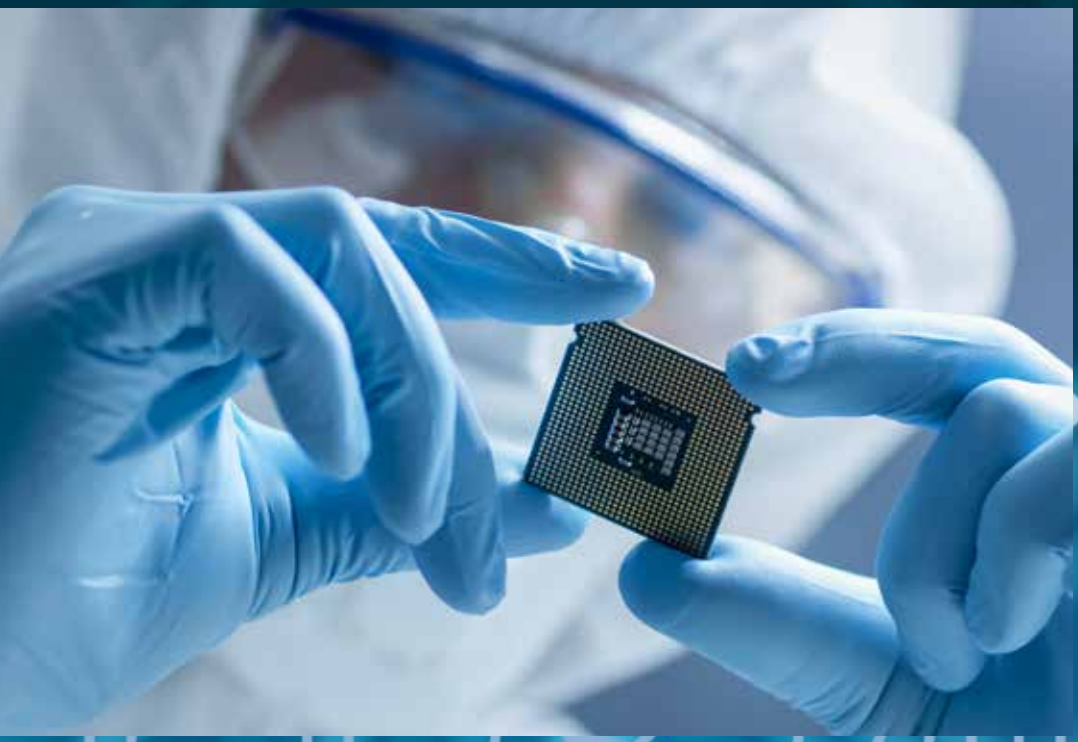
KOGANEI
International America, Inc.

The future of semiconductor equipment starts here.



Precision technology that advances your design.

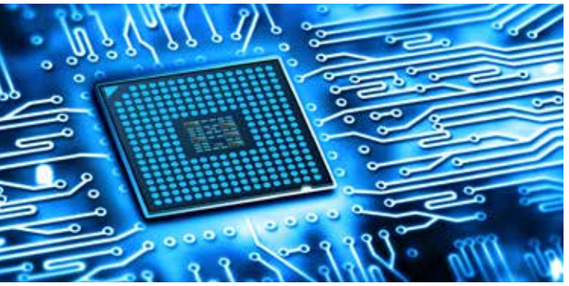
KOGANEI
International America, Inc.

1-855-564-2634
www.koganeiusa.com

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.

Step 1: Understand & Define Your Application
We work closely with you to understand every aspect of your application up front.

Step 2: Test & Evaluate Possible Solutions
We develop your prototype and work with you to test thoroughly, making adjustments if needed for functionality, volume, schedule, or budget.

Step 3: Pre-production Order
We confirm every last detail before scheduled production and shipments begin.

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.



We listen, collaborate, and deliver the best result.

Expedited delivery from our U.S. Logistics Network.

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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
VALVES	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**
VALVES	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**
ACTUATORS	Linear Cylinder **ISO Class 5 Equivalent**	Guided Actuator **+/- 0.0002" Running Parallelism**	Linear Cylinder **High Temperature to 150°C**	Linear Cylinder **15 Million Cycles**
ACTUATORS	Guided Actuator **ISO Class 5 Equivalent**	Air Bearing Linear Cylinder **Extremely Low Friction**	Bernoulli Gripper **Non-Contact Wafer Transfer**	Guided Actuator **5 Million Cycles**
OTHERS	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**
OTHERS	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.

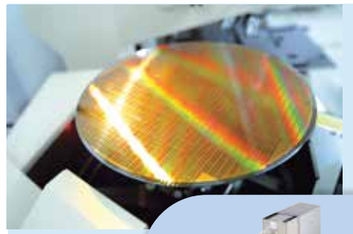
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Advanced applications powered by KOGANEI.

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.

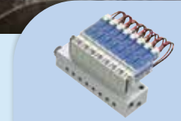


Solution: Our patented Tubephragm pump and our Fluoropolymer valves provided excellent photoresist dispensing repeatability, low contaminate generation, and the least required maintenance, all while maximizing our customer's profitability.



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.

Back End Process Applications

- Dicing
- Back Grinding Tape Laminating
- Back Grinding
- Die Bonding
- Wire Bonding
- Molding
- Trimming / Forming
- Burn-in Testing
- IC Testing
- Marking

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



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

Think KOGANEI

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