

R&D

As the owner of many patented products, we conduct a number of experiments under actual operating conditions before introducing our products to society. Our research and development, supported by the latest verification technologies, continues to evolve toward even higher goals.

Seeking New Values and Striving to Research and Develop Unknown Materials



Microscopic analysis technology

In order to meet the increasingly stringent cleanliness requirements associated with the miniaturization of semiconductors, we are building a system capable of multifaceted analysis (both inorganic and organic).



Data collection and analysis test equipment for failure prediction

This test equipment is used to collect and analyze data on pressure, temperature, torque, vibration, etc. under operating conditions, including failure modes, in order to establish technology for predicting mechanical seal failures.



Design with 3D CAD

We perform basic structural analysis and design seamlessly, leading to faster product design and proposals.



Low temperature test equipment for valves

This test equipment is used to collect data on sealing characteristics, sliding characteristics, and stress relaxation characteristics of gland packing for valves in low temperature environments (-150 to 0°C). It is utilized for the development of gland packing suitable for low-temperature environments.



Test equipment for semiconductor and liquid crystal manufacturing devices

To evaluate performance under severe operating conditions in the semiconductor market, we have thermal cycle test equipment capable of cycling through high and low temperatures.



Friction and abrasion tester

This tester is used for technical evaluation of sliding friction and abrasion characteristics between the material to be evaluated and the mating material to be used for sealing materials. Both ring-on-ring and pin-on-disk testing are possible.

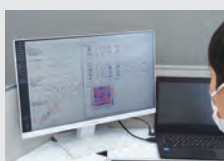
Quality Assurance

In order to achieve the quality required at all stages from product development to design, production, sales, and after-sales service, all of our internal quality assurance organizations cooperate with each other and work together to provide quality that meets the demands of the times based on our Company motto: Quality First.

Statistical Quality Control Measures

In fluorocarbon polymers products for the semiconductor market, we are working to further improve quality and productivity by analyzing quality data from a statistical perspective.

We will continue to monitor fluctuations in measurement data and develop an environment for statistical analysis to improve the quality of mass production and the effective use of materials.



Analysis by data analysis software

Measurement results are shared with each production site via the in-house network, and the results are analyzed. In the future, we plan to further improve productivity by utilizing real-time molding conditions.



High-precision measurement and data utilization with 3D measuring instruments

Three-dimensional measuring instruments assess the characteristics of critical parts that affect the sealing function of molded parts and provide feedback, which is reflected in product quality, including process capability.