

**CUT
LABOR
COSTS**



**THE 7
PACKAGING
SOLUTIONS**

DEUFOL

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INTRODUCTION

Staying lean is an ongoing challenge for most manufacturers. The manufacturing world is more competitive than ever. Customers demand a high level of quality and innovation. You likely face competitors from all corners of the planet. The only way to retain a market advantage and protect your margins is to continuously look for ways to become more efficient.

One major area of opportunity is labor costs. It's easy for labor costs to become inflated and place downward pressure on margins. Dealing with those bloated labor costs isn't so easy, though.

Historically, manufacturers have reduced payroll or cut hours in an effort to reduce labor costs. However, those tactics can poison

the culture and they may threaten your long-term ability to attract and retain skilled workers.

Other manufacturers have tried to slash labor costs by moving operations overseas to take advantage of lower wages. That strategy, though, doesn't have the same impact that it used to. According to a study from Oxford Economics, labor in China is only 4 percent cheaper than the United States when productivity is factored into the equation.¹



In fact, when you consider other costs, the total expense of manufacturing overseas may be greater than that of manufacturing

¹ <http://money.cnn.com/2016/03/17/news/economy/china-cheap-labor-productivity/>

INTRODUCTION

domestically. According to research from Boston Consulting Group, factors like materials, energy and waste make it cheaper to manufacture in the United States than in many European and even Asian countries. Again, Boston Consulting Group's research also found that U.S. manufacturing was only marginally more expensive than production in China.²

So if layoffs and hour cuts aren't a good long-term strategy and overseas production doesn't have the same value that it used to, what are your alternatives to cut labor costs? One effective strategy is to rethink your processes to minimize the need for labor. That may involve leveraging technology or simply developing better workflows.

While you may focus your cost-reduction efforts on your own production, you also may want to analyze your packaging process as well. Your employees are likely spending time on packaging, either your own packaging or packaging you receive from suppliers. That's time that may be more effectively used in other ways.

If you can reduce the amount of time your workers spend on packaging functions, or dealing with packaging that could be better designed for their tasks, you can cut costs, boost your margins, and increase your efficiency. In this paper, we'll highlight seven strategies that Deufol often recommends to companies that want to reduce their labor costs. If you haven't analyzed your packaging process or implemented these strategies, now may be the time to do so.

² <http://www.nytimes.com/interactive/2015/07/31/business/international/rising-cost-of-manufacturing.html>

Rotable packaging is a great way to not only reduce labor costs, but also to cut material consumption. A rotable package is one that can be used multiple times. You use it to package your product and send it to your customer. The customer unpacks the product and sends the rotable back to you for reuse.

This strategy works best when there is a consistent standing order in place. You know the size and quantity involved and you also understand the quality assurance needs. You can then work with a packaging designer to create a durable and efficient solution that can be quickly packed, unpacked, and reused.

The result is that your team spends less time producing packaging. Instead of creating a new package for each shipment, you simply use a previous container. You save on labor as well as new materials.

Rotables can also be effective if you're on the receiving end of the regular order. You can work with your vendor to implement a rotable solution. Imagine if your rotable packaging could be designed to eliminate time consuming assembly tasks on your production floor. Lifting, moving and placement movements can be reduced or eliminated.

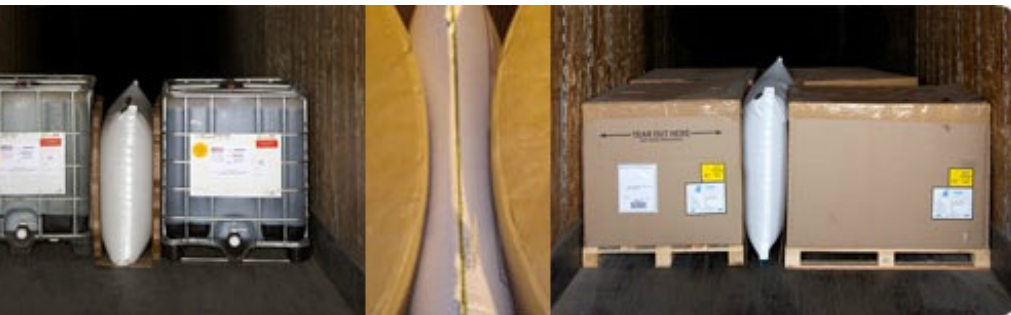
Also, your team can save time and money spent unpacking and removing packaging materials from their work area. Your team saves time and money because you don't have to dispose of packaging. Also, your vendor should save on packaging production, and they may pass some of those savings onto you.



2

ENGINEER TO REDUCE DUNNAGE

For many industrial and manufacturing companies, the wood crate is the default, go-to packaging solution. It's simple, easy to produce, and versatile enough to meet most needs. However, one of the problems with the wooden crate, or any other basic packaging solution, is that it often needs supplemental packaging materials to protect the quality of the materials inside the crate.



