

-ARCO

SOLUTIONS FOR

**SUPPLY CHAIN &
INTERNAL LOGISTICS**

*Material handling equipment
Warehouse automation*

ARCO is a specialist in turnkey solutions that boost productivity and cost-efficiency. We are able to deliver high-quality, customer-specific solutions. When our customers face a challenge, we seek collaboration and work to achieve reliable, cost-efficient solutions.

ARCO develops customized warehouse automation and material-handling installations for companies in night distribution, e-commerce, and parcel & postal. ARCO maintains high standards for quality and

efficiency. Continuity, flexibility, and productivity are factors that are improved by ARCO solutions. Installations are made more reliable, more efficient, and more effective.

ARCO is a system integrator. Because we are not tied to a specific brand or supplier, we are free to choose from the best brands in terms of technology. This freedom puts us in a position to respond quickly to anticipated technical developments. This ensures the best solution for your application.

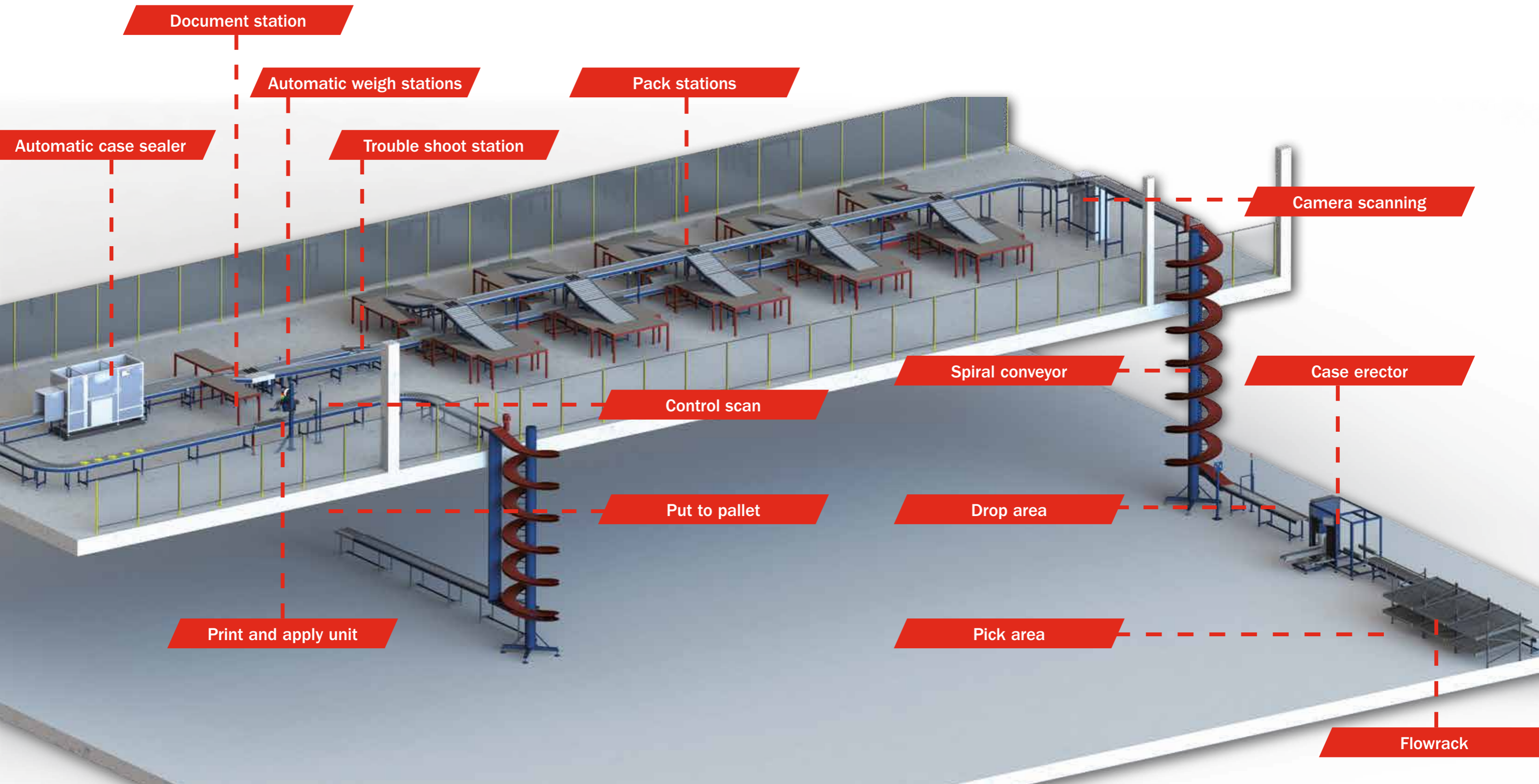
Using ARCO products, our customers are able to sort and convey packages faultlessly and undamaged. ARCO develops, designs, and installs different machines for inbound, warehousing, and outbound processes.

