



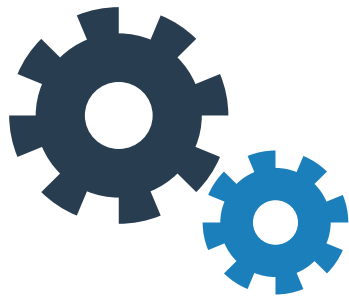
EQUIPMENT: AUTOMATION

# AUTO BAGGING SYSTEMS

INCREASING PRODUCTIVITY WHILE  
DECREASING EXPENSES



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## IS IT TIME TO **AUTOMATE** YOUR BAGGING PROCESS?

Do any of these situations sound familiar?

- Packaging can't keep up with production.
- Packaging is sloppy and damage reports are rising.
- Packaging quality goes down as shifts progress.
- Packaging is taking up too much space in your facility.
- You've got workers suffering from repetitive strain injuries.
- You're so dependent on manual labor that one employee missing their shift affects your entire production schedule.
- You're struggling to keep up with customer demand.
- You're losing product and profit because of overfilled product bags.

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With so much pressure from imports, companies are looking for ways to increase product yield while decreasing packaging costs. When you automate even a portion of your end-of-line packaging, you're using less materials, reducing your facility footprint, and, most importantly, you're removing the human element of packaging.

It's easy to write about why packaging automation is the right decision for every facility, but it's harder to prove. And it's safe to bet that machines are pretty low on the list of priorities, especially, if your management team is looking for ways to cut costs.

# So how about this for the best reason to automate your end-of-line packaging program?

## Increased production with decreased expense.

Every dollar of savings counts when you're trying to compete in today's manufacturing environment. But trying to save a few dollars at the beginning of a project may actually cause you to lose millions by the end. How exactly can you legitimize the initial cost outlay and prove to your management team that the ROI from automating will materialize?

Cost and quality conscious companies are now considering all the additional benefits of implementing a packaging automation system when calculating accurate ROIs: the overall costs of employee absences, health and safety related concerns, packaging waste, and administrative overhead. Careful consideration of all of these factors is critical in determining whether or not packaging automation is right for your facility.

OK. Your management may not go for a fully automated system, complete with palletizing robotic arms and software that can automatically detect the change in a box size. But once they start to see what automation can do to save them costs in the long run, you may start to see a change of heart even from your worst critics.

Anyone who bags materials at their facility knows just how physically demanding that job truly is on a person. Whether you're bagging a 50 pound bag of dry dog food or small bags of picture-hanging nails, the likelihood is that you're trying to get a lot of little things into something much bigger. Right away, to keep up with production and get things out on the right schedule, the idea of automating the bagging process seems like it would be the right fit for your production schedule and your workforce.

### 10 ways automatic baggers increase efficiency:

1. **Up to 350% faster production throughput.**
2. **Increase in weight accuracy.**
3. **Average labor cost reductions of 40%.**
4. **Up to 50% reduction in the amount of needed workstations.**
5. **Printing options that are approximately 50% faster.**
6. **Lower maintenance costs: fewer moving parts, uses off-the-shelf parts.**
7. **Up to a 90% reduction in scrap and material costs.**
8. **Ability to record historical data, used for maintenance and measuring errors.**
9. **Integrates popular rate shopping software for shipping efficiencies and savings**
10. **Average training time of about one week.**

**Up to:**

**40% REDUCTION**  
in labor costs

**350% FASTER**  
throughput

**50% REDUCTION**  
in workstations

## Who actually needs an automatic bagging system?

Packaging may be one of the most important links in the supply chain. Any customer judges the provider based on the packaging received. The customer's expectations include timely delivery, of course, but the condition and purpose of the packaging are an index of quality service.

But if you're on the fence about whether you really need to automate your bagging, we can help with that. No matter the size of your business, an automated bagging system will help you increase production while reducing expenses. It can reduce labor up to 80%, save up to 50% over paper envelopes, and eliminate 100% of labeling and corrugated boxes.



