

R&D

The Company owns a large number of patented products. To introduce these products into the market, we conduct a number of experiments that assume actual operating conditions. 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



ICP-MS

ICP-MS is an elemental analyzer that uses inductively coupled plasma to ionize elements contained in a liquid sample for qualitative and quantitative evaluation of trace elements.

* Presented with permission from Agilent Technologies, Inc.



Large-scale high-speed testing machine

This is a high-pressure, high-speed rotating testing machine used to evaluate the performance of mechanical seals under severe operating conditions in actual machines.



Analytical software (CAE)

CAE is used to conduct structural and fluid analysis, to enable quantitative studies of the optimum seal shape and flow path shape according to product specifications, which in turn contributes directly to the design and proposal of the product.



Test equipment for high pressure valve & high pressure gas booster

Data such as leakage amount, sliding load, and tightening pressure under pressure conditions of up to 100 MPa can be collected using these devices, and the data is used for the development of high-pressure packing.



Product laboratories for semiconductor and LCD manufacturing equipment

We have a laboratory equipped with a neutralization system to handle various types of liquid chemicals used in the semiconductor market.



Horizontal-type valve testing equipment and automatic data logger

The testing equipment imitates a valve, and the data logger automatically collects data such as leakage amount, sliding load, and tightening pressure under a wide range of temperatures and pressures from high to low.

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.

Continuing to Deliver World-Class Quality to Every Segment



Analytical scanning electron microscope (SEM)

In addition to scanning and irradiating electron beams and capturing the signals generated by the magnetic field type lens as images, our SEM can also identify elements contained in materials. It is mainly used for surface observation of developed products, fracture surface observation of returned products, and foreign material investigation.



X-ray diffractometer (XRD)

By irradiating X-rays while changing the angle, our XRD can identify and specify substances with the same constituent elements based on the difference in crystal structure from the angle of irradiation and X-ray intensity. It is mainly used to confirm the crystal structure of developed products.



Infrared spectrometer (IR)

By continuously irradiating infrared rays with varying wavelengths, molecular structures can be identified from the unique spectra corresponding to the vibration energy inherent in molecules. Our IR is mainly used for checking rubber materials and investigating foreign substances in returned goods.



Thermomechanical analyzer (TMA)

Our TMA can heat and cool materials in a wide range from low to high temperatures, and measure thermo-mechanical properties such as thermal expansion, thermal contraction, and softening. It is mainly used to check the linear expansion coefficient of developed products.