We optimize your logistic processes and make sure your installation is cost reductive, more efficient, and more effective. In addition, we minimize waste and develop fully-automatic waste streams. We offer smaller, standard solutions and also handle large turnkey projects that are entirely custom-made to meet the customer's needs.

ARCO also provides service and maintenance on all installations. For breakdown services, our mechanics are at your disposal 24 hours a day, seven days a week.



about ARCO



turn-key solution

Roller conveyors

Roller conveyors can form part of the complete process for handling incoming and outgoing goods. Engineers at ARCO develop the most efficient and effective solution for your internal transport needs. Our specialists focus on building systems that are reliable and flexible and also boost productivity. ARCO uses modular systems, which means that elements can be added to the process at any time. Roller conveyor systems can be developed for any type of crate, box, or pallet. Installation can be produced in all RAL colours and in stainless steel, and are

available for quick delivery. When there is a need to cover longer distances, transport carts – also known as shuttles – can be used. Roller conveyors can be equipped with intelligent solutions for diverting, merging, and transferring boxes. ARCO has an extensive roller conveyor product range:

- Gravity roller conveyors
- Powered roller conveyors
- Accumulation roller conveyors
- Flexible roller conveyors (for lorry loading and unloading)

Conveyor belts (incline, decline)

Choosing the right solution for transportation is an extremely important decision. The choice depends on various criteria, such as the required speed, product characteristics, and the available space. Different possibilities for transportation are:

- Roller conveyors
- Belt conveyors
- Chain conveyors

The specialists at ARCO would be happy to advise you on which conveyor solution best fits your particular situation.

Chain conveyors

Chain conveyors are used in various industries and feature the best technology for precise product placement. ARCO delivers chain conveyors characterized by durability and high levels of flexibility.





Vertical conveyors

A variety of solutions can be utilized for the vertical transportation of boxes, crates, or pallets (for example between the ground floor and the mezzanine). The simplest solution is an incline or decline conveyor belt. This solution requires a large amount of floor space.

Spiral conveyors

Spiral conveyors are mostly used for the vertical transport of boxes or crates, both upwards and downwards. A spiral conveyor is used when the gradient is too steep for a conveyor belt and when a lift would not be able to handle the required capacity. Spiral conveyors are equipped with rollers on the inside, and the roller conveyor can be either self-driven or operate using the force of gravity. Spiral conveyors are safe and offer a large capacity.

Lifts

Lifts (also known as elevators) are used for the vertical transportation of boxes, crates, and pallets. A lift is used when there is insufficient space for a spiral conveyor or a decline/incline conveyor belt. In addition, lifts can be programmed to transport boxes between more than two different levels.



vertical conveyors

High speed sorting

Large mail-order companies sort and ship millions of packages daily. ARCO builds complete material handling installations that fully automatically sort packages, boxes, envelopes, crates, and bags on sorting lines with many hundreds of discharge points.

Speed is an important criterion for many mail-order companies. With ARCO systems, all incoming packages are sorted in no time and the courier can quickly be on their way.

Choosing the right sorting solution is an extremely important decision. The choice depends on various criteria, such as the required speed, product characteristics, and the available space. The specialists at ARCO would be happy to advise you on which sorting solution best fits your particular situation.

Different sorting solutions

Crossbelt sorter: 12.000 packages per hour
Zipp sorter: 5.000 packages per hour
String sorter: 4.000 packages per hour
Pop-up sorter: 3.500 packages per hour
Push sorter: 1.600 packages per hour
Transfer sorter: 1.200 packages per hour

Custom-made

Custom-made sorting solutions are designed entirely to meet the customer's needs. A project team ensures that the best possible solution is developed based on the customer's wishes, the product characteristics, and the required capacity.