80%

Up to 80% reduction  
in labor costs



50%

Up to 50% savings  
over paper envelopes



100%

100% elimination of  
labeling & corrugated

Machines that automatically bag products vary in footprint size, task versatility, and cost-efficiency; they are technologically advanced, programmable, and durable. Available as either fully or semi-automatic, the systems expedite and improve the process of shipping and handling, working with speed and accuracy to open, fill, and seal bags of just about anything – big or small.

Bringing precision and speed to operations relieves workers of this manual work. Automated bagging systems use technology to improve productivity while reducing labor overhead, preventing shipping damages, insuring proper weight distributions, and managing risk with quality outcomes.

“Automating [aspects of the] manufacturing process not only drives costs down, it improves quality, reduces waste and optimizes energy use. [...The] application of automation is an essential ingredient in the sustainability of manufacturing businesses; automation will consequently increase a manufacturer's competitive edge,” says Chairman Mike Wilson of the British Automation and Robot Association.

# WHAT SHOULD YOU ASK YOURSELF BEFORE CHOOSING AN **AUTOMATED BAGGING SYSTEM?**



- 1** WHAT PRODUCT(S) ARE YOU HANDLING?
- 2** WHAT BAGS WILL YOU BE USING (TYPE, SIZE, AND STYLE)?
- 3** WHAT SPEED/THROUGHPUT DO YOU THINK YOU REQUIRE?
- 4** WHAT WEIGHT ACCURACY AND PRODUCT WEIGHT WILL BE REQUIRED?
- 5** ARE THERE ANY SPACE RESTRICTIONS OR CONSIDERATIONS REGARDING THE INSTALLATION AREA?

## Increased Productivity, Decreased Expenses

Yes, it's true that automation can be expensive at the outset. But consider the amount of money you'll save over the long term. It makes more business sense to spend a few extra dollars today to save thousands throughout the year.



In reality, automation has become more affordable in recent years, while almost all other costs (including labor, space, materials, and energy) are only increasing. It's important to consider the long-term investment, not just the immediate payback, when you make decisions about adding an automated bagging system. However, most companies realize a complete return on their investment within a year.

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### INCREASED PRODUCTIVITY

It goes without saying that the key to successful warehouse operations is smooth, efficient product flow. But inevitable bottlenecks will form along the conveyor line, especially if you've got a lot of people trying to bag, weigh, and label items. What can you do to keep product flowing and maximize throughput?

Because bottlenecks can occur with bag filling, automating this portion of production will inevitably speed up throughput, drive down costs, and improve accuracy.

Consider this and apply the Pareto principle:



***If 20% of your SKUs make up 80% of your orders, automation is much more viable because the volume of that 20% is moving at phenomenal rates.***



And when you're moving at faster rates, you need more labor to produce and meet the demands of production. Automatic baggers can work long hours, as well as at night and on weekends, providing an overall increase in productivity. A cost comparison of skilled workers versus an automated system is the best analysis to determine if increased productivity can offset any human staff-related costs.

Honestly, even the most efficient workers couldn't compete with an automated bagger. No matter how good your workers may be, they will never be able to work tirelessly and perform consistently without ever needing breaks or taking personal days.

## DECREASED EXPENSES

Ask yourself: will this machine cost more over its expected life than the labor you'd be replacing would cost? Can labor costs be saved elsewhere by freeing up expensive manpower for more valuable positions in your facility? And does it remove workers from safety risks that could cause accidents or injuries?

At the same time, consider the cost of any error that that person may commit. Equipment can continually repeat consistent final product results. The addition of automation eliminates the common issue of human error that may detract from the overall quality of production.

Remember that bagging, weighing, and labeling by hand is a time consuming process; it is slow and inefficient, no matter what sized product you may be packaging.

