

Electronic Equipment Business

Orders for products for semiconductor and LCD manufacturing equipment increased due to the global recovery in the semiconductor market.

The Super 300 Series of fittings has a 90% share of the global market for semiconductor cleaning equipment applications. Global demand for semiconductors is rising against the backdrop of expanding demand for equipment related to vehicle-mounted, 5G, data centers, and IoT, and we will continue to respond to this demand with our advanced technological capabilities and stable supply system.



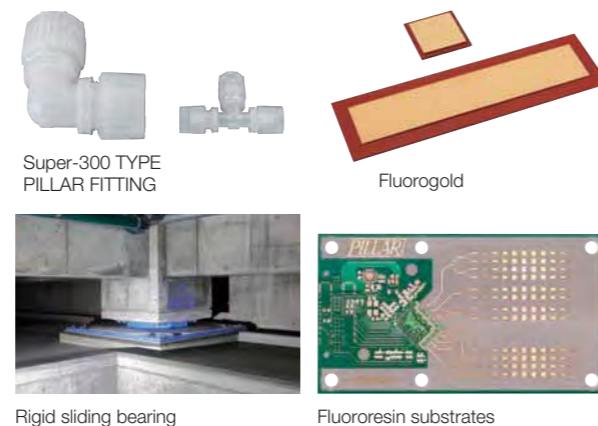
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Business Overview and Market Environment

In the Circulation (CS) business, the core of this segment, we supply fittings, tubes, pumps, and other components for chemical transport lines for use in semiconductor manufacturing cleaning equipment and chemical supply piping. The Super 300 Series of fittings has become the global standard for cleaning equipment applications, with a global share of 90%. In fiscal 2020, telecommuting accelerated in response to the spread of COVID-19, and demand for semiconductors for PCs and tablets increased, while demand for equipment related to vehicle-mounted, 5G, data centers, and IoT expanded.

In the construction market, fluororesins are used in seismic isolators that release earthquake shaking from buildings by applying their low-friction properties. In the field of telecommunications, we have developed millimeter-wave radar antenna substrates that take advantage of high-frequency

characteristics, and these are being used in applications such as forward collision prevention for automobiles.



Rigid sliding bearing Fluoro resin substrates

Progress of Medium-Term Management Plan "BTvision22"

In fiscal 2020, the first year of the plan, we were able to achieve our initial target with a large increase in orders for products for the semiconductor and LCD manufacturing equipment industries due to the global recovery of the semiconductor market.

In the future, we will continue to fulfill our supply responsibilities with the major theme of enhancing our production system so that our customers do not have to worry about supply.

In the area of technology development, we have promoted new product development using resin flow analysis and fluid/structure analysis technologies related to injection molding, which are our strengths, and also improved our mold technologies.

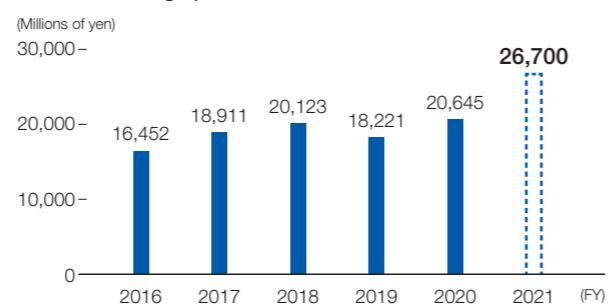
As an example, the new coupling "Sweep Elbow," which we began offering in 2021, is designed with an R-shaped flow path to reduce the load on the pump and save energy.

Furthermore, the new product has been highly evaluated by

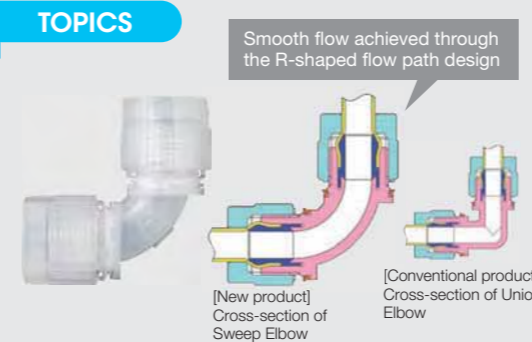
cleaning equipment manufacturers for its greatly improved particle* discharge performance, which is important in semiconductor manufacturing, and we will promote sales expansion starting in 2021.

* Particles: nano-level dust that can cause defects in products.

Sales transition graph



TOPICS



Sweep Elbow is a new type fitting for semiconductor manufacturing equipment

"Sweep Elbow" is a new fitting product that utilizes our core competence in injection molding technology, especially resin flow analysis and fluid/structure analysis technology. The flow path is R-shaped, which allows chemical solutions to flow smoothly, reducing pressure loss by 60-70% and increasing flow rate by up to 20%. This contributes to improved productivity and energy conservation by reducing piping resistance.



The first in the world to manufacture products in a cleanroom

We develop and supply products for medical equipment by making full use of our strengths in injection molding technology, especially fluororesin injection molding technology. We are the first company in the world to use fluororesin for medical applications, and in addition to the world's leading leak-proof performance that we have cultivated through our fitting technologies, we are the first in the world to manufacture our products in a cleanroom to provide clean and safe products.

Future Outlook

We will further expand our overseas operations by leveraging our track record with top equipment manufacturers in Japan, the U.S.A., and Europe. Shanghai Pillar is staffed with engineers who are familiar with CS products, and we will accelerate sales to emerging manufacturers by closely monitoring emerging Chinese equipment manufacturers and market trends. We will also establish a system that can reliably respond to overseas customers.

In the area of production technology, we are seeking technical guidance from Professor Emeritus Hidetoshi Yokoi of the University of Tokyo in order to improve our basic injection molding/molding technology and production site capabilities, based on our past attitude of pursuing mass productivity. As a result, the defect rate, in particular, has been reduced to less than half in the past two years, and we have also made great achievements in resource conservation.

On the other hand, in terms of production system, we have started to operate a production system that fully utilizes the second phase building of the Kyushu Factory, which has greatly contributed to the improvement of productivity. We will continue to build the "next production system" for the next five to ten years.

The Group's CS products have firmly established the position of global niche leader, which is indispensable to the semiconductor industry. We will not rest on our laurels in this position and will continue to strive to increase the value of our products.

In recent years, more and more of our products are being used in the medical field for dialysis applications. We will continue to supply products in this field as well, contributing to a safe and secure lifestyle.

Main SDGs addressed by our electronic equipment business

Social issue	Main activities	Corresponding SDGs				
		1	3	6	7	9
Climate change, environmental pollution	Development and marketing of products that reduce fluid leakage	3.9	6.3	9.4	11.6	12.4
Energy	Improvements in energy conservation and energy efficiency			7.3		13.1
Natural disasters	Contribution to disaster-resistant infrastructure through the provision of seismic isolation devices	1.5		9.1	11.1	13.1
Health value	Contribution to the sensor business with fluororesin substrates	3.6			11.1	



Cleanroom to manufacture products for semiconductor and LCD manufacturing equipment



Clean booth in fitting product assembly line