

**Controls Engineering & Reese Pharmaceutical:**

# **How Reese Pharmaceutical Improved Packaging Line Productivity by 25% Through Stacking and Banding Automation**



## Customer Profile

Reese Pharmaceutical Company is a privately held manufacturer of OTC branded and private label products selling to national and regional chains, food and grocery stores, drug wholesalers, co-ops and independent pharmacies. It operates as both a primary and secondary packager for distributing products throughout the United States.



**Jeff Reese**  
Operations Manager



# Quick Summary

Everything you need to know at a glance

## — PROBLEMS

Coming into 2019, Reese Pharmaceutical's secondary packaging line had recently been almost fully automated. But toward the end of the line, finished product bundling and shrink-wrapping was still done manually.

This forced the line to operate at 60% to 70% of its throughput capacity versus the 80% to 85% that was possible if the line could run at the full speed afforded by automation. Other problems included inconsistent bundling and the ever-present threat of unexpected understaffing, which could devastate productivity.

## — SOLUTION

After an initial search for an automated stacker and bander came up empty, Reese assumed its only option was to work with a company to build a custom solution. This, of course, would be difficult, slow, and expensive without any guarantee of success once it was in place.

That's when they learned about Controls Engineering's Array Pack, an automated stacker and bander that integrates seamlessly with most packaging lines and is capable of keeping up with the high throughput of today's automated packagers.

## — RESULTS

Since their first implementation in March of 2019, Reese has seen a **50% reduction in labor costs**, a **20% to 25% increase in throughput productivity**, and **better customer satisfaction with the convenient stretch film bundles**. They've since integrated two more Array Packs into additional lines and have plans to add more in the future.

*Read on for the full story, or [get in touch](#) with us today to learn more about Array Pack and the impact it could have on your line.*



# The Problems

Low productivity, inconsistency, and staffing pains



## 1. Bottlenecked productivity/throughput

In the years preceding 2019, Reese's packaging and distribution operation was suffering from low productivity.

The problem was a bottleneck in the manual carton stacking component that sat downstream of a fully-automated primary packaging line. Here, a two- to three-person team was responsible for receiving finished cartons and bundling various configurations to be shrink-wrapped and prepared for distribution.

The fully-automated primary packaging line was processing products at a rate that human personnel simply couldn't keep up with: upwards of 18,000 to 20,000 units a day. This resulted in frustrating downtime and forced the line to slow to between 60% to 70% of its full capacity to accommodate for the bottleneck.



## 2. Inconsistent bundle quality

In addition to slowing the down the line and hurting productivity, the bottleneck at the bundling stage was also degrading the consistency and quality of the packages. Each bundle was oriented, stacked, and banded by a human technician.

This was particularly frustrating knowing that the manual bundling was harming the otherwise near-perfect packages the automated machines were producing upstream.



## 3. The threat of understaffing on a high-throughput line

Expecting to raise the bar on packaging productivity given the opportunities unlocked by automation upstream, those areas that remained manually operated took on a whole new level of risk given the everyday threat of illness, position changes, and other staffing problems that could affect the line.

For Reese, staffing levels of two to six personnel had to be maintained depending on the product on the line. When the line went understaffed, it meant a further reduction in productivity. This issue rippled through the business and the supply chain they maintain with customers all over the country.

# The Solution

An automated, fully-integrated stacking and banding system

Realizing the huge importance of solving these problems, Reese researched possible equipment solutions, but struggled initially to find anything already on the market.

Assuming there was no existing solution, they turned to the more expensive and headache-inducing option of arranging a custom solution that could automate the processes involved and integrate with the existing line—a process Operations Manager Jeff Reese referred to as, “a big mess.”



*Going custom would have been tough and expensive. We didn't have any machines like the one we needed. There would have been a lot of head-scratching and legwork to design and build something from the ground up. It would have put a lot back on our plate given how much we'd have to be involved.”*

While looking into custom solutions, Reese was introduced to Controls Engineering (Madison Banders) and their Array Pack (AP-25). This automated stacker and bander was exactly the solution that Reese had so far failed to find on the market.

After connecting with Controls Engineering's leadership team to determine if the application was as much of a perfect fit as it seemed, Reese quickly decided to implement the Array Pack as a more or less turn-key stacking and banding solution. The AP-25 would effectively eliminate the bottleneck and further automate its secondary packaging line.

Following their first Array Pack installation in March of 2019, the immediate impact and sustained improvement in productivity prompted Reese to procure two additional machines in an effort to reach higher productivity levels on other lines as well.