When it comes to bagging, human error is the main reason for overfilled bags, inaccurate weighing, and misapplied labels. And inaccurate weights and incorrect labels are the leading cause for undercharging customers, meaning you're not only losing inventory, but you're also losing profits.

Manufacturing processes can be carefully regulated and manipulated in order to maintain overall quality. This is a key advantage of automated equipment—the human error element is greatly reduced.

According to U.S. Department of Labor estimates, the median age of the manufacturing workforce rose by nearly 4 years in the first decade of the 21st century. And the Society of Manufacturing Engineers “predicts that the shortfall of skilled workers could increase to 3 million jobs by 2015 due to the aging manufacturing workforce.”



While it's impossible to automate every job, finding ways to reduce labor hours is one way to proactively attack the projected skills gap. If you need fewer unskilled workers to bag, weigh, and label products, you can concentrate on ways to better train and retain the skilled workers running your operation.

## Real world examples and statistics

Sometimes the best way to understand the real world application and inherent savings is to see these items in action.

### Wood Pellet Plant

A 50,000 ton per year wood pellet plant operating five days a week for 10 hours per day produces 200 tons of pellets each day. While instances of bulk pellet delivery are on the rise, the overwhelming majority of pellets produced by manufacturers serving their key demographics are placed in 40 pound bags, stacked on pallets, and covered to protect them from weather conditions.

To maintain their 200 ton per day production schedule, this facility has to efficiently fill more than 10,000 bags, stack them on 200 pallets comprised of 50 bags per pallet, wrap them, and move them into a waiting storage area.

Starting as a night-shift worker, the company's current Plant Manager recalled bagging and stacking a whole ton by hand during one shift. While the throughput the workers were able to achieve with that entirely manual packaging solution was admirable, it would not be able to keep pace with current production standards.

**MANUAL**

**6 to 10**  
BAGS PER MINUTE

**15 to 20**  
BAGS PER MINUTE

**AUTOMATED**

At that rate, manual packaging would cut current automated throughput by nearly 50 percent. The manual approach can be expected to yield 6 to 10 bags per minute, while their automated solution forms, fills, and seals 15 to 20 bags per minute, allowing the plant to easily meet their daily tonnage requirements.

### Frozen Food Producer

This company produces single-serve and family-sized packages for sale nationwide at grocery stores, membership warehouse clubs, convenience stores, and food service operations. It also packages some private-label brands and food service products. Packaging is done at its 119,000-sq-ft facility on five packaging lines.

In the past, this facility was manually filling the frozen packs and using a dozen employees to do so.

"From a labor perspective, our people did a pretty good job," said the company's VP of Manufacturing and Logistics. "But we wanted to automate the bagging process for different reasons, both for labor savings and speed, which was a big deal."

*"Automating [the bagging process has] also reduced the cost of film because we no longer have to have the film converted into a premade bag. Instead, we use rollstock film, which is a more economic way to go. Automatic bagging has also allowed us to make use of a scale to improve our weighing accuracy and reduce giveaway."*

Much of the savings come from reduced labor. "The labor-savings are dramatic," he revealed. "When we look at the fact that we've virtually doubled our speeds from manual packing, with fewer people, we have realized a 65% reduction in labor costs."

**65%**

**REDUCTION  
IN LABOR  
COSTS.**



## Jewelry Bead and Fastener Producer

A company that produces and sells jewelry beads and fasteners had been using a hand-counting and hand-loading system as an integral part of their packaging process. But, since they were producing thousands of beads and fasteners a day, the manual assembly line process was costing the company valuable time and money. An operator opened a bag, counted pieces, placed them in the bag, closed the bag, and placed a label on the bag.

The jewelry production business was struggling with:

- Inefficient packaging process
- Wasted time and resources
- Manual counting inaccuracy
- Customer returns

With the implementation of an automated bagging system, the company realized an immediate increase in productivity; the machine printed a label directly onto the bag, blew open the bag, counted the product, and closed the bag. The bagging system can run 24 hours a day with just one operator to oversee production.

