

# Simpl-Seal® v. RF/Sonic/Heat Sustainability



## How does "SUSTAINABILITY" differ, based on sealing method?

Since the 1950s, sealed clear plastic has offered shelf-presence, shelf-life, anti-soil, anti-damage, tamper evidence, anti-pilferage and other benefits. RF/Sonic/Heat sealing methods delivered the benefits (without competition) until the 1990s... until Simpl-Seal from Partner Pak was patented and released. Coincidentally, this was also when ecologists began pushing to reduce/remove PVC from packaging. This anti-PVC campaign was the beginning of what is now known as "sustainable packaging."

Simpl-Seal® (a patented UV sealer) was in the right place at the right time because it offers more sustainability. Simpl-Seal's ability to use *eco-friendly* plastics has been the marquis benefit, but Simpl-Seal's miserly use of electricity and its highly-acclaimed design flexibility have been just as important, though not as obvious.

Today, packaging sustainability improvements that are invisible-to-the-consumer are leading the way. And, "invisible" translates to such things as: recycled plastics; bio-plastics; energy conservation; reduced material (plastic and paper); reduced weight; and less bulk. And, with Simpl-Seal, not one of these has to hamper shelf-presence. **Invisible changes** do not change buying habits.

### 1. Recycled Plastics and Bio-Plastics:

Simpl-Seal offers choices. Currently RPET, PCR and PLA are conveniently processed by Simpl-Seal's UV. These substrates do not change outward appearance (invisible), yet they make big improvement in sustainability. (Currently are price-invisible, too.)

- RF/Sonic/Heat sealing have not proven they can consistently seal recycled plastics or bio-plastics. These are not options.

### 2. Reduced energy consumption:

Reduced energy consumption (up to 10X less) is the easiest, most invisible and best path to eco-responsibility (and it saves real money). Plus, the faster the sealing process goes the more energy Simpl-Seal saves.

- RF/Sonic/Heat sealing use energy to pressurize the plastic and use energy to heat the plastic. These very substantial consumers of energy, do not exist with UV.

### 3. Reduction in materials:

Simpl-Seal offers choices to reduce plastic and paper. UV "will process" what is currently in use, but "can process" less material (less weight, less cost) without changing outward appearance (invisible).

- RF/Sonic/Heat sealing are engineered (wired) to process plastic of a given type and within a given range of thickness. If plastic is reduced/changed machinery may have to be replaced or reengineered. With UV, thickness, weight (and type) are not concerns.



## Sustainability – Simpl-Seal® v. RF/Sonic/Heat

### 4. Increased recyclability:

Simpl-Seal allows packaging to use recycle-friendly materials/methods. (Consumers never "see it.") UV is flexible enough to avoid material contamination so Simpl-Seal ensures source-separability. "Recycle-friendly" and "source separation" are the keys to being "recyclable."

- RF/Sonic/Heat sealing can produce source-separable packaging, but the use of recycled plastics is a rarity and the use of recycle-friendly plastics (like PETG), generally cost 20% to 30% more other plastics.

### 5. Eco-friendlier materials:

Simpl-Seal offers eco-options such as PLA (bio-plastic), RPET and PCR (both recycled plastics). Simple-Seal employs an unparalleled variety of eco-friendly materials and the application of these is invisible.

- RF/Sonic/Heat sealing have not shown the ability to consistently seal recycled plastics and bio-plastics are virtually unheard of.

### 6. Reduced energy consumption:

Reduced energy consumption (up to 10X less) is the easiest, most invisible and best path to eco-responsibility.

- RF/Sonic/Heat sealing leave an enormous carbon footprint, comparatively speaking.

### 7. Decreased packaging cost:

Simpl-Seal saves on tooling, energy and material. Tooling? There isn't any. Energy? Far less. Material? Design options and material choices that make a difference. All these are INVISIBLE to consumers, yet VISIBLE in profit reports. Reduced cost is the "economic incentive" to be more eco-responsible.

***"In its simplest terms, sustainability is about reducing waste and increasing efficiency..."*** November, Package Design Magazine, Ron Romanik, Editor-in-Chief.

***Bill Bregar wrote an article titled "Energy-saving advances consume industry" in Plastics News, Dec 22 issue. Bregar reports, "Constant efficiency improvement is a basic principle of manufacturing. For decades, plastics machinery has been on a march forward to put out more products, faster, using less energy."***

**FACT: IT DOES NOT HURT ANYTHING TO BE MORE SUSTAINABLE AND MORE PROFITABLE AT THE SAME TIME!**

**FACT: RESISTANCE TO SUSTAINABILITY INITIATIVES, BEFORE SIMPL-SEAL, HAS BEEN HEAVILY INFLUENCED BY INCREASED COSTS.**

Sustainability... Consumers want it, merchandisers ask for it and the environment needs it. With Simpl-Seal, the environment, consumer, merchandiser and packager all win.