

X KATSURAGI INDUSTRY CO.,LTD.

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X KATSURAGI INDUSTRY CO.,LTD.





Industry and Environment

Contribute to society through three technologies—drying, concentration, and crystallization—from manufacturing to environmental conservation

KATSURAGI INDUSTRY manufactures and sells chemical equipment such as concentrators and crystallizers, mainly various dryers including drum dryers. Our products support a wide range of manufacturing sites, from chemicals and food to drugs and electronic components, and also contribute to environmental fields such as wastewater treatment and recycling.

Dryers

A technology that completely removes water from substances by drying them through heating. Drum dryers are the main products of KATSURAGI INDUSTRY, which boast the No. 1 delivery record in Japan.

Concentrators

A technology that makes highly concentrated liquids by boiling and evaporating water and other substances in solutions. Since only substances other than water can be concentrated, it can also be utilized for wastewater treatment and other purposes.

Crystallizers

A technology that crystallizes and deposits the necessary components from solutions. KATSURAGI INDUSTRY excels at industrial-scale continuous crystallization, which enables mass production in a small space.



Sustainable Society



Support a sustainable future through wastewater purification and recycling

While our chemical equipment has been supporting a wide range of manufacturing fields, in recent years it has also been adopted frequently in recycling and wastewater treatment sites as a technology that contributes to the environment. We are also working to reduce CO2 emissions by taking measures such as actively incorporating technologies that contribute to energy conservation into our products.

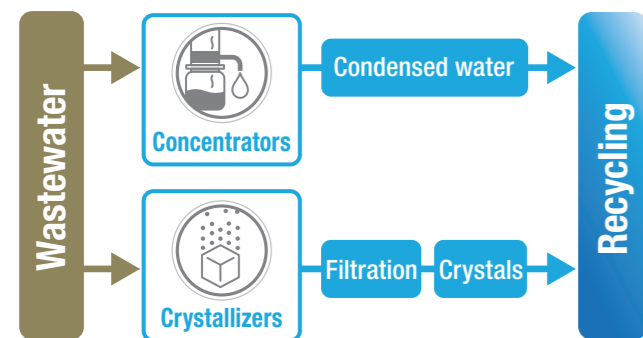


Various technologies that also contribute to the SDGs

Properly treat wastewater generated from factories and final disposal sites



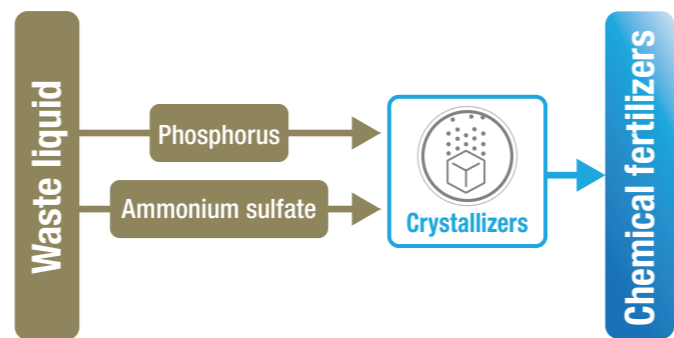
The volume of wastewater itself can be reduced by evaporating water in industrial wastewater to solidify and concentrate the wastewater. At final waste disposal sites, our equipment is used to separate the generated wastewater into clean water and impurities.



Extract components that can be fertilizers from waste liquid after manufacturing



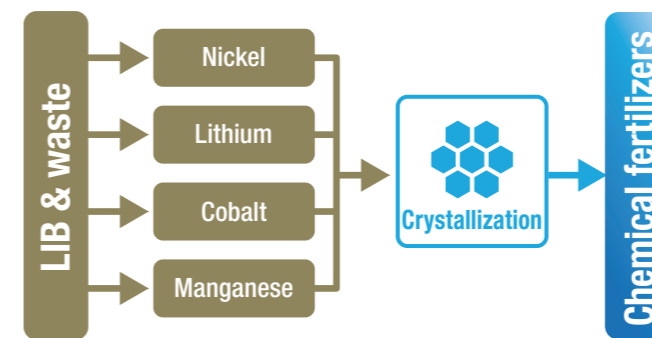
Our equipment is used to extract and crystallize phosphorus, ammonium sulfate and other components that can be fertilizers from waste liquid discharged when manufacturing products. The extracted components are used in chemical fertilizers.



Recycle rare metals from used batteries



Our equipment is used to crystallize solutions of nickel, cobalt and other substances recovered from used lithium-ion batteries (LiB) with high purity. It is also utilized for recovering rare metals from waste generated during manufacturing.



Contribute to CO2 emission reduction through energy-saving design

In addition to the use of waste heat with dryers, we are also working on energy conservation for equipment that can reduce both CO2 emissions and running costs, such as the adoption of ejector systems and heat pump systems for concentrators.





Chemical Equipment

Use our accumulated technical capabilities to fulfill all needs of customers

Almost all the products provided by **KATSURAGI INDUSTRY** are custom-made. Very few products are the same among the ones we have delivered in the past, so the many achievements that we have accumulated have directly become our technical capabilities. On the other hand, what we have consistently in common is that we have promoted development from customers' perspectives by conducting tests and discussions together with customers. We are always thinking about how we can meet our customers' needs with our technologies, and taking on challenges.