Since the implementation of their automated bagging system, the company has saved an average of 34% on materials and seen a consistent productivity increase averaging 63%. Counting accuracy has also improved due to machine-counting and loading. Fewer customer returns are reported and productivity is up 300% over what it had been prior to the machines being implemented on the line.

**FEWER CUSTOMER RETURNS AND A 300% INCREASE IN PRODUCTIVITY** with an average of

**34% SAVINGS** on materials

**63% INCREASE** in production

## Retail Mail Fulfillment Company

Experiencing issues with its packaging process, a retail mail fulfillment company looked to find solutions, but with each new change or method, new dilemmas arose. Suffering from capacity problems, customer grievances, and low productivity, the mail fulfillment company was at a loss for solutions to their predicament.

With the implementation of automated bagger systems, the company now no longer needs as many work stations as they previously had. They found the automated bagger system provided them with reliability, ease of operation, labor savings, material savings, and higher worker productivity, so while they had previously maintained up to 25 workstations, they now only need to maintain 13. The mail fulfillment company has achieved better, faster results at about 66% of the cost of their previous systems.

**BETTER, FASTER RESULTS AT ABOUT**

**66%** of the cost

**OF THEIR PREVIOUS SYSTEMS THEY HAD IN PLACE.**

What do all of these have in common?

All four companies found ways to be **more productive**, **reduce costs** and **maximize productivity** by automating their bagging process.

The truth is, you can't simply sit back and wait for the right time; your competitors haven't. The stakes are too high, and your bottom line matters too much.

**Now is the time to automate your process.**

## Let's Get Started

Justifying the decision to automate your packaging process at your facility doesn't have to be difficult. In fact, the whole experience can be truly beneficial. But first, you need to find out what is right for you.

### You need a solution.

In today's competitive, consumer-driven marketplace, the question is perhaps not whether to add automation to your warehouse operations, it is when and where to add it. Most systems pay for themselves in less than a year when you factor in the savings from workforce reallocations, safety improvements, and material usage reductions, as well as the increased production speeds.

But these are just a few of the factors to understand when you weigh the long-term benefits and costs of automating any part of your packaging process. It's also important to think about how the needs of your customers and your facility might change over time and have a plan about what sort of automation technology you'll need to drive efficiency and productivity in the future.

## WE'RE HERE TO HELP

Automating your process has many benefits, and we're here to make sure you benefit from every single one of them.

Step 01

#### Get in touch.

Our product specialists are ready with the answers you need.

Step 02

#### Get answers.

We'll assess your needs and show you how we can help.

Step 03

#### Get a solution.

Damage prevention starts with the right solution. We'll provide that solution.



### Call Us

Our knowledgeable specialists are ready with solutions.

**855-995-4280**

### Email Us

No time to call? No worries, send us an email.

**knowledge@ipack.com**

## About IPS Packaging

Since our inception in 1976, Industrial Packaging Supplies has been serving our customers with complete packaging supplies, systems and solutions. We are your packaging partner in productivity.



We can provide you with an end-to-end packaging solution to boost your productivity and maximize the effectiveness of your industry on the packaging side of your business. IPS can be your total packaging partner in productivity.

Our business isn't just to provide packaging supplies, but to provide packaging solutions, using our top-of-line packaging products, packaging equipment, and highly trained and knowledgeable packaging professionals.

"IPS Packaging provides innovative solutions that will lower your operation costs, increase your productivity and positively impact your bottom line."

### Who we are

IPS Packaging's name has become synonymous with the entire industry, after all our name describes it best, **Industrial Packaging Supplies**.

### What we do

IPS Packaging is a complete solutions and service provider offering:

- Full line of packaging supplies
- Full line of packaging equipment systems
- Innovative, cost-saving solutions



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