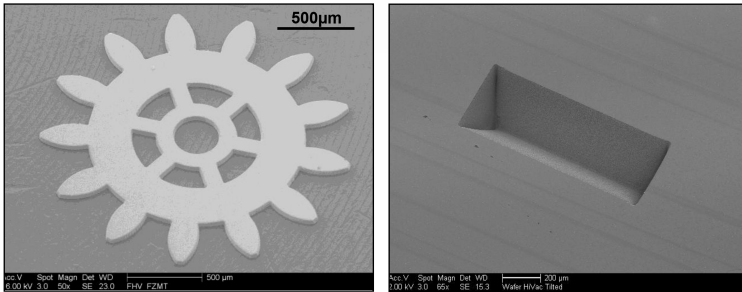


Since 1969, Newport has led the way in delivering products in the areas of lasers, photonics instrumentation, vibration control, optics, and precision automation for manufacturing, engineering, and research applications. Drawing on our vast expertise, Newport is also able to provide complete solutions and sub-assemblies for precision laser machining and microfabrication for markets ranging from automotive to medical devices. Newport laser materials processing solutions can be built around both Spectra Physics and third party lasers.



Newport can provide its laser processing customers a competitive advantage through:

- Powerful and Intuitive Laser Machining Software
- Laser-synchronized motion at the pulse level
- Industry leading motorized positioners
- Galvanometric scanner synchronization with motion
- Application-specific custom systems
- Ease of software integration
- Laboratory services and other support
- Turnkey R&D Laser Systems

## LASER MATERIALS PROCESSING SOFTWARE (LMS)

Newport LMS Software provides a comprehensive single point laser machine control interface for materials processing. With a deep feature set, LMS can address the needs of a wide array of applications for both subtractive and additive processes. Features include:

- Automatically converts DXF, DWG, STL and other file formats
- Optimized trajectories with motion synchronized laser triggering/gating
- Intuitive Process Parameter Setting and Process Automation
- Supports 2D and 3D Additive and Subtractive Processes with many options
- Seamless Integration of Vision System, Auto-Alignment and Autofocus

## LASER-SYNCHRONIZED MOTION

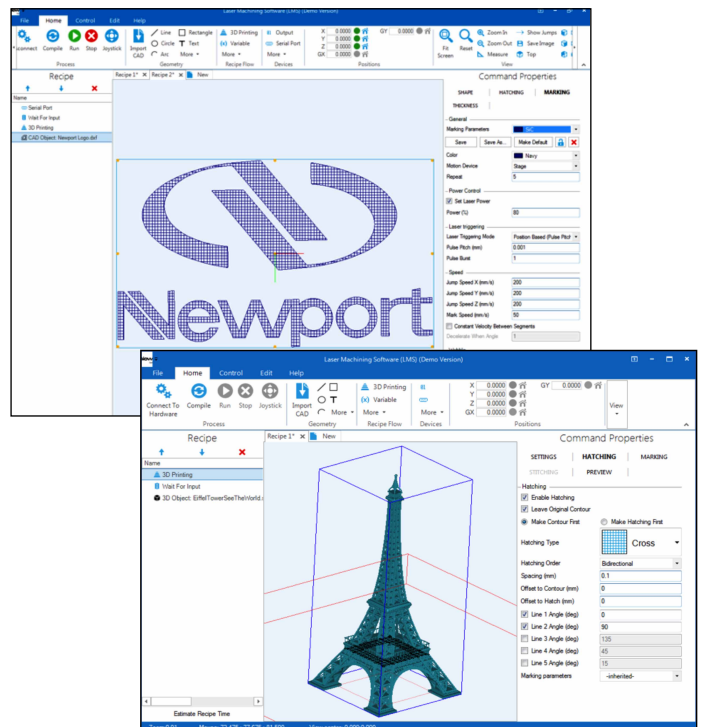
A challenge for laser materials processing is precisely synchronizing the firing of the laser with the motion path. This includes synchronous trigger with the internal laser clock to get best performance and avoid missed pulses/substandard results.

