future prevention of quality-related issues.

Inspection of Quality Management Systems

We seek to improve the quality management systems of our refineries and plants by carrying out inspections based on the Quality Management System. The strengths and weaknesses of the system at each location are identified and shared throughout the company, enabling us to make further improvements to these systems.

Initiatives at Distribution Sites

As part of our quality management efforts at distribution sites, we work with freight companies to ensure that all procedures, from product loading to unloading, are carried out safely and without error.

Major initiatives for preventing accidents include the installation of state-of-the-art equipment to prevent the mixing of products on tank trucks that transport gasoline, kerosene, and diesel, and thorough implementation of procedures, such as having both customers and truck drivers present during unloading.

In addition, when transporting packaged lubricant products by truck, we work to prevent transport-related issues by having both customers and truck drivers check the destination, product name, packing condition, quantity and appearance during unloading.

Initiatives at Service Stations

At our service stations, we work with operators to improve product quality management and customer satisfaction.

Product quality management initiatives at our service stations include regular inspections of weighing devices, underground tanks, and other facilities.

In addition, we have prepared a quality management manual and other materials for the development of knowledge and skills in order to ensure quick and appropriate response to product quality issues should they occur.

Strengthening the Quality Audit Function from a Third-Party Perspective

In January 2018, as part of its efforts to strengthen its quality management structure, JX Nippon Mining & Metals established the Quality Control Department, which is in charge of planning, proposing and implementing policies aimed at maintaining as well as improving quality management at the company. From a position independent from the company's business operations, the Quality Control Department conducts quality audits of all business sites to ascertain whether quality management is being appropriately implemented.

The Quality Control Committee was also established to ascertain whether the quality management structure is functioning properly and to share any issues.

Initiatives in Quality Control Education

At JX Nippon Mining & Metals, a quality control education has been developed with the following three objectives:

- To standardize and raise quality control levels across JX Nippon Mining & Metals Group;
- To improve problem-solving capability, enabling employees to logically deduce the causes of problems and take the lead in solving them; and
- To pass along and inculcate quality control techniques.

To achieve these objectives, the company has made it compulsory for all employees to take the Elementary and "Five Why Analysis" quality control courses.

Addressing Customer Needs

JXTG Nippon Oil & Energy receives valuable feedback from our customers through the JXTG Customer Service Center. The JXTG Customer Service Center responds to enquiries with clear, courteous explanations and addresses complaints promptly and in good faith. We share customer feedback obtained through the JXTG Customer Service Center with the relevant departments.

From April 2017 to March 2018, we received a total of 23,695 enquiries.

In the quality design for products and the establishment of manufacturing standards, we conform to laws, regulations, and standards such as JIS, as well as the contractual specifications of our customers. In addition, to prevent customer use issues with our products, we carry out in-depth studies, utilizing our abundant experience and knowledge as a database, to ensure that we provide reliable products of the highest quality.

Quality Control Education System

