

MKS Overview

MKS Instruments, Inc. is a global provider of instruments, systems, subsystems and process control solutions that measure, monitor, deliver, analyze, power and control critical parameters of advanced manufacturing processes to improve process performance and productivity for our customers. Our products are derived from our core competencies in pressure measurement and control, flow measurement and control, gas and vapor delivery, gas composition analysis, electronic control technology, reactive gas generation and delivery, power generation and delivery, vacuum technology, temperature sensing, lasers, photonics, optics, precision motion control, vibration control and laser-based manufacturing systems solutions.

MKS products are used all over the world

in semiconductor devices and electronic thin film processing, life and health sciences, process and industrial control, and research and defense. Our product groups have a full commitment of resources in design, manufacturing, customer support and marketing to ensure that our customers' needs are quickly met with products that exceed World Class Quality Standards. Our partnerships with customers, universities and other sources of knowledge have allowed us the visibility to make product and market decisions that are aligned with the long-term needs of process-oriented industries.

Worldwide service and support are cornerstones of our commitment to our customers. Across the globe, our customer support centers are staffed with Applications Engineers to help you determine the right product prior to purchase. Technically trained sales engineers will help you with this selection process, and verify that MKS understands your specific procurement and materials management needs. After your purchase, MKS service engineers will provide fast turnaround for certified calibration and service, and will assist you with preventative maintenance planning. MKS also offers educational and training programs designed for the vacuum instrument user.

For additional information, visit us on the web at www.mks.com

#1 Critical Technology Process Control Supplier

- Broadest technology portfolio
- Ranked #1 in served semiconductor market
- Leveraging technology into growing markets

Key Facts

- Founded in 1961 with a proven track record of continued growth and performance
- ~6000 employees worldwide
- 2021 revenue of \$2.9B
- Public company listed on NASDAQ: MKSI
- Organic and acquisition-based growth strategy
- Lean manufacturing / global supply chain

SEMI Advanced Packaging

MKS offers a comprehensive suite of best-in-class instruments, components and subsystems for use in Semiconductor Advanced Packaging applications:



LASERS

MKS develops and manufactures advanced pulsed and continuous wave diode-pumped solid-state, fiber and hybrid fiber lasers for precision applications. Pulse widths span nanosecond, picosecond, and femtosecond, and wavelengths range from infrared and visible to the ultraviolet.



INSTRUMENTS, MOTION, COMPONENTS & VIBRATION CONTROL

MKS provides a wide range of high precision motion control products including linear and rotation stages, hexapods, controllers, piezos and industrial OEM sub-assemblies. In addition, MKS offers vibration isolation solutions, specialized light sources, laser power measurement and beam characterization instruments, and other instruments including optical to electrical converters, solar simulators and laser diode control, which are all used in photonics applications. Products used to mount, position, or support optical components and systems are also part of the MKS offering.



OPTICAL COMPONENTS, IR ASSEMBLIES & INTEGRATED SOLUTIONS

MKS provides precision optical components and complex lens assemblies across the infrared, visible and ultraviolet spectrum. In addition, MKS provides custom subsystem solutions. Products include optical filters, thin film coatings, high performance gratings, replicated mirrors, windows, spherical, aspherical and cylindrical lenses, laser optics, refractive, reflective, catadioptric optical assemblies on a build-to-print or build-to-spec basis, and off-the-shelf high-performance IR thermal imaging lenses and continuous zoom lenses.



POWER SOLUTIONS

MKS provides high reliability RF power and microwave generators. Our RF generators deliver solid state power from low to very high frequencies (VHF) and combined with our Impedance Matching Network and V/I probe provide a complete RF delivery system. Our industrial microwave generators and systems generate power levels from 1 to 75kW and are adaptable to a wide range of applications.



PRESSURE & VACUUM MEASUREMENT SOLUTIONS

MKS provides pressure and vacuum measurement products. MKS Baratron capacitance manometers provide highly accurate and repeatable direct pressure measurement and are insensitive to gas composition. In addition, MKS has a wide range of indirect pressure sensors, transducers and modules that use hot and cold cathode, Piezo and Pirani gauge technologies. These products measure pressure in corrosive and noncorrosive environments over 14 decades of range from above atmospheric to ultra-high vacuum. EtherCAT is available on select products.



PLASMA & REACTIVE GAS SOLUTIONS

MKS provides plasma systems that deliver fluorine, oxygen and hydrogen radicals. MKS manufactures ozone generators that produce ultra-pure, high concentration ozone gas. Our dissolved gas delivery systems supply high concentration ozonated water, dissolved CO₂, and NH₃. In addition, MKS designs and manufactures high power microwave subsystems that generate power levels from 1 to 75kW. EtherCAT is available on select products.