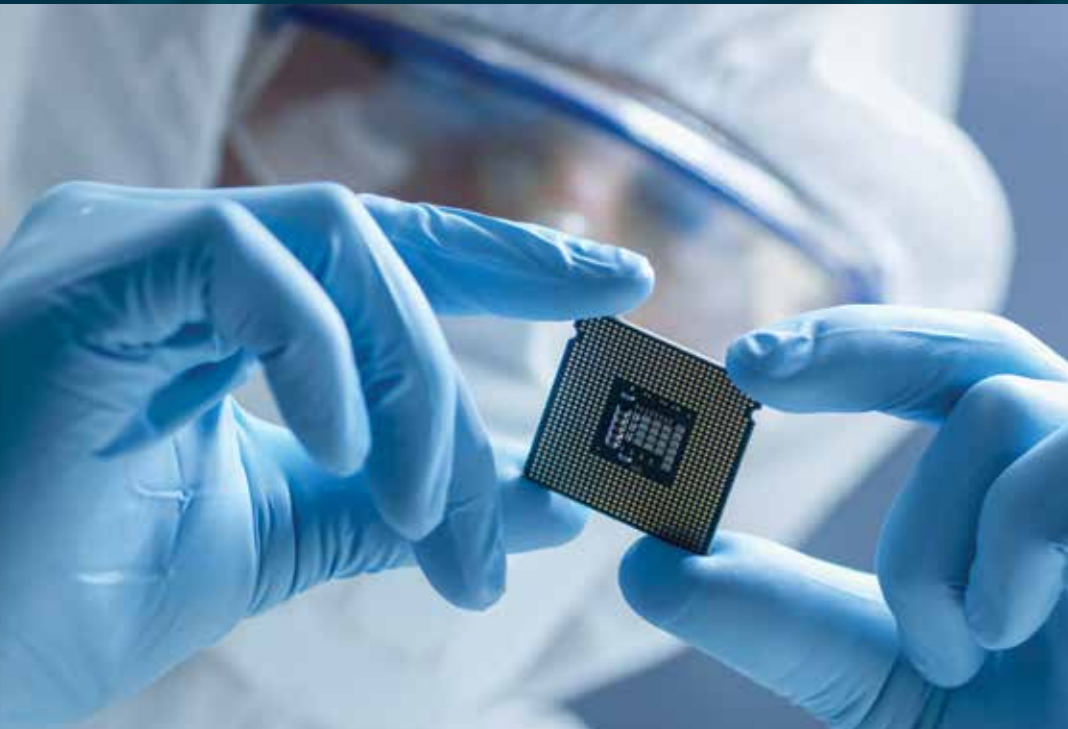


The future of
semiconductor equipment
starts here.

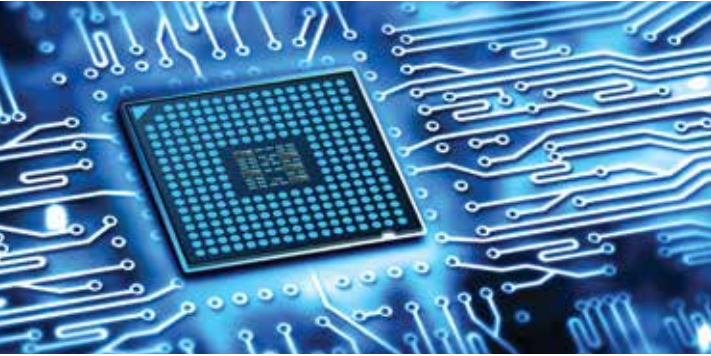


Precision technology that advances your design.

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.

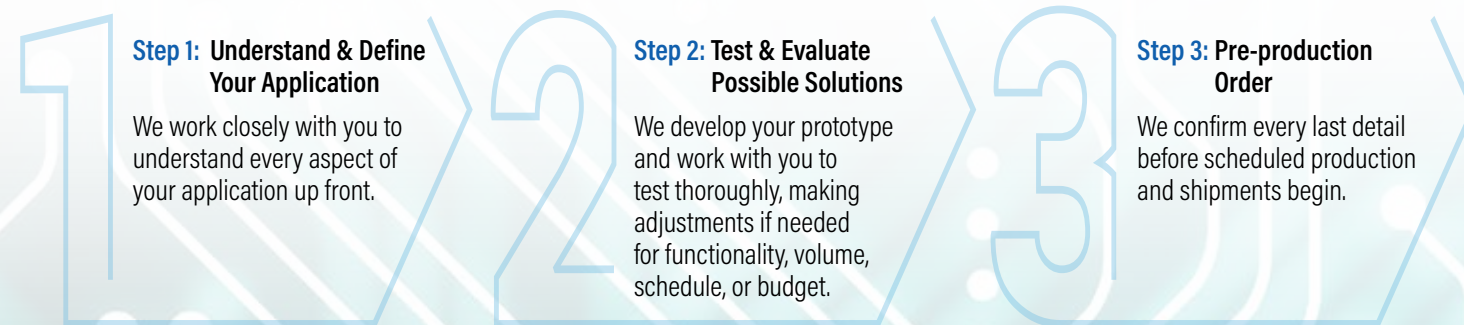


Tap into our global supply chain.

