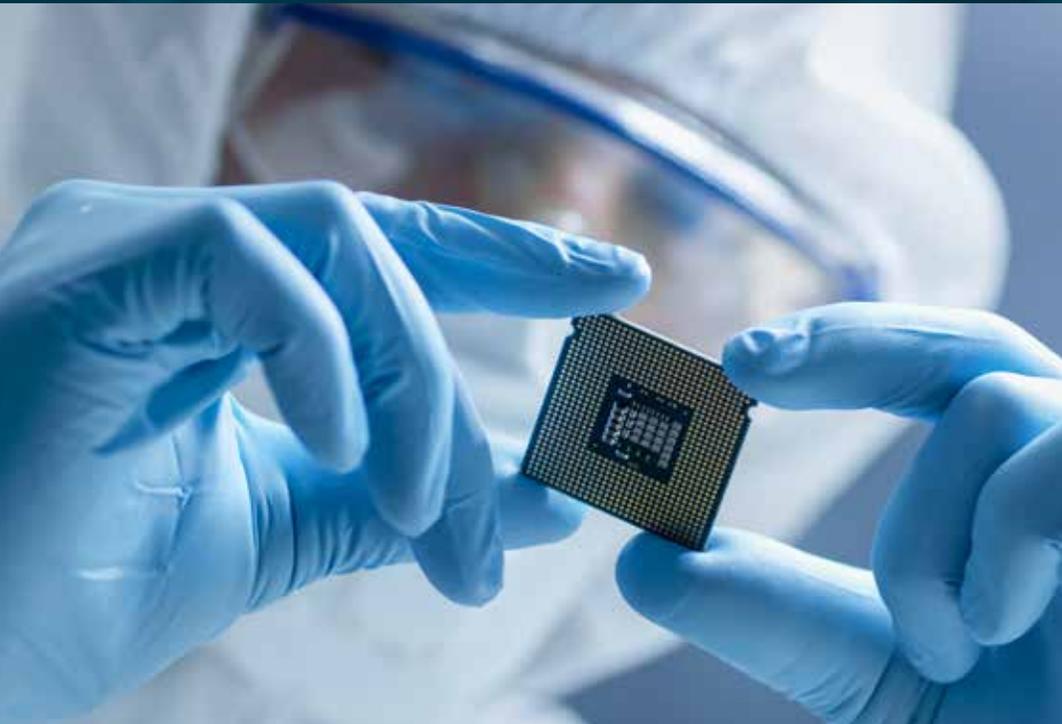


The future of
semiconductor equipment
starts here.

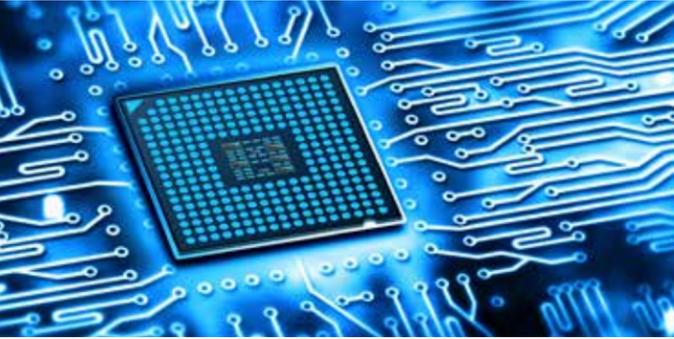


Precision technology that advances your design.

Next-gen semiconductor equipment will be *smaller, lighter, faster.*



OEMs rely on KOGANEI for advanced pneumatic, fluid-handling, and electrical automation components and assemblies.



The semiconductor equipment of the future will be more compact, offer higher purity, and be more accurate and reliable. Tomorrow's equipment will do more using less power, delivering precision performance in a smaller footprint.

Increasing component precision is critical to bringing this functionality into tighter spaces and more efficient equipment. However, this can present serious challenges to traditional manufacturing and automation.

No one understands precision better than KOGANEI.

For more than 85 years, we've helped customers design and build game-changing equipment with precision components. Let us put our innovation and expertise to work for your semiconductor equipment design!



The capacity and flexibility to deliver.

