

Sustainable solutions with modular palletizing systems

Sustainability and energy-efficiency for your manufacturing logistics



Körber stands for dependable and high-performance system solutions, but that's not all.

As a modern and quality-oriented manufacturing logistics machine builder, we are not only responsible for our customers, our employees and our product solutions, but also for our environment.

Sustainable action and energy-efficient products are an elementary part of our company philosophy.

Challenge

CO2 taxation and sustainability are driving up logistics and production costs more and more.

As an operator of energy-intensive production, do you also complain about excessive energy consumption and try to improve your overall energy balance and reduce your CO2 footprint?

Solution

Effectively supporting you in achieving a positive energy and CO2 balance was one of our goals when developing our latest palletizer, the K.Handle layer palletizer PA15. In this way, we and you can meet the economic and ecological requirements of the future.

Less air

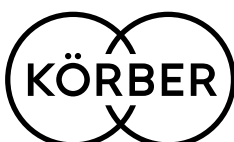
The more often a compressor starts up to keep the air pressure in the system constant, the more expensive the compressed air becomes. For this reason, pneumatics are only used for fall protection in this machine concept.

Less electricity

Depending on its power and use, a more efficient motor can save a substantial amount of money over its service life. Our built-in motors are all classified as at least IE3 and are switched off by the program controls when they are not needed.

Living longer

Particular attention was also paid to the entire product life cycle, as this also reduces environmental impact. This begins with the selection of the raw materials



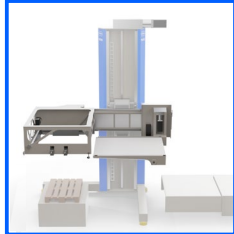
used and continues through the manufacturing process of mechanical prefabrication onto assembly at the regional location.

In creating the PA15, Körber took care to develop a layer palletizer that guarantees sustainability and resource efficiency for you in the long term.

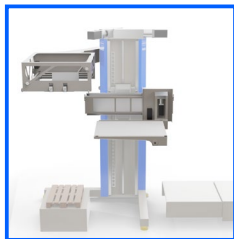
Expandable modules

The modular design of the PA15 allows adaptation to the required production output, product content or weight, and after years of production, the option to upgrade and adapt to new conditions.

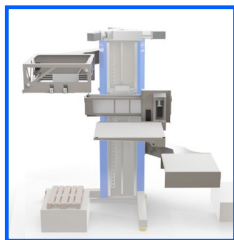
PA15.1 One z-axis



PA15.2 Two z-axes



PA15.3 Three z-axes



One, two, three

In the low-speed version, the PA15 has a Z-axis, which moves the placement belt and compression in unison.

In the mid-speed version, these two components are divided into two Z-axes and can move independently of each other (4 to 6 layers pre minute).

The high-speed version then achieves a performance of 10 layers per minute with the third independent axis. Like the palletizer, the K.Handle infeed station ZF72 was designed to be expandable in order to adapt it to increased output.

Save energy and material

The upgradeability of our product solution effectively saves you material and prevents waste, which will ultimately reduce your carbon footprint substantially. This also reduces high production downtimes often associated with the purchase and installation of a new machine.

The mid-speed version of the PA15 requires 1.2 kW per operating hour. In concrete terms, this means, with a performance of 6 layers per minute, up to 85% less energy than comparable market solutions.

An additional benefit of the PA15 is its compact design, which does not require additional floor space with a later increase in performance.

Gentle on products

In order to save material, more and more packaging consists of thinner and thinner films - gentle handling of the products is becoming increasingly important. With its patented driven placement belt and gentle compression, the PA15 innovatively “conveys” products instead of pushing them. The compression secures the products during the placement process while at the same time closing small gaps in the layer configuration and thereby creating stability. The flush arrangement of the products increases the process reliability of the pallet and so reduces the likelihood of downtimes.

Results

Low energy consumption is no coincidence - it is designed intelligence.

For example, the precise attachment of counterweights compensates very effectively for the inertia of the lifting belt and the compression unit. This made it possible to use significantly smaller motors for the hoist.

In addition, during downward movement, the generated energy is recovered in the system and absorbed by the internal buffer capacitors of the motor control and power supply.

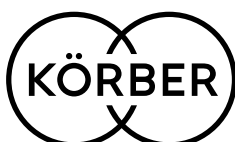
With the new PA15, you have a solution that is simple, flexible, energy-efficient, and sustainable - even in the future - and adaptable to your particular circumstances and goals.

“In terms of social and ecological responsibility, sustainable action is the foundation of our corporate development and anchored in our business strategy. Our products are developed and manufactured by employees who are respected and highly valued. We live sustainability and consider this to be an elementary part of meaningful action in today’s world.”

Enrico Pes

CEO

Körber Supply Chain Automation Eisenberg



Körber Supply Chain
koerber-supplychain.com

Copyright © 2021 Körber AG or its affiliates.
All rights reserved.