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.

Standard Products

When designing a next generation machine, you need to have options. With more than 512,000 standard products we provide just that. Our engineering team can assist you in specifying the component that best fits your needs. With the variety of technologies we offer, along with our engineering expertise, we often combine products into custom subassemblies, so you always get the best possible solution.

Engineered Specials

With many applications, there are times when you need something special. In those cases, our engineering staff will work with you to design and develop a custom solution to optimize your machine's functionality and performance. From design to delivery, we are with you every step of the way.

Unrivaled Quality

The cost of failure on a new product is higher than ever. That's why we 100% test every single component before shipping, preventing expensive 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.

> [LEARN MORE](#)

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

The Advantages of KOGANEI Technology

	High Purity / Low Contamination		Accuracy and Repeatability		Unique Performance		Longer Life	
V A L V E S	PTFE / PFA Pure Process Valves  High Chemical Compatibility	F-AVPN070 Fluoropolymer Valves  High Flow in Small Envelope	PTFE / PFA Suck-Back Valves  Precision Volume Control	KFPV Series Proportional Flow Valves  Repeatable to ±2% Full Scale	005 Series Micro Valves  5.9 mm Width	iB-Flow Series Digital Flow Controls  Stepper Driven Needle Valve	F Series Valves and Manifolds  100+ Million Cycles	PVR Series Media Isolation Valves  10 Million Cycles
	CS-BC Series Compact Cylinders  ISO Class 5 Equivalent	CS-MGA Series Mini Guide Sliders  ISO Class 5 Equivalent	MGT Series Mini Guide Tables  ±0.0002" Running Parallelism	AC Series Air Bearing Cylinder  Extremely Low Friction	TBDA Series Twin Rod Guided Actuator  Low Speed Option Down to 1 mm/s	NCT Series Bernoulli Grippers  Handle Wafers w/o Surface Contact	BC Series Compact Cylinders  15 Million Cycles	BCG Series Guided Actuators  10 Million Cycles
	KSHC Series Shock Absorbers  Silicon-Free, ISO Class 5 Equivalent	PTFE / PFA Fittings and Tubing  High Chemical Compatibility	PRS100 Series Precision Regulators  ±0.15 psi Sensitivity	Tubepragm Dispense Pumps  ±0.1% Full Scale Accuracy	PFA Anti-Static Tubing  Conductive Surface to Dissipate Charge	DTY-EPS01 Series Electrostatic Sensors  24/7 Monitoring	DTY-ELF14 Fan Type Ionizers  No Routine Needle Maintenance	KSHP Series Shock Absorbers  3 Million Cycles

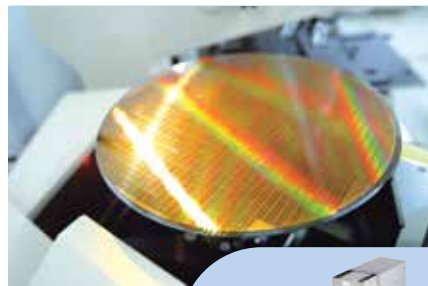
We make great designs even better.

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 materials while maintaining high speed throughput. At the same time generating the lowest amount of contamination and requiring the least maintenance.

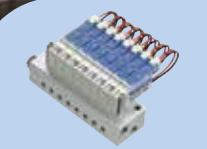
Solution: Our patented *F-EPT Series* Tubephragm pump and *F-AVPN070* Fluoropolymer valves provided excellent photoresist dispensing repeatability, low contaminate generation, and the least required maintenance, all while maximizing our customer's profitability.



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: At only 5.9 mm wide, our *005 Series* direct acting solenoid valves offered the smallest footprint and lightest weight manifolds, allowing 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 *KFPV Series* 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 *KSHJ Series* 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, self-cleaning *DTY-ELF14HC* fan type ionizers and *DTY-EPS01* electrostatic sensors provided 24/7 performance monitoring and enabled a much longer maintenance interval, drastically reducing the customer's costs and 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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