*As far as I know, there wasn't anything like the Array Pack on the market. We went to the trade shows. We did our homework. There was nothing else out there. If we went custom, we would have obviously incurred way more costs. It would have taken way more time, and honestly, it probably wouldn't be anywhere near the Array Pack in terms of capability. It perfectly fit our processes. We met the company. [Controls Engineering's President] Jason Kenney and customer service were incredible. I was sold pretty much instantly."*

The company's second Array Pack installation followed in May of 2020.

A third installation took place in August of 2020, likely with additional opportunities in the future.

# The Results

Less labor costs, higher productivity, more satisfied customers



## 50% reduction in labor costs

Simply by adding the Array Pack to their line, Reese has been able to cut personnel needs in half.



*Almost immediately, we were able to reassign positions and reduce staff on our line from four people down to two. In some instances, we've taken it from six people down to three, depending on the job that we're running. So, that's been huge for us."*



## 20% to 25% increase in throughput productivity

Once the Array Pack was fully integrated into its secondary packaging line, Reese saw its bottleneck evaporate, allowing the company to realize the full potential of the automation investments it had put in place.



*We had a line that was operating somewhere between 60% and 70% throughput. And we've already taken that all the way up to about 80% to 85%. It's certainly increased our productivity."*



### Fast, easy configurability

With a variety of change-out parts provided as part of every install, Reese's frontline technicians can save each configurability setting it uses across its various product lines directly into the machine. This enables technicians to save time switching over – minimizing downtime.



*The configurability is great. It's just a couple change-out parts and then changing the setting. It takes very little time and our basic technicians can do it with ease. That time savings really adds up as we grow and add more products to the line."*



### Higher consistency and end-user satisfaction

While tough to quantify, Reese reports a more consistent, user-friendly bundle from the Array Pack compared to the typical manual bundle – an advantage that reflects well on end-users at the end of the supply chain.



*The bundles are more consistent and definitely improved aesthetically. They're just nicer to look at and handle. Without the human element, the cartons are being oriented one way and one way only. When our customers get our packages, you know that it's a lot cleaner, they're a lot neater, a little more consistent. That might seem like a small detail, but it's important to us because it's really important to them."*

# Feedback, Impressions, and the Future

## Automated, fully-integrated stacking and banding system

Looking back on its first Array Pack implementation, Reese pointed to a uniquely strong customer service experience that has served to strengthen and expand the relationship.



*I personally haven't dealt with a company that's been as receptive and helpful as Controls Engineering. Anytime I can recommend them to somebody else that is dealing with the same issues that we were, I do. Just because of the experience and the relationship that we have been able to have with Controls [Engineering]— I really don't have a bad thing to say. And I couldn't ask for anything more from a partner than what they've been able to offer us. They've made our lives easier in more ways than one."*

# Maximize packaging efficiency and productivity.

## The Array Pack (AP-25) Automated Stacker and Bander

The Array Pack AP-25 is a fully automated carton stacking and banding system that offers revolutionary versatility, performance and reliable operation.

Watch the AP-25 in full operation on Reese Pharmaceuticals's packaging line.

[▶ Watch Video](#)



### Cut labor hours over your run times.

The Array Pack AP-25 is designed for maximum efficiency, helping you reduce labor hours. Fully automate your carton stacking, indexing, and banding for vertical and horizontal stacked cartons and combined configurations.



### Integrate with your carton filling equipment.

The AP-25 integrates with your carton filling equipment for a seamless packaging flow. It's flexible enough to interchange quickly between various bundle configurations. For additional capability, the AP-25 can provide standalone stacking or coupled with the bander with or without the CE Auto Roll Changer. The system can handle pieces from 1"x 1"x 3" to 12"x 11"x 4".



### Get the highest bundle integrity at the lowest per bundle cost.

Our high-performance stretch film brings a quality solution to your packaging, is completely recyclable, and is easy to use.

Reactive Tension Control redefines the standard for bundle integrity by automatically adjusting to varying product sizes and shapes while allowing the operator to finitely control the bundle tension.

# Ready to maximize packaging productivity and efficiency?

Get in touch and get the  
conversation started.

---



**Dan Odegard**

Interested in learning more  
about Array Pack and if it's a fit  
for your line?

Drop me a line and we'll help  
you run a savings report, get  
detailed specs, and more.

**GET IN TOUCH**

608-836-1164

dan.odegard@controls-llc.com

---

