Four Easy Ways to Automate

WAREHOUSE SOLUTIONS

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FOR ABCO SYSTEMS |

Warehouse Solutions: Four Easy Ways to Automate

E-commerce has grown exponentially over the past decade, and due to the pandemic, it has never slowed down. A study from the US Census Bureau[1] disclosed that eCommerce grew 43% in 2020 and is still going strong. In fact, online shopping currently accounts for 20% of total retail shopping[2].

To keep up with the demand, many warehouses have invested in automation – the process of automating moving inventory into and out of the warehouses utilizing as little human work as possible. The term "warehouse automation" includes everything needed to improve efficiency and accuracy in the warehouse. This includes robotics, sensors, software, hardware, and more.

Amazon is the most well-known company to use warehouse automation as a tool to propel their business to new heights. Their use of automation technology over the past ten years has set up a race amongst warehouse businesses to deliver products quickly and efficiently.

Yet, even with Amazon and other big box stores changing the way warehouses do business, over 80% of warehouses in the United States have no automation at all[3]. As they struggle to keep up with giant companies like Amazon and Walmart, automation is becoming a necessity rather than a luxury.

When a warehouse decides to take the leap and implement automation solutions, it can be daunting. Luckily, ABCO Systems is here to help companies increase efficiency and streamline processes by offering different solutions that meet the exact needs of each individual business.

Below we outline four easy warehouse automation solutions – print and apply, Cubiscan, case sealers, and put-to-light – and explain what they are and how they could help take your business to the next level.

Top Four Warehouse Automation Best Practices

1. **Print and Apply**

When it comes to starting warehouse automation, sometimes the simplest and most obvious areas are the best to automate. This is true for print and apply labeling, which is a way to save minutes or even hours in an industry where every second counts.

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[1] https://www.census.gov/programs-surveys/arts/data/tables.html
[2] https://www.scmr.com/article/whats_fueling_the_growth_in_warehouse_automation
[3] https://www.businesswire.com/news/home/20210621005532/en/Global-Warehouse-Automation-Robots-Technologies-and-Solutions-Market-Report-2021-2030---ResearchAndMarkets.com

With a print and apply machine, workers can print labels on demand. Additionally, many of the machines come with a label applicator, reducing the need for human interaction. Print and apply technology increases efficiency and decreases human error.

How it works:
The print and apply label systems automatically creates and attaches shipping labels to containers.

The strategy behind a print and label machine is to create labels that are applied directly to what is being shipped rather than relying on hand labeling, allowing warehouses to streamline their labeling process and boost operational efficiency.

The benefits:

- **Improved efficiency**. When it comes to investing in automation, the goal is efficiency, and apply and label machines deliver. Instead of spending time manually peeling and placing stickers, the machine does the work for your workers allowing them to focus their time and attention elsewhere.
- **Decreased error**. One area that can adversely affect a warehouse is shipping the wrong thing to the wrong person. This creates logistical problems, not to mention ending with an unhappy customer. Utilizing a machine to print and apply the label instead of using a manual process results in a smaller chance of error.
- **Increased speed**. When workers are applying labels, they may create a bottleneck that can lead to slowdowns in other areas of the warehouse. With a machine doing the work, the speed is consistent.
- **More affordable**. Hand labeling can take time and therefore cost money. A print and apply system quickly pays for itself as it frees up workers to complete other more important tasks.
- **Streamlined process**. Print and apply systems are beneficial in the shipping and manifesting process. The systems usually include a barcode scanner to identify the parcel, a print/apply machine, a conveyor for inducting, labeling, and discharge, plus a verification scanner to read the printed label.
- **Space optimization**. The compact apply and label machines save floor space by utilizing the same machine for label printing and application.

There are many different types of print and apply machines. If you are ready to upgrade to an apply and label machine, contact our team at ABCO Systems to learn which software and machine is the best custom equipment for your business. We can tailor all our solutions to each customer's needs and specifications.

2. Cubiscan

Cubiscan is an automatic dimensioning and weighing system. With one touch, a warehouse will have the complete size and weight data for every package it needs in order to run the most efficient and accurate warehouse possible.

When warehouses automate the dimensioning process, they reduce labor costs and take the manual aspect out of weighing and measuring. By automating this process, a warehouse will benefit from accurate data output and from a reduction of risk by no longer requiring workers to use a tape measure. By automating measuring and weighing, a warehouse will also benefit from increased efficiency as they try to fulfill heavy demands.

How it works:

The Cubiscan uses sensors to capture how much a box weighs and its dimensions by using sensing technologies including ultrasonics, infrared light, three-dimensional camera sensing technologies, and lasers to scan for the dimensions of the item.

Those sensors send a signal out. The technology receives the data coming from the signal and then programming and algorithms interpret the signals into accurate length, width, and height.

The benefits:

- **Increased productivity**. The Cubiscan can quickly and accurately take the necessary measurements and capture the necessary data. Manual data is less accurate and more time-consuming. By incorporating Cubiscan, warehouses quickly see increased productivity and reduced labor costs.
- **Safer outcomes**. Reducing manual measurements is safer for both workers and the package contents.
- **Improved accuracy**. Not all boxes are the same, and when it comes to irregularly shaped boxes, Cubiscan offers a precision that cannot be matched by humans. This is not only simpler and more effective but eliminates bad data that results in wasted time and money.
- **Optimized space.** Eliminating material waste and picking errors with Cubiscan means warehouses suddenly gain extra space.
- **Environmental benefits.** Dimensional automation helps reduce package size which is a waste of funds and an environmental hazard.