Dryers



Drum dryers with the No. 1 record in Japan

Using steam and other materials, heat is added to the inside of a rotating cylindrical drum. Evaporation is performed by having a liquid raw material flow to the outside of the heated drum, and the raw material attaches to the surface as a solid substance. The attached raw material is collected by being continuously scraped from the drum surface with a fixed knife. **KATSURAGI INDUSTRY** also offers a variety of other dryers suited to different purposes.



Concentrators



Reduce maintenance work with unique technology

Concentration is a technology that makes highly concentrated liquids by boiling and evaporating water and other substances in solutions. In this process, there are issues such as internal burned parts and clogged pipes, and regular maintenance is essential. **KATSURAGI INDUSTRY** has mitigated these issues by changing the structure and applying a technology to control the heat. We enable efficient operations by significantly extending the maintenance intervals.



Crystallizers



Crystallize any substance with proven technical capabilities

Crystallization is the process of heating or cooling solutions to crystallize and take out the components contained in them. Since various cases are possible depending on the material to be taken out, in a sense, this is a field where experience matters. **KATSURAGI INDUSTRY** has also delivered many crystallizers, and has technical capabilities to handle various substances.

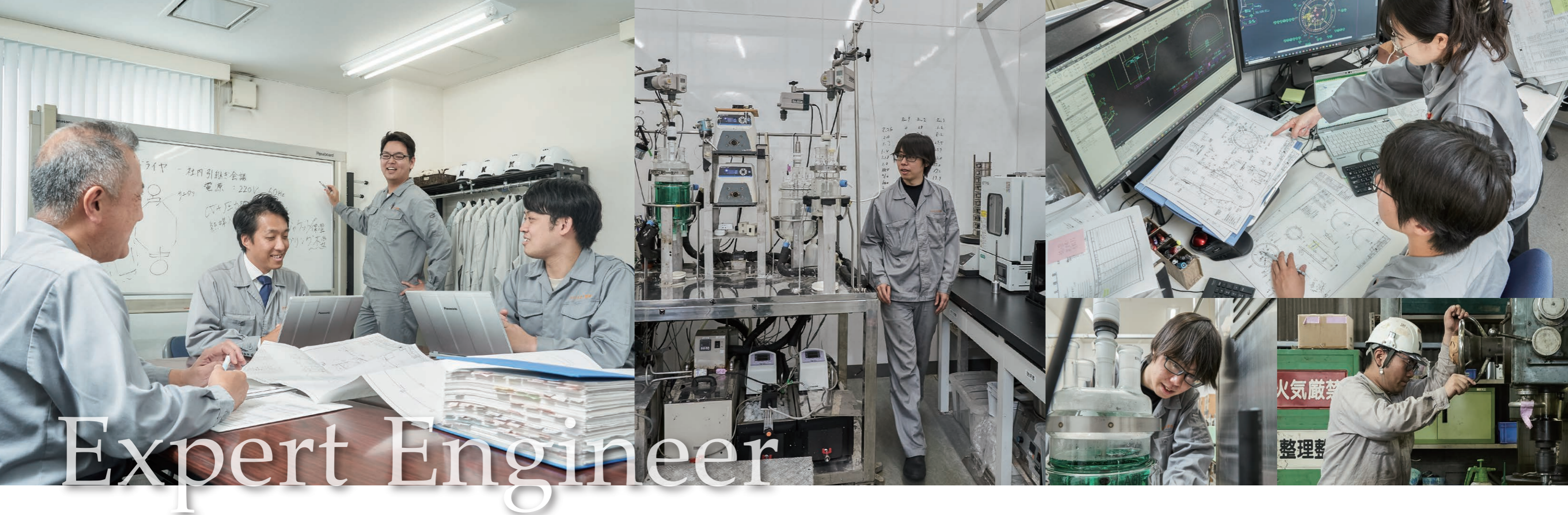


Chemical equipment for cooling and solidification



Flexibly handle various types of chemical equipment

We also manufacture a variety of other chemical equipment, including drum flakers that solidify resins and other materials at low temperatures to improve the handling, and peripheral equipment for dryers, concentrators and crystallizers. In addition, we do our best to update old equipment that has been discontinued as long as we can utilize our technologies.