Barcode, QR code, and photo scanning

The automatic application of a barcode and/or shipping label to products makes it possible to register and track products and to distribute and store them entirely automatically. Because less manpower is required for tasks such as folding, taping, and labelling, installations can be run with significantly fewer FTEs. ARCO provides systems with high-end scanning equipment for optimized performance.

Print and apply units

To track orders through your warehouse, every box, envelop, or bag requires a unique code or label. Applying labels on boxes is a fully automated process. ARCO delivers hardware and software for coding, labelling, and scanning, applicable to your warehouse management systems. Once incoming products have been labelled and coded, they are ready to enter your warehouse.

Volume measurement

Volume measurement takes place in the final phase of the packing process after the box has been closed and the label has been applied. Based on the volume measurement and the dimensions of the box, the system automatically chooses the optimum pallet, van, or lorry. Volume measurement prevents unnecessary air travel.

Weighing solutions

Weighing is carried out to check whether the actual weight of a packed box matches the weight that it should have. Any differences between the actual and planned weights probably mean that there is something wrong with the package. This can then be investigated further. ARCO delivers state-of-the-art weighing solutions.



equipment integration

Pick-to-light, Put-to-light, Product-to-picker

Order picking is a critical success factor in warehouse automation. The pick-to-light system is an example of an intelligent automated solution for achieving flawless and efficient order picking. Through the use of barcode scanning and pick-to-light displays, order pickers can see the quantity and the location to pick at a glance. Orders then move via conveyors to the next step in the process. The system is ideal for companies in e-commerce and is easy to use. The pick-to-light system reduces costs and picking failures, and increases capacity and efficiency.

WMS / WCS integration

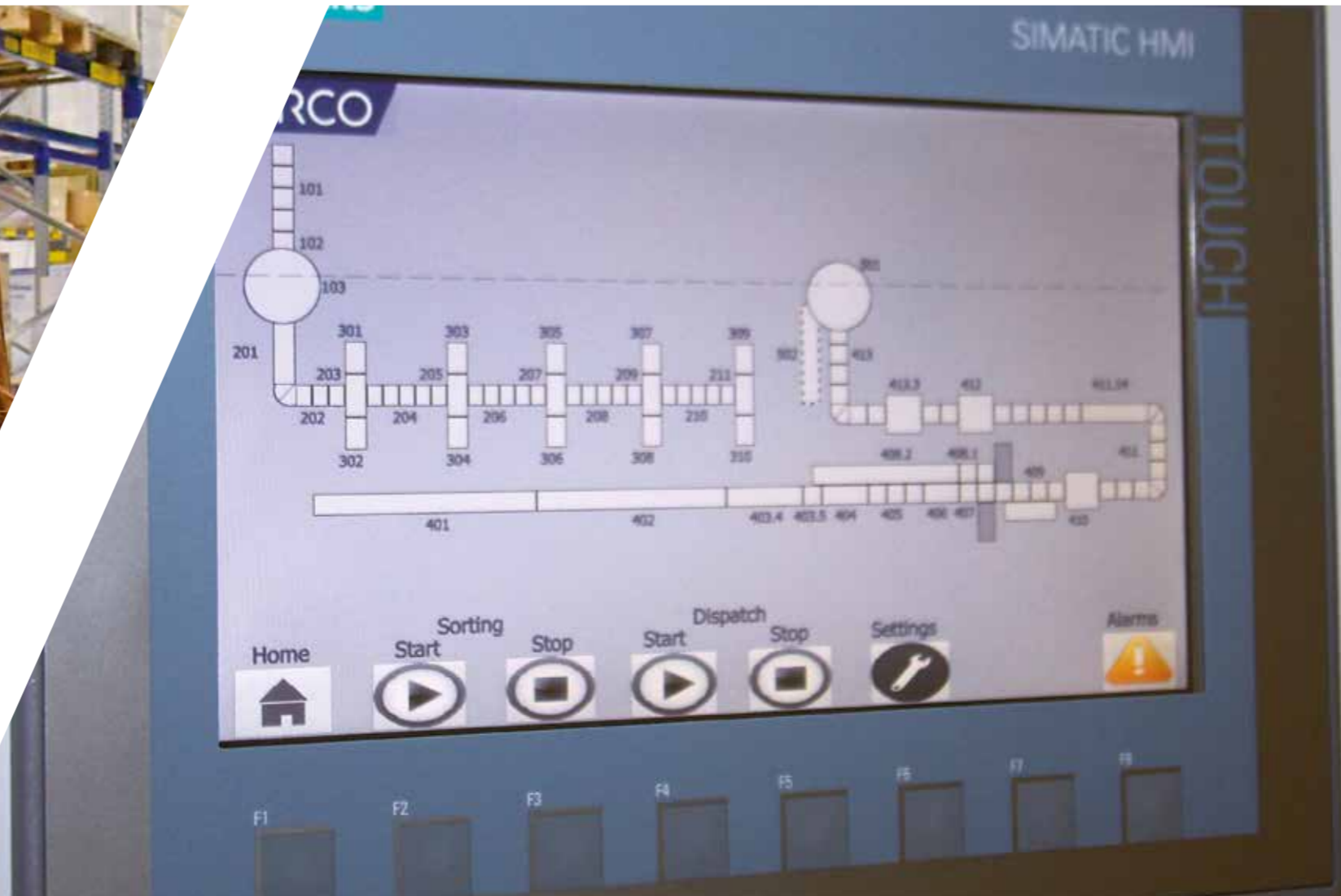
Business process automation is a combination of reliable mechanical installations and intelligent software. For smooth, trouble-free processing operations, it is essential that these two elements work well together. Good data analysis makes it possible to optimize the installation, as a result of which productivity rises, costs drop, and the quality of your product improves. ARCO software engineers ensure full WMS/WCS integration, allowing you to manage your production site from a single point. Machine data, productivity, track and trace; you

