# SEI Laser: innovative solutions for flexible packaging

sei LASER GAME CHANGERS

During the last SEI Laser open house dedicated to digital converting, we met Matteo Maffeis, SEI Laser sales manager for machines dedicated to flexible packaging. He showed us the latest innovations dedicated to flexible packaging converters. Thanks to laser technology, users can open new markets, whose limits are limited only by imagination.

Since 1982, SEI Laser has designed and manufactured laser systems for various industrial applications. In recent years, the company has focused primarily on graphic and packaging applications—specifically on solutions designed for flexible packaging; thanks to a modular platform that is well suited for different production requirements.

Matteo Maffeis, who has extensive technical and commercial experience in the flexible packaging industry, has been appointed by SEI Laser to represent the company and develop business in that segment. Flexible packaging currently plays an important role in brand recognition and differentiation in stores, as a fundamental element of communication and marketing.

Consumers love products that can demonstrate freshness, quality and authenticity. Seeing the product inside packaging is a very important feature that packaging manufacturers must be able to meet.


***Two technologies for different applications: Packmaster CrossWeb and Packmaster Web Direction***

SEI Laser's solutions for flexible packaging converters can help add value to packaging, offering their brand owner customers a way to substantially differentiate themselves in an increasingly crowded market.

"Our laser systems allow for the creation of different innovative solutions in the flexible packaging world, including easy opening, windowed packaging, and micro/macro perforation for breathability and baking of the product. The new range of laser systems—all designed and built in-house—are perfect for cutting, half-cut, macro and micro-perforation of flexible single or multilayer films in different materials including paper, PE, PET, PP, nylon, PTFE and laminated films," says Maffeis.

SEI Laser offers two technologies that deliver all these processes. Their flagship technology is undoubtedly the Packmaster CrossWeb, a solution with fairly compact dimensions that are attached directly to the production cycle of solvent-free laminating machines. They are available for webs up to 1800 mm (about 71 inches) and can reach 400 m/minute (1312 feet per minute) while cutting, half-cutting and micro-perforating with galvo scanning heads.


**Packmaster CrossWeb**

## *SEI Laser: innovative solutions for flexible packaging continued*

"This technology is perfect for all packaging converters in food or health-care industries. With Packmaster CrossWeb you can create windows that are increasingly used for paper packaging laminated to film; or as an easy opening for diaper or pet food packaging, micro-perforations for salad, tomatoes or chicken pouches; or all the micro-perforations and punctures used for cooking food in a microwave oven. The fully digital process assures that job changes are immediate with a dramatic reduction in downtime and reduced costs, since it is no longer necessary to rely on mechanical die-cutting," adds Maffeis.


Maffeis explained in detail how laser technology, and lasers mounted on Packmaster CrossWeb, operate. The lasers inside the cutting area manage to draw even complex geometries, so this solution can work on any shape. This is impossible to achieve with the traditional process of cutting/die cutting directly on the laminating machine.

"We developed a closed system. The only interface provided on the machine on which the Packmaster CrossWeb is mounted, is for emergency control. We opted for this solution because it provides greater process standardization and does not rely on any type of action for the machine operator," continues Maffeis. "The system also is equipped with a vapor suction system and a cassette to recover waste material."
Icarus, the proprietary software, was developed by SEI Laser engineers for the flexible packaging industry and is extremely intuitive. You can import any type of vector file as well as follow the status of the work on a monitor.

**Packmaster Web Direction**

The second solution, a little simpler and with a smaller footprint, is Packmaster Web Direction. It will work on materials as wide as 1800 mm (about 71 inches) and at speeds over 500 m/min (1640 feet per minute) for applications requiring continuous perforations for easy opening; micro perforations with a controlled diameter; and hatches—but only longitudinally to the web-running direction.

The laser also allows users to write directly on the packaging—for example, customizing flexible packaging with unique codes, production batch numbers or expiration dates.

"The application possibilities are endless. We have national and international companies that have already installed our systems and we have received significant interest from many other printers and converters who want to know the full potential of our systems to determine how they might fit into their production processes. I think that one of the applications that will develop significantly in the near future will be windowed packaging and resealable packages. Thanks to these, you can minimize food waste and the environmental impact; issues deeply felt by consumers. SEI Laser has the skills and the right technology to assist customers in the development of these new trends within the diverse world of packaging," concludes Maffeis.