Palletizing robots

Industry-leading automation solutions

Palletizing robots are the perfect tools for optimizing the manufacturing production line, while packing goods onto pallets for transfer and delivery. Automating this process leads to faster cycle times and higher levels of precision, increasing efficiency and reducing costs, while improving working conditions and employee safety.

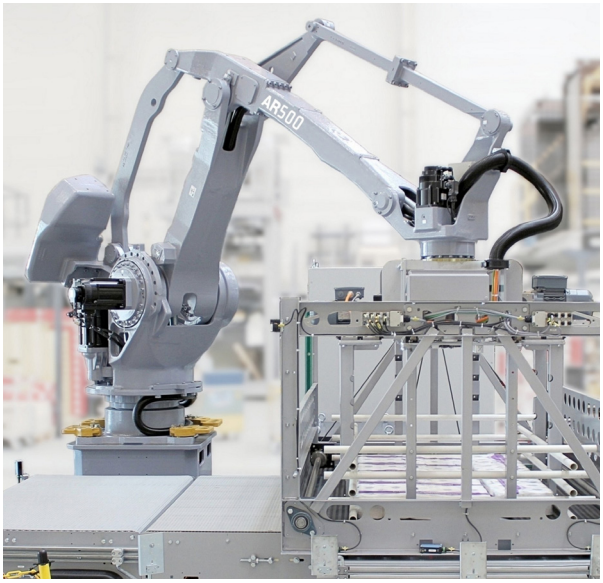
The palletizing challenges in modern manufacturing workflows
Modern manufacturing and production are highly demanding in terms of increasing levels of growth, speed, scale and efficiency, all while requiring processes to be kept as cost-effective as possible.

This can be extremely challenging to achieve with a manual workforce, especially as in most markets, efficient, reliable labor is increasingly difficult to come by.

Goods to be palletized can also be difficult or dangerous to handle, whether delicate or hazardous materials, or simply heavy in large volumes. This requires more care and more time.

The price pressures of modern production mean speed is imperative, and the line must move as quickly and efficiently as possible – so precision is paramount.

There is an escalating need to modernize and evolve all aspects of operational logistics, to standardize processes, systems, checks and balances, and to be able to measure and improve systems across sites, divisions and different countries and regions. Digitalization is key to the solution.



Körber palletizing robots offer speed and efficiency

Körber has a long-established expertise in conveying and palletizing systems, setting new industry standards in the manufacturing of robotic palletizers. We offer a range of palletizing robots, focusing on quality, reliability, process stability and a long life cycle.

Articulated arm robots
Enormously flexible, suitable for a very wide range of applications, and economical in situations where many different types of task are required. For example, when more than one packaging line needs to be palletized by a single machine, our multi-line systems are fast, precise and able to handle heavy loads, with user-friendly reprogramming options for new tasks.

Key benefits

Deep expertise
Körber's wide-ranging experience in both robotics and logistics is coupled with a deep knowledge of software and systems integration for all aspects of the supply chain.

Flexible options
No off-the-peg solution, systems are custom built to fit material flow environment and each customer's individual requirements.

Process optimization
Planning and execution for the complete palletizing process is made simple, efficient, repeatable, measurable and transparent.

KÖRBER

Layer palletizer robots
Suitable for almost all consumer products in uniform packs, cases, crates or bags. Products are rotated and orientated into layers, then layered onto pallets. A typical application is the hygienic paper industry, where a single robot palletizes both large bundles and small packs at rates of up to 200 items per minute.

Linear robots
A flexible and economical solution for palletizing most consumer goods products; easy to operate and maintain. Perfect in situations with low ceilings and limited space, generally with a load capacity of up to 500 kg and a working height of up to 2.8 m.

Gantry robots
Heavy-duty palletizing robots operating from an overhead gantry, capable of moving large loads quickly and accurately. Fitted with either a fixed or telescopic lifting axis, they are highly flexible, with wide operating ranges along their three axes: the X-axis (lengthwise movement), the Y-axis (crosswise movement) and the Z-axis (vertical movement) handling heavy loads with speed and precision.

No two companies have exactly similar requirements, so no two Körber palletizing robot systems are the same. Each one is flexible, custom built, and adjustable to fit customer requirements. One of Körber's key strengths is the in-house expertise to design and implement the right system and material flow environment in exact accordance with your needs.

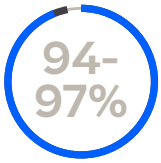
It varies with application of course, but the average ROI time for palletizing robot systems is around two years. During this time the supply chain benefits from the efficiencies of the system translate into operating profit.

The Körber difference
We pride ourselves in technology leadership within the industry, and our in-house R&D department is exploring the next generation of state-of-the-art robotics. We have a complete portfolio of products, each system tailored to your needs. We are also uniquely placed to offer the complete logistics solution, with the infrastructure, reach and financial backing of a truly global company. This scope, and our own manufacturing capacity for machines, conveyors and auxiliary components, means we are also unmatched in more pragmatic everyday areas such as the availability of spare parts.

"For customers with a particularly difficult or special application, the breadth of our product portfolio means there's always a way to find a unique solution that works and makes the customer happy. That's the fun part."

Kai Menges
Vice President, Product Solutions,
North America, Körber

Our solution improves performance



Our robot conveyor technology operates with drives of energy efficiency at category IE3, offering a premium effectiveness of 94 to 97%.

Our solution in use

Lieken
Körber created a fully automatic stacking and palletizing unit, with the flexibility to handle all standard formats for Germany's leading bakery specialist, Lieken, helping to lower costs and increase human resources efficiency.

Körber palletizing robots are in use by some the world's largest manufacturers, including:
BASF, Heinz, Kimberly-Clark, Mars, Melitta, Miele, Nestlé, PepsiCo, Procter & Gamble and Unilever.