

## CLP'S COMBINATION OF LASER SCORING, ZIPPER & RETORT IS HOT

### Patented combination offers outstanding performance and customer convenience

Bringing together three key technologies – retortable stand-up pouch construction, reclosable zippers, and a laser score for easy opening – CLP Industries from Israel has created an ideal package for many food marketers.

It was not easy to walk the balance between creating a pouch that can withstand the high heat and pressure of the retort process and yet feature a score for easy opening without scissors and knives. In fact, CLP's research and development team teamed up with scientists from the Center for Food Technology (CAFT) at Rutgers University in the U.S. to test the concept under rigorous conditions.

Already a leader in both retortable stand-up pouches and laser scoring technology, CLP sought to marry the two capabilities to add greater consumer convenience to its packaging. "Laser scoring was far preferable to mechanical scoring for retort pouches because a finely tuned laser can perforate just one of several layers of the laminate rather than compromising the entire film," explains Dr. Rani Stern, CLP's chief technical officer. Typically, high-absorbance materials such as polyester (PET) or bi-oriented nylon (BONYL) are scored, while Aluminum foil can remain undisturbed by the laser scoring process.

The result is a fine score that allows users to easily tear the pouch open in a tidy line, yet has little impact on the barrier properties and burst resistance of the pouch. CAFT studies showed a very slight decrease in burst resistance of two- and three-ply laminates, says Stern.

But targeting the appropriate layer is just part of creating a successful laser score, Stern notes. Precise placement of the score is crucial, he says. Scores on the front and back of the pouch must line up exactly for a clean tear. Using the same precise controls, CLP's customized laser equipment can also create curved or scalloped scoring to enhance the functionality or aesthetics of a pouch.

Zipper material for retort pouches must also be carefully selected and handled, Stern points out. Fusing the zipper to the inner layer of the laminate and creating a perfect seal along the edges of the pouch are vital to creating a package that will perform in the retort chamber and on the supermarket shelf.

CLP's laser-scored retort pouches have been released in markets from Western Europe to South Africa, and North America.



For more information on CLP, please contact Limor Schaffer, Marcomm Manager, at +972 8 679 0301 or [limor@clp.co.il](mailto:limor@clp.co.il), or visit [www.clp-packaging.com](http://www.clp-packaging.com)