Our engineering team in Japan can work while the US is asleep to provide answers the following day. Our expansive manufacturing capabilities allow us to make your components quickly once designs are finalized. We'll even stock your design solution and carry custom assemblies as a single part number.

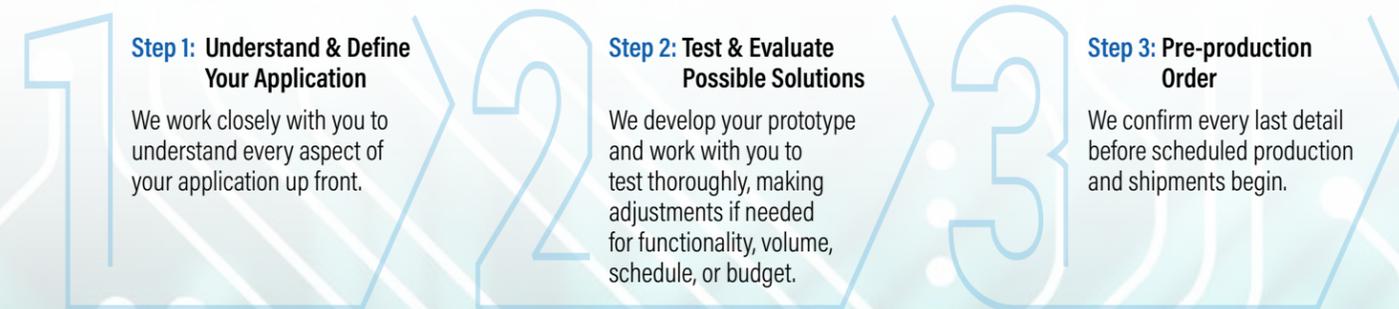


Tap into our global supply chain.

Looking for help to reduce your manufacturing time? A reliable supplier? Look no further. Over decades, we've established a network of quality sources, specialty manufacturers, and assembly options, so you will always enjoy the lowest costs and fastest delivery.

Accelerate your development process.

With years of experience, our engineers have created solutions for most design challenges. Our proven process optimizes your design for usability and manufacturability from day one.



We listen, collaborate, and deliver the best result.

Unexpected orders? No problem.

We can carry dedicated safety stock so you can accommodate for your customers' changing requests without holding extra inventory. Our U.S. Logistics Network will ensure you have the product you need when you need it.



Expedited delivery from our U.S. Logistics Network.

Unique technology that enhances your product.



Optimized designs with a variety of sizes and styles to fit almost any application.



With more than 512,000 products and the engineering expertise to combine them into custom sub-assemblies, KOGANEI will provide you with the best possible solution. Your product will have one part number from a single source, minimizing the number of vendors and potential delays.

Unrivaled quality components.

The cost of failure on semiconductor equipment is higher than ever. That's why we 100% test every single product before shipping, preventing costly changes or rework.

Our facilities are ISO 9001 and ISO 14001 certified, and in RoHS compliance.

Solutions for Cleanrooms

KOGANEI offers innovative design and unmatched performance that meet and exceed the demands from OEMs that require clean operating environments. Ultra-efficient compact designs allow engineers to reduce machine footprints or accommodate future expansion.

[> LEARN MORE](#)

Advantages of KOGANEI Technology

	High Purity / Low Contamination	Accuracy / Repeatability	Unique Performance	Longer Life
V A L V E S	Fluororesin Micro 2 Port Valve 2 mm Orifice, 14 mm Valve Width	Suck Back Valve Precision Suck Back Flow Control	Solenoid Valve 5.9 mm Valve Width	Solenoid Valve 100+ Million Cycles
	Pure Process Valves High Chemical Compatibility	Proportional Flow Control Repeatable to +/- 2% F.S.	Stepper Driven Flow Control Repeatable Setting	Media Isolation Valve 10 Million Cycles
A C T U A T O R S	Linear Cylinder ISO Class 5 Equivalent	Guided Actuator +/- 0.0002" Running Parallelism	Linear Cylinder High Temperature to 150°C	Linear Cylinder 15 Million Cycles
	Guided Actuator ISO Class 5 Equivalent	Air Bearing Linear Cylinder Extremely Low Friction	Bernoulli Gripper Non-Contact Wafer Transfer	Guided Actuator 5 Million Cycles
O T H E R S	Shock Absorber ISO Class 5 Equivalent, Silicon-Free	Dispense Pump +/- 0.1% F.S.	Anti-Static PFA Tube Conductive Surface Material	Fan Type Ionizer No Needle Maintenance Required
	PTFE Fittings / PFA Tubing High Chemical Compatibility	Precision Pressure Regulator +/- 0.15 PSI	Electrostatic Sensor 24/7 Electrostatic Monitoring	Shock Absorber 3 Million Cycles

> Please click on the products in the table above to go to our website for more information.

