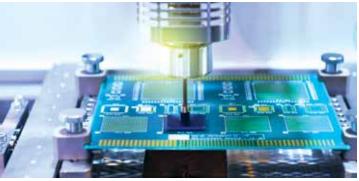




# Next-gen electronics manufacturing equipment will be smaller, lighter, faster.





How do you differentiate your product in a market of thousands of manufacturing technologies? The assemblies of the future will be more compact and portable, fitting more easily into manufacturing equipment. Tomorrow's machines will do more using less power while delivering precision performance.

Reducing component size is critical to bringing this increased functionality into tighter spaces. However, miniaturization can present serious challenges to traditional manufacturing and automation, material handling, and packaging systems.

#### No one understands miniaturization better than KOGANEL.

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

### Accelerate your development process.

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



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.



### 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 guickly once designs are finalized. We'll even stock your final product for you 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.



### **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.** 

# 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 a custom sub-assembly, you get the best possible product. (While minimizing the number of vendors and potential delays.) Your product will have one part number from a single source.

# Unrivaled quality components.

The cost of failure on electronics manufacturing 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.

Sol	lutions	for C	leanrooms
	lutions		

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					
	Miniaturization	Accuracy / Repeatability	Unique Performance	Longer Life		
V A L V E S	Solenoid Valve 5.9 mm Width	Solenoid Valve Repeatable Response Time	Solenoid Valve Manifold Fast, Simple Assembly	Solenoid Valve 100+ Million Cycles		
	Media Isolation Valve High Flow in Small Envelope	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  2.5 mm Bore	Guided Actuator +/- 0.0002" Running Parallelism	Linear Cylinder Low Speed to 10 mm/s	Linear Cylinder  15 Million Cycles		
	Guided Actuator 4.5 mm Bore	Pneumatic Gripper No Finger Backlash	Pneumatic Gripper Superior O.D. Grip Force	Guided Actuator 5 Million Cycles		
O T H E R S	Pressure Regulator 23 mm Square Body	Pressure Regulator +/- 0.15 PSI	Air Line Water Separator No Filter Element to Clog	Fan Type Ionizer No Needle Maintenance Required		
	Desktop Robot  A4 Size Footprint	Electric Gripper Fast 30 mm/s Gripping	Air Conservation Pulse Unit Reduce Air Use by up to 50%	Shock Absorber  3 Million Cycles		

<sup>&</sup>gt; 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.

### Electronics Manufacturing Applications

- Surface Mount Technology (SMT)
- Reflow
- Screw Tightening
- Soldering
- PCB Cutting
- Mechanical Testing
- Electrical Testing
- Packaging
- Ink-Jet Coating (Flat Panel Display)
- Cleaning
- Shock Absorbing



### Video Game Test Equipment

**Challenge**: Developing the compact, long-life pneumatic equipment necessary to test the durability and endurance of video game controllers.

**Solution**: Our miniature, high-performance pen cylinders exceeded the customer's critical life cycle requirement, out-lasting similar components from other manufacturers.



## **OLED (Organic Light-Emitting Diode) Ink Jet Printing Equipment**

**Challenge**: Preventing degradation of the chemical solution due to the inevitable heat generated by the solenoid valves used in dispense process.

**Solution**: We developed an air operated version of our media isolation valve and paired this with our micro 3-way solenoid valve. This enabled the electrical component to be isolated from the dispense process, resolving the customer's heat issue.



### **HDD (Hard Disk Drive) Assembly Equipment**

**Challenge:** Maximizing the life of shock absorbers used in the cleanroom environment while preventing the introduction of oil and particulate contaminants due to their general leakage and failure.

**Solution**: Our cleanroom shock absorber with integrated particle pocket and oil scatter prevention filter eliminated the customer's contamination issues, while its high-performance, linear orifice design provided excellent life expectancy.

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

Exceptional component life through advanced engineering & design.



### **Solar Cell Pick & Place Equipment**

**Challenge**: Reducing inaccuracies during cell handling caused by undesirable shifting and flexing normally associated with small pneumatic actuators.

**Solution**: Our compact, precision guided cylinders provided the customer with the load capability and rigidity comparable to larger bore cylinders but within the envelope of their existing component, allowing them to improve performance without increasing footprint.



### Magnetic Components (Inductors, Transformers) Assembly Equipment

**Challenge**: Adjusting the range of motion of assembly machinery quickly and precisely to simplify switching between workpieces of different thicknesses.

**Solution**: We modified the end of stroke adjustment mechanism on our precision guided actuator so that operator could hold it more easily while tightening the adjustment bolt, saving them valuable time during their product changeover.



- Pick & Place
- Conveying
- Inserting
- Lifting
- Pushing
- Clamping
- Film Peeling / Laminating (Flat Panel Display)
- Painting
- Assembling
- Part Feeding
- Part Sorting



### **Car Audio System Assembly Equipment**

**Challenge**: Maintaining the various ionizers required to prevent particle accumulation and Electro-Static Discharge (ESD) events, despite having limited in-house expertise and inadequate supplier support.

**Solution**: We conducted an ESD audit to evaluate the customer's current ionizer implementation and provided field training and technical support to improve their maintenance process, enabling them to save time and related costs.

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

Accuracy and speed for precision assembly operations.

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### 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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