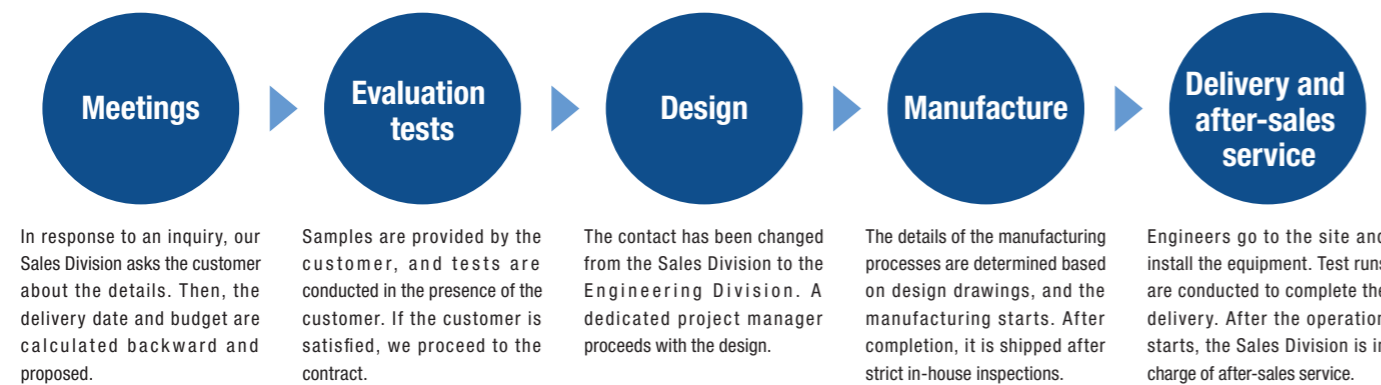


Expert Engineer

Aim for manufacturing without compromise with everyone acquainted with technologies

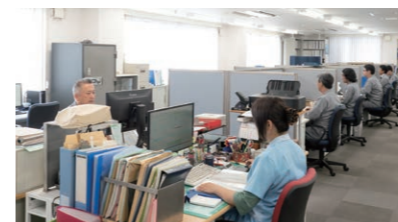
The strength of KATSURAGI INDUSTRY is that everyone from the Sales Division to the Manufacturing Division, not to mention the Engineering Division, is acquainted with technologies. In our company, we actively exchange ideas to make better products. Based on the concept that “what makes a company is its people,” we are also proactively working to develop human resources, from helping them to acquire various qualifications to activities at academic conferences.

Flow to introduction



Sales Division

All the sales personnel at **KATSURAGI INDUSTRY** are sales engineers. Since they have experience in technologies and design, product specifications and other items can generally be determined at the meeting stage. Our strength is that the work before design can also be carried out smoothly.



Engineering Division

After a contract is signed, the Engineering Division assigns a dedicated project manager (PM), who takes over the work. In addition to the design, the PM manages all the processes, including meetings with the customer, coordination with the Manufacturing Division, in-house inspections before the shipment, and on-site test runs.



Manufacturing Division

It is a manufacturing department that actually gives form to equipment. The strengths of our Manufacturing Division are its solid technical capabilities and extensive experience. Using the skills, they propose things such as ways to shorten the period and reduce the costs from the design stage to the Engineering Division. They proceed with manufacturing more efficiently.



Development system

Missions such as collecting information on new technologies and verifying new technologies to be introduced are conducted mainly by the Technology Development Division. In addition, we also focus on academic activities including promoting research and development through industry-academia collaboration with Kyoto University, the University of Hyogo and other universities, and participating in the Crystallization Subcommittee of the Association of Powder Process Industry and Engineering, JAPAN, to actively present new technologies.





Technical Capabilities

Contribute to society by utilizing our manufacturing technologies and wisdom, creating products that satisfy our customers, and letting the company and employees grow together.

KATSURAGI INDUSTRY has been providing a lot of chemical equipment to customers over many years. Thanks to everyone's support, our drum dryers now have the No. 1 delivery record in Japan, and other chemical equipment is also building up successful track records. In addition, our equipment has expanded into environmental fields in recent years, and we are once again aware of our ability to contribute to society. There is no doubt that the roles we should play in society are increasing, from both performance and environmental aspects. Recently, we have been receiving an increasing number of inquiries from customers saying, "Other companies rejected our request and we're in trouble. We want your help." We presume that this situation is occurring due to the overestimation of risks, and we would like to be a company that also shares risks with customers and overcomes them together. We will cherish this mindset and continue to challenge ourselves to remain a company that is needed by society.



Toshiro Satake, President

Company Outline

Corporate name KATSURAGI INDUSTRY CO., LTD.

Location Head office and factory
5-4-6, Minamitsumori, Nishinari-ku,
Osaka, 557-0063, Japan
Tel.: 06-6659-2432 (main number)
Fax: 06-6658-3789

Establishment August 1968

Foundation February 1974

Factory Site area: 1,812 m²
Total building area: 1,940 m²

Research and development building Site area: 619 m²
Total building area: 591 m²

Banks Kansai Mirai Bank, Ltd.,
Tengachaya Branch
Sumitomo Mitsui Banking Corp.,
Tengachaya Branch
Resona Bank, Ltd., Sumiyoshi Branch

Business lines Design and manufacture of chemical and industrial equipment

Company History

1968 Initiated as an iron factory to handle shipyard lock gates, tanks, etc.

1974 Incorporated as a stock company

1980 Shifted from an iron factory to a chemical equipment manufacturer with drum dryers as its main products

2006 CRYSTAL ENGINEERING CO., LTD. founded as a group company to handle concentrators and crystallizers

2011 CRYSTAL ENGINEERING CO., LTD. integrated

2014 KATSURAGI KOREA CO., LTD. founded in South Korea