Segment Overview

Industrial Equipment Business

SDGs related to our products

Net sales breakdown 26.9%

Business Profile

The origin of our heat exchangers is an aluminum heat exchanger for aircraft that was developed using our own technology. Today, we provide high-performance heat exchangers of various sizes to a wide range of industries as well as exporting to countries around the world. In addition, we have the world's largest delivery record in LNG (liquid natural gas) vaporizer market. Our precise technology is highly regarded and licensed to an overseas manufacturer. Going forward, we will strive to meet your demands toward the establishment of an efficient energy system by developing and introducing heat exchangers made of not only aluminum but also stainless steel and titanium.

Furthermore, Sumitomo Precision Products has cultivated the fields of injection molding equipment, general industrial equipment, and transport equipment, leveraging its technologies developed for aircraft hydraulic equipment, and also pioneered the high-pressure coolant pump field, leveraging its hydraulic pump technology. While expanding usage as indicated above, the company develops and manufactures low consumption hydraulic and coolant pumps in consideration of environmental issues.

Business Strategy

In the industrial heat exchanger segment, Sumitomo Precision Products caused a great deal of inconvenience to its customers and other stakeholders due to certain deviations in the manufacturing and inspection processes of heat exchangers, as announced in fiscal 2019. The company will ensure its commitment to the quality-first policy, and move forward with production activities in customer business relation in fiscal 2021, and move back to its growth trajectory.

Meanwhile, as demand for electronic equipment is growing along with the move forward to a post-5G/digital society, the company will focus on promoting the sale of its products to new customers in the market needing the cooling of electronic components generating more heat than ever before.

Moreover, the company will also focus on the development and supply of products which are required in each situation such as producing, transporting, and using hydrogen and ammonia so as to be helpful for heat management in the non-fossil energy value chain.

In the precision hydraulic equipment business, in fiscal 2021, we will strengthen our partnership with the Haitian Group, which is the largest manufacturer of injection molding equipment in the world, enhance our facilities, and boost production, taking advantage of the booming Chinese market.

In addition, we will focus on promoting the sale of coolant pumps primarily in China and Taiwan. During the Mid-term Management Plan period, we will boost production, income, and profits with the aim of securing the largest share in the pump segment of the injection molding equipment market in China.

Major product lines and strengths of Sumitomo Precision Products

Industrial Heat Exchangers

LNG Vaporizer

Heat Exchanger for Air Separation Plant

Technology developed for heat exchangers for aircraft is expanded to the ones for energy applications and industrial equipment.

Since we shipped Japan's first open rack LNG vaporizer (ORV), we have shipped ORVs to our customers in Japan and abroad and secured the largest market share. In addition to ORVs, we offer various other vaporizers, which serve as key systems for natural-gas-fueled thermal power generation. With advanced technology, we have been making contributions to develop the global energy value chain.

Plate-fin heat exchangers from Sumitomo Precision Products have made its name the best brand in applications such as air separation systems for the production of various industrial gases, petrochemical plants, and natural gas liquefaction.

Small, high-performance aluminum coolers are supplied to a broad range of applications, such as transportation systems to electronics systems and others.

Japanese rolling stock equipment manufacturers highly value Sumitomo Precision Products as their main supplier especially for power device coolers for high-speed trains. Our coolers are the most utilized for Japanese bullet train Shinkansen.

Sumitomo Precision Products manufactures stainless steel heat exchangers, which are globally unique for high-pressure and high-temperature applications with various fluids, including hydrogen.

Inverter Control Element Cooler

Stainless Steel Heat Exchanger

Precision hydraulic equipment

Hydraulic Pump "QS Series"

Coolant Pump "CX Series"

Hydraulic Pumps "QT Series"

Example of feeding cutting fluid during machining

To supply precision hydraulic pumps featuring low consumption, low pulsation, and low noise for various applications such as transport equipment and general industrial equipment with advantage of technologies developed for aircraft hydraulic equipment.

Ningbo SPP Hydraulics Co., Ltd. was established in China as a joint venture with the Haitian Group which is the largest manufacturer of injection molding equipment in the world. Hydraulic pumps manufactured by Ningbo SPP Hydraulics were selected as the standard for the molding equipment of the Haitian Group. They were also adopted by many other molding equipment manufacturers.

Based on skills and experience gained through years of hydraulic pump sales, we developed the one and only internal gear coolant pump in the industry. We have sold the pump to major machine tool manufacturers and coolant system manufacturers in Japan and abroad, who use it to feed cutting fluid, a critical element in the machining process. Taking advantage of the features of a gear pump, the internal gear coolant pump is small yet exhibits superb durability. In addition, it enables high-pressure feeding of cutting fluid, being helpful for improved machining precision and efficiency.

Social value of major products

Our durable compact heat exchangers contribute to reducing the burden on the environment through high-efficiency cooling of electronic equipment in the Shinkansen (including the cutting edge N700S series) and other rolling stock as well as various industrial machines. In addition, LNG vaporizers contribute to the reduction of CO_2 emissions, while heat exchangers for plants contribute to energy saving by improving heat efficiency of the entire plant in a broad range of industrial applications across the world, such as petrochemical and industrial gas production.

Injection molding equipment that uses precision hydraulic equipment manufactures all kinds of daily products, including medical goods, helping to improve healthcare services and achieve healthy living. Furthermore, hydraulic pumps, including QT pumps, and coolant pumps have features such as low consumption, low pulsation, and low noise, which contribute to the reduction of energy consumption and an improved work environment at various manufacturing sites. About 60% of the materials used in our pumps are made from recycled materials.

Initiatives toward a sustainable society

Development of heat exchangers for non-fossil energy including hydrogen

Sumitomo Precision Products developed, and began to ship, diffusion-bonded heat exchangers that meet strength required to cool ultrahigh-pressure hydrogen at hydrogen stations.

Transported liquid hydrogen is vaporized to use at an extremely low temperature. We try to develop products to vaporize liquid hydrogen by using its extremely low temperature technology acquired from heat exchangers for plants and LNG vaporizer technology.

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diffusion-bonding-type micro channel heat exchanger that is used at hydrogen stations and can adapt to a high-pressure environment

Find new customers who need coolers for semiconductors, which have higher performance and generating heat

We developed a two phased circulation-type cooler (Siphorex), which leverages the phase change (boiling and condensing) of coolants, for cooling power devices for high-speed trains and industrial machines. The product has been supplied in large numbers.

To improve this product for higher performance enabled it to cool semiconductors with more highly generated heat more efficiently. Demand for small and high-performance cooling devices becomes dramatically increasing for hyper-scale data centers, power conditioners at mega solar farms, and electrified transportation systems and others. We focus on the sale of this product as one of some next-generation strategic products.

A small, high-performance two-phase cooler (Siphorex), developed for cooling CPUs of servers at data centers

Development of precision hydraulic equipment

Our hydraulic pumps are installed in various types of manufacturing systems. In this field, development is under way to make the system small and high performance with the aim of saving energy and improving productivity. To respond to these market needs, we will further improve the efficiency of pumps and newly develop equipment suitable for energy-saving operation, utilizing inverters and other devices.

Sumitomo Precision Products coolant pumps are used on machine tools to feed cutting fluid. Parts made from difficult-to-machine materials are abundantly used in electric and fuel cell vehicles, expected to come into wide use for realizing the carbon-free society. Given this trend, the company will help improve the machining efficiency of difficult-to-machine materials by making its coolant pumps more high-pressure capable.

High-pressure coolant pump