- Trajectory synchronized laser pulse control
- 4 MHz Pulse Output Frequency
- World-leading multi-axis laser trigger latency of 100 ns
- Multiple/Flexible Pulse Modes for Laser Trigger/Gating

## GALVANOMETRIC SCANNER SYNCHRONIZATION

Newport offers a turkey software solution for complete galvo and motion integration. Using a simple step-scan approach for continuous write fields, our software can set flexible mark and jump parameters for galvo and stage, including multi-pass processing. Laser workstations with galvos can easily be built with Newport stages, controllers, and software.

- Design automatically parsed into galvo and stage motion
- Simple parameter settings, including: Jump speed, Mark Speed and Path Repeat
- Laser synchronized motion
- Large Field of View determined by stage travel



## EASE OF SOFTWARE INTEGRATION

For many laser processing applications, the most efficient and cost-effective solutions can be designed with Newport-based systems. But to accommodate customers with existing software based on a specific controller, Newport can completely configure the motorized positioners for out-of-the-box operation with your preferred control solution, optimizing system performance for the application demands. This will require little to no adaptation of your existing software or change to the control or drive electronics.

## MOTORIZED POSITIONERS

For 50 years, Newport has developed an extensive catalog of motorized positioners, which can be found at the most prestigious research and hi-tech commercial centers. Our series of long-travel, linear motor driven stages are recommended for laser processing.

### XM SERIES

- Ideal for Laser Micro/Nanofabrication
- Ultra-Accurate, Repeatable and Contouring

### IDL SERIES

- Ideal for Precision Industrial Laser Machining Processes
- High Throughput, Robust, and Protected against debris

### ONE-XY SERIES

- High value solution for ultrafast micromachining and laser microfabrication
- Compact, Low-Profile, Integrated XY stage

### IMS-LM SERIES

- Cost-effective solution for laser processing
- High speed and throughput with micron accuracy

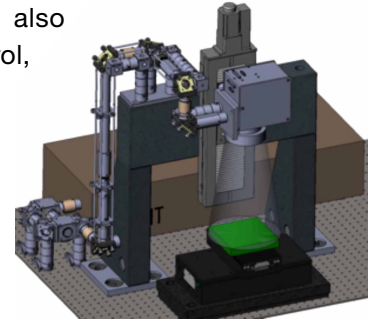
Newport also offers a complete line of linear, rotation, and vertical stages that can be combined for optimum results.-

## SERVICE AND SUPPORT

Newport offers a vast array of services to ensure minimal downtime for manufacturing, engineering, and research applications. Standard services include factory authorized repairs and calibrations throughout the US, Asia, and Europe. We also offer service contracts and worldwide field service to support customer needs.

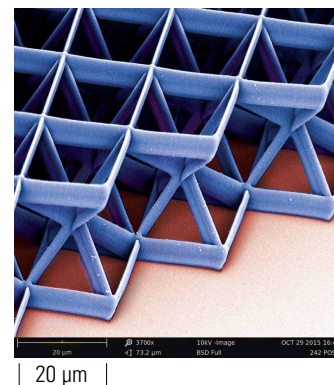
## APPLICATION-SPECIFIC CUSTOM SYSTEMS

Working directly with customers, Newport can deliver custom/OEM application-specific systems that are optimized to your requirements. Newport can either modify standard products or features for your application, provide assemblies of standard products, or design complete turnkey systems including software. In addition to motion systems, Newport can also integrate vibration control, platforms, bridge structures, granite bases, laser mounts, and laser sources into your solution.



## TECHNOLOGY AND APPLICATIONS CENTER

The Newport Technology and Applications Center (TAC) located in Irvine, California offers a specialization in laser micro/nanofabrication and ultrafast technology. The TAC works closely with both customers and Newport's Precision Motion team to optimize and verify application-specific performance through dedicated process studies. Expertise ranges from ultrafast micromachining to two-photon polymerization at both the materials and process level. Newport plans to open other similar centers at worldwide locations.



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[www.newport.com](http://www.newport.com)

Newport Corporation, Irvine, California and Franklin, Massachusetts; Evry and Beaune-la-Rolande, France and Wuxi, China have all been certified compliant with ISO 9001 by the British Standards Institution. Santa Clara, California is DNV certified.