You're likely familiar with these materials, also known as dunnage. Common types of

dunnage include shredded paper, foam peanuts, and bags of compressed air. You know the drill. You put your product or materials in the crate and then load the crate with dunnage to fill all the empty space and minimize movement while in transit.

The problem is that dunnage can become a time drain. On the packaging side, there's the time needed to fill those crates with paper, peanuts, or your dunnage of choice. On the receiving end, your team has to unpack all that dunnage and then transport it to a dumpster or other waste center. Couldn't that time be better spent on other tasks?

A packaging partner who thinks beyond the wooden crate can help you engineer a more protective and efficient container that will protect quality on its own, without the need

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ENGINEER TO REDUCE DUNNAGE

for additional dunnage. That means your workers spend less time filling crates with peanuts. Or you can work with your suppliers to engineer their packaging so you don't have to sift through a mountain of shredded paper every time you receive a package from them.

Either way, your team members spend less time sorting through dunnage and more time on the tasks that are most important to you. That increase in efficiency and productivity could reduce your need for staff or work hours.



3 CREATE A RECEIVING AND SUPPLY HUB

Does your facility receive parts and materials from dozens, or maybe even hundreds, of different vendors? How are those crates and parts sorted when they arrive at your receiving bay? If you're like many manufacturers, your team members unpack the crates, sort through the materials, and then figure out which parts need to go to which stations in your building.

You might have an efficient process for handling the reception of supplier parts. In our experience of consulting manufacturing and consulting companies, though, this process is a time drain for many.

The problem arises when there's no system in place and when each team or worker is responsible for locating their specific parts and materials. The worker spends time

walking to the receiving bay, looking through the recently arrived shipments, and tracking down the desired part.

Maybe they find it quickly, in which case they spend time unpacking the crate. Or maybe they discover that the wrong person



accidentally grabbed the part. That starts a whole new hunt and drains additional time.

3 CREATE A RECEIVING AND SUPPLY HUB

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There's another option: You could create a receiving and supply hub near your facility.



All shipments go to the hub rather than your production facility. There, they are checked in via barcode scanner so you can track them in your system. The containers are unpacked and then parts and supplies from various

vendors are bundled together based on their next destination. The bundles are then delivered directly to workstations in your facility.

We recently implemented this idea for Siemens and their facility in Charlotte.³ It's helped them streamline their supply process and keep their employees focused on their most important jobs. That has boosted efficiency and helped them keep labor costs under control.

³ Siemens Industrial Hub Case Study: <http://info.deufol-us.com/siemens-case-study>

4 IMPLIMENT PACKAGING DESIGN SOFTWARE

If you produce your packaging in house, what software do you use to create the design? If you work with a packaging company, what software do they use? If you don't know the answer or if it's all done by hand, you may have a packaging process that relies too much on labor and drives up your costs.

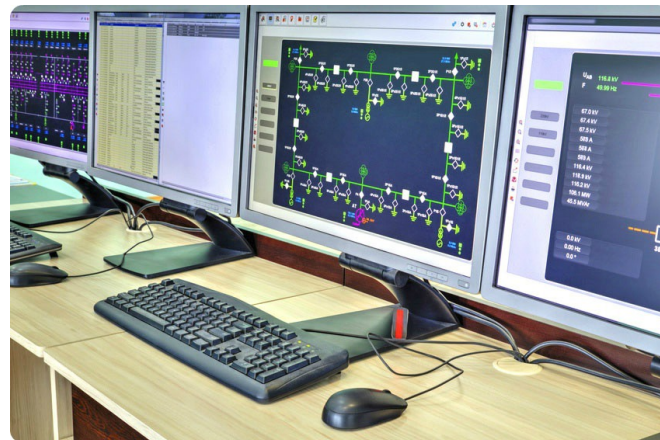
The most advanced industrial and manufacturing packaging companies invest regularly in technology, including crate engineering software. This software can be used to develop detailed and highly customizable packaging blueprints.

How does this impact labor costs? If you know that you want to limit labor input to

a certain amount of time per container, you can use the software to design a package that meets that restriction. Engineering software gives you or your packaging partner the flexibility to create designs that fewer assembly steps and less manual input.

Also, you can use the software to automate a portion of the packaging production process. Depending on your hardware, you can often

feed the design from the software directly into the assembly equipment, creating some or all of your packaging with little labor required.



5

ON SITE LOGISTICS

We've mentioned the challenges that can arise when your team members are responsible for tracking down their own parts and packages on the receiving end. That task can become a time drain in a manufacturing facility.

It can be even more problematic on a large-scale industrial project site. You may have hundreds of third-party contractors onsite to perform a wide variety of tasks. Containers from many different suppliers may be arriving nonstop throughout the day. Those contractors may have to track down packages and parts with little idea of what they're looking for or where to find it. The result is lost time that can quickly accumulate and throw the project off-schedule.

Onsite Insight is a solution we have developed for many of our industrial customers. It's similar to the hub concept except that it takes place on the actual project site itself rather than in a separate facility.

