

Simpl-Seal® v. RF/Sonic/Heat LABOR



How does "LABOR" differ, based on sealing method?

No known competitor or predecessor to Simpl-Seal is simpler for workers to learn or use. This includes set-up effort, production activities and periodic maintenance. This also includes operational consistency and reliability. These claims are verifiable (have been verified).

Yes, some users report substantial production-time savings. Substantial! And many report a lot less time with changeover. But, an optimized production pace, higher production quality, less worker turnover, reduced training and less overtime to meet delivery schedules are part of every Simpl-Seal installation, across the board.

Where labor efficiency tends to be most obvious is in sealing skills. It takes less skill to work with a conveyor and adhesive than it does to work around a press, tooling, heat and high-energy. Workers get more done, of higher quality, with less fatigue.

Cycle-time - Simpl-Seal does not pause when sealing. Predecessor sealing does. This difference is a big KEY to labor saving potential.

- A sealing pause ("cycle-time") artificially limits production's speed. Anything that can go faster is wasted labor in a manual system and wasted production potential in an automated system. With Simpl-Seal, there is no cycle-time delay.

Difference Cycle-Time Can Make With Manual Operations:

Assumptions:

<u>Predecessor Sealing</u>	<u>Comment</u>	<u>Simpl-Seal Sealing</u>
1-Denest plastic packaging	Same	1-Denest plastic packaging
2-Put contents in package	Same	2-Put contents in package
3- - - Continue	Unique	3-Apply Adhesive
4-Snap-close the package	Same	4-Snap-close the package
5-Place package in sealer	Unique	5- - - Continue
6-Pressurize/energize/seal	Different	6-Cure adhesive w/UV light
7-Remove package	Unique	7- - - Continue

If each step takes six seconds, production is optimized. But, workers on the line *know* which steps are the most and least demanding. Workers conform to the pace that is "set." This is true with predecessors and Simpl-Seal.

So, how long does it take to denest a clamshell? How much time does take to seal? The difference is wasted labor. If the last step (sealing) is the slowest, all steps before that have the potential to waste time. With Simpl-Seal, step 4 is the last worker-performed step. With Simpl-Seal, there is no chance to waste labor beyond step 4.

If a predecessor sealing cycle is six seconds and other steps range from 4.5 seconds to 5.5 seconds, what is the wasted labor? Five seconds per package... 138 hours of labor.

What if placing contents in a package is 5.5 seconds and other steps with Simpl-Seal range from 4.5 to 5.5 seconds, what is the wasted labor? Two seconds per package. (For 100k packages that is 56 hours of labor.)

LABOR COMPARISON



Speed of automation is a very substantial difference.

The difference Cycle-Time Can Make With Automated Operations:

Assumptions:

	<u>UV-Seal</u>	<u>RF-Seal</u>
Clamshell denesting	2.0 sec	2.0 sec
Ad-card insertion	3.0 sec	3.0 sec
Product insertion	3.0 sec	3.0 sec
Adhesive application	2.0 sec	2.0 sec
Package closure	2.0 sec	2.0 sec
Package sealing	N/A	5.0 sec
PACE	3.0 sec / 1200 hour	5.0 sec / 720 hour

Speed of Manual Changeover & Set Up:

<u>Predecessor Sealing</u>	<u>Comment</u>	<u>Simpl-Seal Sealing</u>
A-Fit the press with tooling	Different	A-Fill adhesive dispensers
B-Verify/adjust power, cycle, etc.	Different	B-
C-Test the process	Similar	C-Test the process

A good case may be made for reduced set up (A&B above), more efficient manual assembly and sealing effort (3,5,6,7) and higher production from automation.

Every packaging production department is different.

Will your department be made better and more profitable with more flexibility?