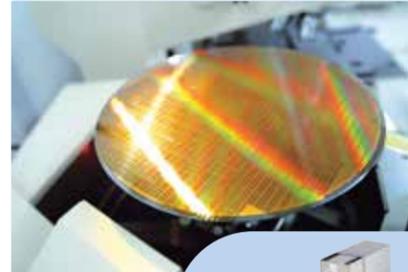
We make great designs even better.

We 100% test EVERY product before it ships.

Advanced applications powered by KOGANEI.

Front End Process Applications

- Silicon Substrate Processing
- Oxidation and Nitride Film Deposition
- Photoresist Coating
- Exposure
- Development
- Etching
- Ashing / Cleaning
- Dielectric Film Formation (CVD)
- Planarization (CMP)
- Gate Dielectric Film Formation / Gate Electrode Formation (CVD, PVD)
- Patterning
- Ion Implantation / Annealing
- Internal Dielectric Film Formation (CVD) / Planarization (CMP)
- Contact Formation (CVD, PVD)
- Interconnect Formation (CVD, PVD, CMP)
- Probe Testing



Photoresist Coating Equipment

Challenge: Reducing the waste of expensive photoresist while maintaining high speed throughput. At the same time generating the lowest amount of contamination and requiring the least maintenance.



Solution: Our patented Tubephragm pump and our Fluoropolymer valves provided excellent photoresist dispensing repeatability, low contaminate generation, and the least required maintenance, all while maximizing our customer's profitability.



CVD Equipment

Challenge: Decreasing the installation space required by the pneumatic solenoid valve manifolds that control the system valves for the high vacuum chamber.



Solution: Our 5.9 mm wide direct acting solenoid valve offered the smallest footprint and lightest weight manifolds that allowed the customer to meet their design criteria.



Wafer Cleaning Equipment

Challenge: Reducing the risk of fire caused by an Electrostatic Discharge (ESD) event due to transporting Ultrapure Water (UPW) through insulative Fluoropolymer (PFA) tubing.



Solution: Our Anti-Static PFA tubing has a conductive material on the surface that provided a ground connection point and eliminated the possibility of an ESD event.

> Please click on the applications above to go to our website for more information.

High purity and reliability for equipment and processes.



Back Grinding Equipment

Challenge: Reducing quality issues caused by unstable water flow at the cleaning nozzle during the wafer rinse process.



Solution: Our low hysteresis proportional control valve enabled tighter control of the water pressure to the cleaning nozzle, providing the customer with the stability needed to resolve their quality issues.



Die Bonding Equipment

Challenge: Minimizing damage to expensive tooling and other components due to crashing and vibration caused by incorrect machine set-up of the high-speed electric actuators.



Solution: Our linear orifice shock absorbers were installed as emergency stops at the end of stroke of each actuator, dissipating the energy caused by the accidental crashing, and preventing damage to the critical components.



IC Testing Equipment

Challenge: Decreasing the frequency and duration of production stops required to maintain ionizers by measuring their performance and cleaning when compromised due to environmental contamination.



Solution: Our long life, maintenance free fan type ionizer and electrostatic sensors provided a much longer needle cleaning interval and 24/7 performance monitoring which drastically reduced the customer's maintenance costs and losses due to down-time.

> Please click on the applications above to go to our website for more information.

Precision and speed, from dicing to marking.

KOGANEI is committed to your success from concept, to initial design, to final delivery and beyond.



* Headquarters

Focused on providing industry leading pneumatic, fluid handling, and electrical automation components and assemblies for the OEM market

Think KOGANEI

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