A dedicated, third-party team receives and checks in all packages from suppliers. They scan those parts into a tracking system so you get real-time transparency. They then bundle all required parts together according to destination and deliver those parts to the appropriate contractor or workstation.

The result is that your contractors and team members focus on their core tasks. They get the parts they need delivered directly to their work area, so they can be more efficient and productive. Your project stays on schedule and you eliminate wasted labor spend.

6

LEVERAGE ADVANCED PACKAGING TECHNOLOGY

As mentioned, packaging engineering software can be used in several different ways to reduce your labor costs. But that's not the only useful form of packaging technology you can leverage. Other valuable tools include scanning technology, GPS, and even photo documentation software.

At Deufol, we use scanning and barcode technology in many of our solutions. It allows us to check-in containers and products as they move through the packaging and distribution process. We then integrate that with your customer's internal software so they can track packages in real-time.

That integration has a sizable impact on labor costs. Instead of searching a facility for a missing package, the worker can simply pull up the software to see the last place it was

scanned. Instead of spending time on the phone with a supplier to see where a shipment is, you can quickly log into your software and get the information with a few clicks of the mouse.



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LEVERAGE ADVANCED PACKAGING TECHNOLOGY

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GPS technology can also serve a similar purpose. The GPS tells you a package's exact location, making it quick and easy to determine the location or get a status update. Photo documentation software is also helpful. We use it to photograph items as they are packaged. Then, on the receiving end, workers can quickly see what the item should look like and what condition it should be in.

As you likely know, technology is one of your most powerful tools for reducing labor costs. If you aren't leveraging technology in your packaging process, you could be missing out on a substantial opportunity.



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RETHINK YOUR ENTIRE PROCESS

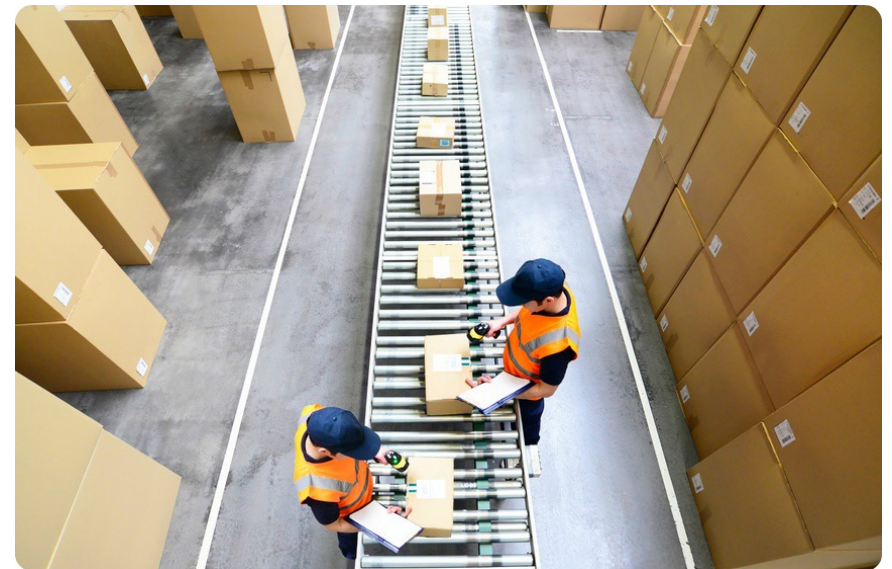
A redesign of your package or container could help drive down your labor costs, but what about rethinking your entire packaging process? Have you been producing your packages manually because that's what you've always done? Why not reimagine that process?

Obviously, you could transition to a fully automated packaging production system. The software and technology exists to build an automated system for almost any type of package. At Deufol, we have our own in-house machine shop specifically to build equipment for our customers' automated production lines.

The problem is that an automated line can often require a substantial investment of capital. While it may drive down per unit labor

costs, it could take time before you recoup that investment. You may not have the cash flow or the financial flexibility to take on that kind of project.

You don't have to choose between fully automated and fully manual, though. Those



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RETHINK YOUR ENTIRE PROCESS

are just two ends of the spectrum. There are plenty of options in between the two.

For example, at Deufol, we will often help our customers build a packaging production system that meets their capital limitations but also achieves their per unit cost goals. We do that by engineering and building a custom semi-automated process that integrates automation with manual input.

Of course, that kind of solution is highly dependent on your unique needs and goals. The process starts with a thorough analysis of your packaging requirements and your current solution. Then we engineer a new solution from scratch and even build custom machinery to do the job. Not every packaging

company has the capability to create that process.

If you're in the process of examining your labor costs, don't forget to include your packaging process in the analysis. Chances are good that your team members are spending more time on packaging-related tasks than you would like. Rethinking your process and your packaging can help you reign in those costs.

Not sure where to start? Let's talk about it. Our packaging consultants welcome the opportunity to speak with you about your labor costs and your packaging needs. Let's connect soon and start the conversation.



For more information, or to discuss your own industrial challenges,
<http://info.deufol-us.com/industrial>

For answers to your most challenging packaging problems,
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