manage the complete supply chain, independently and from one single point.

ARCO can also provide specials such as 'Bay-watch'/supervision towers, step over, tillgates and mezzanine floors.

Service Level Agreements

ARCO offers the option of establishing a service level agreement (SLA), fully relieving the client of responsibility for maintenance of the installation. A maintenance plan and semi-annual inspection by a specialist technician ensure that faults as well as wear and tear are detected at an early stage. ARCO guarantees an up-time of 96% of the operational hours and is available for troubleshooting and repair 24 hours a day, seven days a week. If a problem cannot be corrected remotely, a technician will be sent to resolve the problem on-site.





Crate-, box-, pallethandling

ARCO has a special business unit for crate, box, and pallet handling. ARCO's engineers are specialized in the development and construction of elements such as crate, box, and pallet lifts, stackers, palletizers, turntables, and pallet splitters. We also develop solutions for fully-automatic feeding, stacking, unstacking, loading, and disposal of crates, boxes, and pallets.

Palletizing and robotic palletizing

ARCO is specialized in developing fully automated palletizing solutions. Palletizers are made of steel or stainless steel and process pallets of various sizes. Robotic palletizing is a modern form of palletizing and offers great capacity. One of the biggest benefits is that a robot palletizer can handle all manner of items, with different shapes and sizes, thanks to the specially-developed robot head.

Box-, crate stacker/destacker

A stacker is used for the automatic stacking of crates and/or cases, for example before or after a production process or during the washing of the crates. ARCO builds crate equipment that complies with the most stringent regulations and that are made of steel or stainless steel. Crate stackers are available for a whole range of crate sizes, from large to small. In most cases, a stacker is installed in combination with a destacker for the destacking of crates.

Pallet stacker/destacker

A pallet stacker is used for the automatic stacking of wooden and/or plastic pallets, for example before or after a production process or during the washing and storage of pallets. The system easily copes with various sizes. ARCO's systems are able to process Europallets and block pallets in both plastic and wooden versions.



Case sealers

Case sealers are used for fully automated box closing. Depending on the number of boxes to be processed, the case sealer can save labour amounting to a number of FTEs. Case sealers are often combined with case erectors.

Case erectors

Case erectors are used for fully automated box folding. Depending on the number of boxes to be processed, the case erector can save labour amounting to a number of FTEs. Case erectors are often combined with case sealers for fully-automated box closing.

Wrappers

Wrappers are used for the tertiary packaging (transport packing) and help to prevent loads from sliding off the pallets during transportation. ARCO can integrate fully-automated Wrappers at the end of a production line.

Turntables

Turntables are used to negotiate curves or to guide pallets/boxes from one processing line to another. When a pallet/box reaches the turntable, the turntable rotates 90 degrees. The pallet is then transported by means of power-driven rollers to the relevant route. Pallet turntables are available in steel and stainless steel. ARCO produces decks for both wooden and plastic pallets in various sizes. Turntables are available for use with both belt and roller conveyors.



case packing and pallet handling



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