



Next-gen medical technology will be smaller, lighter, faster.





How do you differentiate your product in a market of more than 500,000 medical technologies? The devices of the future will be more compact and portable, fitting more easily into patients' lives. Tomorrow's instruments will do more using less power, delivering precision performance at hospitals, labs, and in the field.

Reducing component size is critical to bringing this increased functionality into tighter spaces and more easily transportable equipment. 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 medical or life science 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.

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.

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 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.



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. Your assembly will have one-part number from a single source, minimizing the number of vendors and potential delays.

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. A custom product with unique part number is also a great way for OEMs to secure their MRO business while providing value add.

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.

			The Advantages of KOGANEI Technology							
	Miniaturization		rization	Accuracy and Repeatability		Unique Performance		Longer Life		
	.,	005 Series Micro Valves	F-AVPN070 Fluoropolymer Valves	PVR Series Media Isolation Valves	KFPV Series Proportional Flow Valves	G010 Series Compact Valves	iB-Flow Series Digital Flow Controls	F Series Valves and Manifolds	K Series High Speed Valves	
	V A L V E							The same of the sa		
	S	5.9 mm Width	High Flow in Small Envelope	Low 35 µl Dead Volume	Repeatable to ±2% F.S.	Low Power Use for Portable Devices	Stepper Driven Needle Valve	100+ Million Cycles	Up to 1 Billion Cycles	
	A C	PBDA Series Pen Cylinders	MBDA Series Mini Bit Cylinders	MGA Series Mini Guide Sliders	AFDPG Series Flat Grippers with Guides	MRV Series Rodless Cylinders	NHL Series L-Hand Grippers with Guides	BC Series Compact Cylinders	BCG Series Guided Actuators	
	T U A T O				9-3					
	R S	from 2.5 mm Bore	from 4.5 mm Bore	±0.0002" Running Parallelism	Minimal Finger Backlash	Low Speed to 8 mm/s	Superior External Gripping Force	15 Million Cycles	10 Million Cycles	
		RN100 Series Pressure Regulators	VLF Series In-Line Air Filters	PRS100 Series Precision Regulators	EW2H Series Electric Grippers	FME Series Vacuum Ejectors	FDH Series Membrane Dryers	iB-Cyclone Air Line Water Separators	KSHP Series Shock Absorbers	
	O T H E R S	C C				10	Will be to the same of the sam		. 4. 4	
	3	23 mm Square Body	from 13 mm Diameter with 5 µm Filtration	±0.15 psi Sensitivity	Positioning Accuracy ±0.05 mm	Quiet Operation <50 dB	Prevents Moisture in Air Lines	No Filter Element to Replace	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.

Life Science Applications

- Automated Liquid Handling
- Automated Liquid Sampler
- Automated Sample Preparation
- Flow Cytometry
- Gas Chromatography
- Liquid Chromatography
- Molecular Diagnostics
- Immunoassays Analyzers
- Clinical Chemistry Analyzers
- Microbiology Analyzers
- Hematology Analyzers
- Urinalysis Analyzers
- Emission Analysis
- GMO Analysis
- Air/Water Quality
 Analysis
- Mass Spectrometry
- Capnography Monitor



Genetic Analyzer

Challenge: Moving the test sample through the fluidics card while maintaining consistent pressures to the flow paths with no leakage.

Solution: Our *G010 Series* low leak solenoid valves controlled the pressure signals, ensuring the system didn't experience any pressure loss throughout the life of the device.



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Cell Secretion Analyzer

Challenge: Controlling up to 150+ flow paths while maintaining the smallest footprint possible and reducing the possibility of leaks and assembly errors.

Solution: Our *005 Series* micro solenoid valve manifold met the performance and envelope requirements. Providing the complete sub-assembly ensured accurate and fast installation.



Immunoassays Analyzer

Challenge: Keeping the control for the microfluidic cartridge membrane valves small, simple, and easy to install. (Competitive solutions were too large and highly complex.)

Solution: Our fully-integrated, custom solution using *MBDA Series* actuators and *005 Series* valves kept the system complexity to a minimum, reduced potential leak points, and streamlined overall installation.

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

Precision and speed, from the lab to the operating room.



Clinical Sterilization Equipment

Challenge: Maintaining a precise level of clean, dry compressed air in a small, efficient assembly while sourcing parts from multiple suppliers.

Solution: Utilizing the breadth of our product line and compact compressed air treatment components, including our *FDH Series* membrane dryer, we provided a complete assembly that met the required filtration and dew point levels.



Endodontic Device

Challenge: Finding compact, high-flow, and quiet operating fluid control valves for mixing and dispensing of the proprietary fluid.

Solution: Through a modification to the solenoid on our *PVR Series* media isolation valve, we provided a custom assembly that met the OEM's application requirements while sufficiently reducing operating noise.



Respiratory Equipment

Challenge: Finding a solenoid valve small and lightweight enough to be easily mounted and plumbed directly on a PCB. The valve also needed to allow high flow with low air leakage for quick and consistent calibration of the system sensors.

Solution: At only 5.9 mm wide, our **005 Series** high-flow, low-leak micro 3-way valve was easily mounted onto the circuit board, and its built-in barb fittings allowed for quick pneumatic connections.

Medical Applications

- Deep Vein Thrombosis
- Alternating Pressure Mattresses
- O2 Concentrator
- Negative Wound Therapy
- Root Canal Device
- Anesthesia Delivery
- Clinical Sterilizers
- Endoscopy
- O2 Conserver
- Ventilator
- Cataract Surgery
- Blood Pressure Monitoring
- Lasik Surgery
- Microdermabrasion
- Cardiovascular Assist
- Capnography Monitor
- CO2 InsufflatorsDialysis Machine
- Chrysotherapy Therapy Device

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

Portability and performance for patients and physicians.

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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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