

SEALING IN SUSTAINABILITY

Partner Pak Inc. of Huntington Beach, Calif. (Booth # E-7151), originally designed its Simpl-Seal method of ultraviolet sealing of clamshells and blisters as an alternative to be used with merchandise which could not tolerate the traditional radio frequency or heat sealing. The secret which has emerged, however, is that UV-sealing is inherently sustainable for a number of reasons, which are explained by Paul Appelbaum, Partner Pak's president and CEO.

Ultraviolet sealing with a non-toxic UV-reactive sealant uses five times less energy than traditional sealing methods, as measured by the electricity meter. Since the Simpl-Seal operation can be automated rather than manual, the production process moves more quickly, resulting in energy savings associated with less plant time, less lighting and reduced HVAC consumption.

The Simpl-Seal uses no tooling, dies or presses when sealing so those consumables never need replacement.

Some sealing methods work only with polyvinyl chloride (PVC). The Partner Pak system can use recycled polyethylene terephthalate (RPET), PET and even polylactic acid (PLA), which is derived from natural, renewable resources, such as corn. If a current customer opts to change from PVC to RPET, for example, no additional equipment, power or tooling changes are required. Partner Pak also offers the patented ClamCard, which seals a small clamshell or blister through a paperboard card, not to a card or wedged between two cards. This method results in a separation of materials—a clear benefit for recycling.

Most clamshell and blister sealers require trained set-up personnel since the process is essentially manual. The Simpl-Seal employs only two people—one to load the infeed conveyor and one to take-away the finished packages. Appelbaum points out that many clamshell packaging operations have gone offshore because of labor requirements. But offshore-made packages must then be transported back to the U.S., adding to greenhouse gas emissions, plus the requirement for added warehouse storage until required sales reduces inventory. Larger warehouse space is expensive and requires more HVAC consumption.

And because there are no dies, tools or presses, there are fewer restrictions on package design, including material choice, package shape and printed graphics.



Partner-Pak originally designed its Simpl-Seal method sealing as an alternative to traditional radio frequency or heat sealing. It soon discovered that UV-sealing is inherently sustainable for a number of reasons.