

Körber Supply Chain

# Keep it up

Using palletizers to keep  
your production levels high



## Introduction

Customers are increasingly demanding a wider variety of product choice, from different packaging, to different colors, sizes, and shapes – on a global scale. For supply chain logistics, this means finding new ways to sustain higher production levels. Even more so as the recent pandemic has brought considerable growth in online shopping, adding even more pressure for businesses to deliver goods faster, and more efficiently.

Automation offers you a safe, efficient way to answer these challenges, and others. Many companies have already turned to automation as a cost-effective way to improve operations, helping them stay competitive in a very demanding market. Palletizers offer especially high throughput rates, increasing efficiency while reducing costs – all without compromising on quality.

# Answering your needs

Automating the packing of goods onto pallets leads to faster cycle times and higher levels of precision. They particularly help businesses moving from a smaller to a larger production scale.

Palletizers take manufactured products and place them on pallets, creating higher layers than manual labor could, and preparing them for delivery to the end customer, distribution center or warehouse. This can be done with almost any type of product, no matter its size, packaging, or material, as the palletizers are custom built from standard modular components.

**“As soon as you deploy a two-shift model, or you have multiple lines with products to palletize, you should start looking into palletizers to improve efficiency and reach faster throughput rates”**

**Kai Menges**  
Head of Business Development  
and Field Marketing

They answer many of your needs, including:

### Special requirements

Pallets are sometimes delivered to stores and placed directly on the shop floor as they arrive. When this happens, you must adhere to special requirements regarding their aesthetic. Palletizers make sure the products are neatly stacked on the display pallets, making them presentable for any end consumers who happen to see them before the store can move them.

### Labor shortages

Finding, training and retaining staff is one of the supply chain's biggest challenges. High turnover rates mean it's difficult to rely on an efficient team, as new employees must continuously learn how to work, and move, around the production plant. This creates downtime and, in turn, higher costs. Automating the palletizing process gets around these issues, as the palletizers reduce manual labor and don't need human handling to operate.

### SKU proliferation

Customers demanding more variety often causes the manual stacking of products to become increasingly time-consuming and difficult, due to the different packaging types and sizes. Palletizers can handle different formats of goods, as their picking technique is customizable.

# Key benefits

As well as answering most of today's major supply chain's challenges, palletizers offer several other benefits to your operations. These include:

## Higher throughput

Palletizers can cover the complete palletizing process, as they are custom-built from standard modular components, to fit the material flow environment and customers' needs. Compared to manual labor, they work faster, and more efficiently. They can also stack pallets higher than your staff could. This leads to a higher overall throughput.

## 24/7 production

Having an automatic process means there is no need for rest time, or a shift pattern. You could have palletizers working 24/7 during your busiest times, making production even more efficient.

## Improved health and safety

Moving goods is one of the most demanding tasks in a production plant. Heavy lifting is the leading cause of back injury, and fatigue workers need regular breaks during shifts. Palletizers reduce these risks.

## Cost-effectiveness

As you can choose the best palletizing solution for your needs, there is no risk of overspending on something you don't need. Some palletizers can also be adjusted as your requirements change, including increasing picking speeds for higher throughput.

# Finding the right palletizers

Your solution must work for your specific needs. That's why our range of palletizers can be implemented as single solutions, or together to create a bigger automation solution. These are:

- **Articulated arm robots**  
Used in flexible environments, where different types of tasks are performed. They can handle a single pick, multi-pick, or layer pick, and can work up to 6 cycles per minute.
- **Layer palletizers**  
These are suitable for almost all consumer products. They can work at a low speed, and go up to 10 layers per minute.
- **Linear robots**  
Used for smaller throughputs, these offer a flexible and cost-effective option which is easy to operate and maintain.
- **Gantry robots**  
These are used for heavier loads, as they're able to palletize on multiple pallets at a lower throughput of up to 4 layers per minute.



Whether you are new to automation or want them to form part of an existing system, palletizers are highly flexible and adaptable. Each solution can be made to fit within any existing set-up, and work with any other productivity-enhancing systems.

# Looking to the future

There is no doubt that the need for higher throughput will keep increasing. As customers demand more variety and choice, businesses must adapt to provide. More automation, including palletizers, can help you answer these rising challenges.

With sustainability also becoming an increasingly hot topic within the supply chain, we can confidently say the future of palletizers will be:

- **Digital**

The digitalization of supply chain logistics means more visibility across the whole production line – and beyond. This makes it easier to identify possible bottlenecks in the processes, and quickly act to solve issues. Automation is at the heart of this process, as each palletizer, for example, can be implemented as part of a wider solution and easily controlled through one central system.

