

MKS Overview

MKS Instruments, Inc. is a global provider of instruments, subsystems and process control solutions that measure, control, power, monitor and analyze critical parameters of advanced manufacturing processes to improve process performance and productivity. Our products are derived from our core competencies in pressure measurement and control, materials delivery, gas composition analysis, control and information technology, power and reactive gas generation, vacuum technology, photonics, lasers, optics and motion control.

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.

#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
- 4,700+ employees worldwide
- 2016 revenue of \$1.3B
- Public company listed on NASDAQ: MKSI
- Organic and acquisition-based growth strategy
- Lean manufacturing / global supply chain

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.mksinst.com

SEMI Advanced Packaging

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



LASERS & LIGHT SOURCES MKS is the foremost provider of lasers for precision applications. Our market-leading portfolio includes pulsed UV, pulsed fiber, green, and ultrafast lasers for critical 24/7 applications including wafer grooving, scribing and dicing, microvia hole drilling, glass drilling and cutting, IC package cutting, laser direct patterning, film cutting, repair and many other precision applications. Additional products include incoherent sources, laser diode controls, electro-optic modulators and accessories.



MICROWAVE MKS is a leader in microwave technology with power levels from 300W to 6kW. Solutions include integrated microwave plasma subsystems, solid state microwave generators, microwave plasma sources, and microwave components and accessories.



MOTION CONTROL MKS is a premier supplier of unique and differentiated high-precision mechanical and air bearing stages with unparalleled positioning performance to fit your application's need. A patented vertical axis with Tip/Tilt functionality provides a wide range of substrate alignment. Our controllers and amplifiers are designed to maximize the performance of our mechanical assemblies. The design and manufacturing of these motion control solutions are backed by extensive metrology techniques and instrumentation that guarantee our customers' peace of mind.



OPTICS MKS offers the highest quality optics and optical coatings that cover the VUV, DUV, UV, visible, NIR and IR wavelengths as well as a selection of lenses, mirrors, beam splitters, polarizers, OEM and custom optics, optical systems, optics sets and accessories, windows, prisms and gratings.



OPTO-MECHANICS MKS provides a comprehensive line of optical mounts and positioners including catalog and custom mirror and lens mounts, support posts, bases and brackets, breadboards, rails, beam routing and custom components and sub-assemblies.



POWER MKS offers leading, high reliability, compact, solid state, low to very high frequency (VHF) RF power generators with advanced pulsing and frequency tuning, impedance matching networks, plasma metrology products, and pulsed and continuous DC power generators.



PRESSURE/VACUUM MEASUREMENT MKS is the leader in pressure and vacuum measurement. The MKS family of pressure and vacuum measurement instruments includes Baratron® capacitance manometers, pressure sensors, pressure switches, pressure control subsystems, vacuum and pressure gauges, transducers and controllers; as well as Granville-Phillips® indirect vacuum gauge transducers and modules, vacuum gauges, vacuum gauge controllers, and vacuum quality monitors.



REACTIVE GAS MKS offers a complete spectrum of ultra clean, highly reliable ozone generation, delivery and accessory products including state of the art, compact, high concentration ozone generators, closed-loop controlled gas delivery subsystems, high concentration dissolved ozone liquid delivery subsystems and ozone accessories for flow mixing and ozone destruction.



REMOTE PLASMA SOURCES MKS designs and manufactures RF toroidal and microwave plasma sources to energize and dissociate gases. Fluorine-based gases such as NF₃ are used to clean unwanted deposits from the walls of vacuum process chambers. Plasma sources for process chemistries include oxygen, nitrogen, ammonia and hydrogen.