Cubiscan offers a broad range of dimensioning systems that deliver a lasting quality with rich and useable data. To learn which Cubiscan system might be right for your company, contact ABCO Systems.

3. Case Sealers

Automated case sealers secure different-size cartons and boxes using an automated packaging system that employs either tape or glue. By eliminating the need for a constant human presence at the end of the line, you will see higher daily output.

How it works:

The box will come down the conveyor belt and the case sealer will fold and seal the box as it runs through the machine.

There are several different types of case sealers. These include hot melt, cold glue, pressure sensitive, and tape. They each have their own advantages. If you'd like to learn which might be the best for your warehouse, contact us.

The equipment differs with different types of case sealers, but many of them offer top sealing in a variety of case styles, sealing 15-29 cases per minute, simple operation and automatic tool-less changeovers, and more advanced features including remote access capabilities. Button controls make operating the machines easy.

The benefits:

- **Efficient packaging line**. Broken tape and failed seals are the enemies of a productive packaging line. A case sealer tapes a box once and does it correctly. There is no need for double tape across the top or re-doing work.
- **Enhanced packaging presentation**. With one swift tape application, your packaging will look much more professional than if it were put on by hand.
- **Decreased injury and damage**. Having the machine put on the staples, glue, or tape means that there is a much smaller chance of a worker getting hurt or your packages getting damaged.
- **Lower material cost**. Using a case sealer can lead to a reduction in tape cost by up to 30% and a reduction in stretch film cost by up to 75%.

4. Put-to-Light

Put-to-light is an automated technology that is typically used in eCommerce. It is a perfect technology for warehouses that deal in high-volume fulfillment operations with many SKUs that are looking to increase productivity without increasing labor costs.
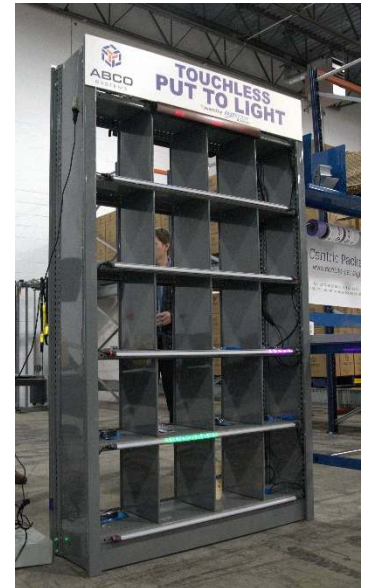
This technology is ideal for warehouses that have large batches of products come in that need to be sorted into individual orders. A put-to-light technology helps complete this task in an accurate and productive way. Workers can break larger quantities of a product into individual customer order sizes quickly and efficiently.

How it works:

The wall where orders are sorted is called a "put wall" and has several bins that can be changed based on needed requirements. Each bin has a confirm button, a message display to let workers know the status of the order, and a barcode scanner.

Once the worker has a batch of multiple orders that need to be sorted into individual orders at the put wall, the worker will log in to the put-to-light technology which will alert the worker to how many items they must sort. The worker will scan the individual product and a light will illuminate on the put wall letting the worker know where to put each product. Additionally, if there is a packing list for each order, the put-to-light technology will let the worker know where that packing list belongs.

As soon as the orders are finished, the opposite side of the wall will illuminate, letting workers know the order is ready to be packed.

The benefits:

- **Increased accuracy.** A put-to-light system takes the human element out of placing products in the correct area. The more accurate the picking accuracy, the smoother the warehouse operations. Urban Outfitters and SDI used a put-to-light technology and increased picking accuracy to 99.7%[4].
- **High level of productivity.** By removing the reading, the user simply scans the barcode which illuminates the light in front of the product that needs to be picked and displays the quantity.
- **High-tech software.** New put-to-light features have been introduced that provide the worker with full visibility on status, throughput, and visibility all in real time leaving little room for error.
- **Ability to scale.** As companies grow, it is easy to add capacity within the initial investment for larger put walls or upgraded technology without having to buy a completely new infrastructure.

By understanding your existing process, number of SKUs, and order profile we can determine if put-to-light is right for you. Contact ABCO Systems today for a software demo and additional information.

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[4] https://www.linkedin.com/pulse/increasing-picking-accuracy-put-to-light-technology-yusuf-emlek/

Automation is Here to Stay

As companies continue to deal with a changing landscape that includes increased customer demands, supply chain issues, and workforce shortages, the need to automate becomes more and more apparent.

ABCO Systems understands that warehouse automation can be daunting but choosing one of the four easy solutions discussed above -- print and apply, Cubiscan, case sealers, and put-to-light – means a warehouse can become more proficient, adaptable, and less expensive. ABCO Systems offers comprehensive automation solutions. Contact us to see how ABCO Systems can help your company increase efficiency in your space and processes with warehouse automation solutions.