- **Sustainable**

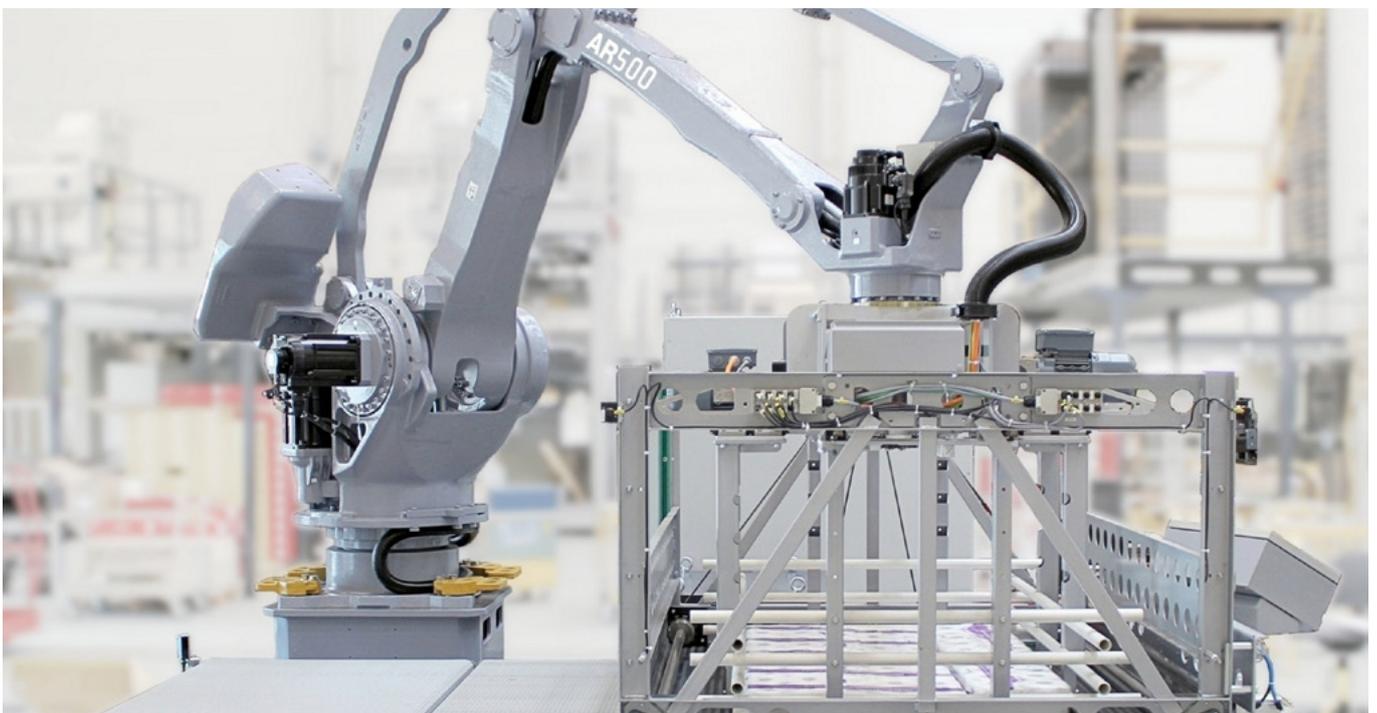
Following the Paris Agreement, customers, competitors, and international regulations are asking companies to meet better sustainability standards. As a result, companies are looking for ways to reduce their carbon footprint in different areas of their operations, including across their production line.

Palletizers that allow for upgrades are a more sustainable alternative to both manual labor and other automated palletizing. Our layer palletizers, for example, start from a low-speed model, handling 4 layers per minute, and can go up to 10 layers per minute. Instead of replacing your old system with a new one, and thereby creating waste, our solution allows you to upgrade what you already have. This means you're lowering your carbon footprint as your system grows alongside you.

**“The future looks much more digital. It’s important your palletizing solution is connected to the rest of the system. This allows us to look beyond the palletizer’s sole efficiency, to the whole supply chain and production line, all the way to your palletizing disposal system. This is how we can ensure everything runs smoothly and downtime is reduced, making sure the palletizer isn’t the bottleneck of the system – and that, ultimately, we get our input as well as keeping our output.”**

**Kai Menges**

Head of Business Development and Field Marketing



# Supporting your automation journey

As supply chain logistics moves towards a more automated future, our role is to partner with you to make this journey as easy, and as efficient, as possible.

To make sure you get it right on the first try, we will support you in developing the perfect palletizing system for your needs. We will start by taking a look at your product types, from packaging to dimensions and weight, taking note of the speed of production, and your goals. From this, we develop the palletizing solution that best fits your requirements, optimizing your material flow process.

## Conclusion

Automation is the future of supply chain logistics. It offers an efficient and cost-effective way to stand up to today's supply chain challenges, increase productivity, and keep up with growth. Solutions such as palletizers are flexible, reliable and customizable, meaning they can answer your present and future needs.

### Find out more

Learn more about our Körber's palletizers solutions here:

