



Successful Logistics Concept

Automated Tote System (ATS)

Fully automated picking
of totes and beverage crates

Be innovative • Be committed • Be successful



www.witron.com

ATS

ATS Principle

With ATS, the entire material flow is significantly simplified. Firstly, a huge variety of products such as fruit and vegetables, meat or fish items are delivered to the distribution center in totes already packed by the supplier in stacks on single SKU pallets.

ATS-Function

With ATS (Automated Tote System), WITRON has launched a new, fully automated tote picking system on the market.

This patent-pending ATS concept enables the fully automated generation of dispatch units, consisting of totes and/or beverage crates, which have already been filled with goods from the inhouse production department or by the supplier.

These dispatch units are collected in the ATS without any staff deployment or ID entry, buffered, picked, stacked onto a dispatch unit in a customized and/or store-friendly manner and staged for outbound delivery.

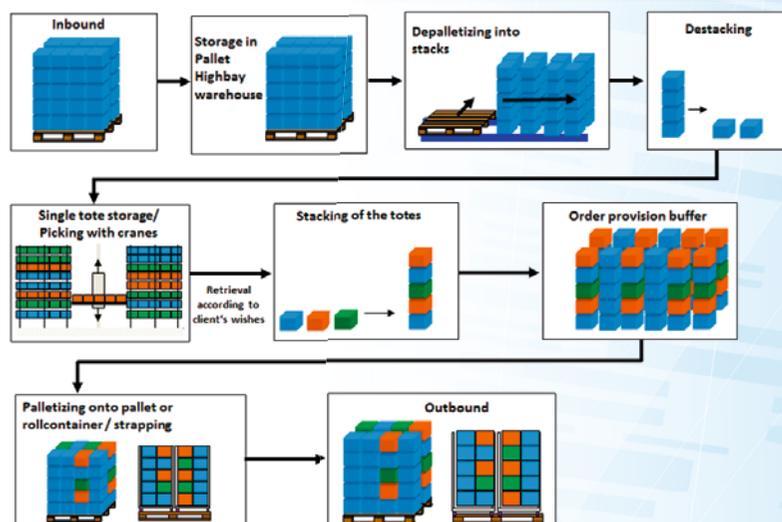
These applications are most commonly found in the fresh and temperature-controlled areas of distribution centers in food retail. The solution can also be used in beverage crate picking with great cost efficiency.

In addition, the complete avoidance of strength-sapping lifting and carrying of heavy totes means that ATS is also setting new standards in ergonomics.

The new system completes the WITRON portfolio of highly efficient modular warehousing and order picking solutions for the retail and wholesale trade and is the ideal complement to the automated picking systems OPM (Order Picking Machinery) for case picking and DPS Dynamic Picking System) for piece picking.

There, a single identification process takes place centrally. Follow-up in the system is guaranteed by indirect target tracking, thereby completely disposing of the need for time-consuming physical labeling of individual totes with barcode or other identification. Thanks to the flexibility of the system, the use of whole or half totes, each with different heights, presents no problems. Once the stacks of totes have been slid off the inbound pallet and then separated, highly dynamic stacker cranes known as Picking Mini Loads (PMLs) place the totes in the AS/RS (automated storage and retrieval system) for intermediate buffering.

To increase system output, several totes can be stored and transported simultaneously in stacks. The PMLs also provide for store-friendly retrieval of the totes to generate dispatch pallets, with each PML able to accept up to four totes simultaneously per trip. The removed totes are then transported to a stacking device, where all the totes belonging to one client order are stacked mechanically on top of one another and pushed onto a pallet using an efficient pallet loading operation. Specific requirements, such as the unloading sequence in the store, maximum fill level or loading height can be parameterized flexibly according to the client's wishes. Even the generation of double-deck (sandwich) pallets is provided for a way of increasing the shipping volume. The final step is the transportation of the securely stretch-wrapped order pallets to the dispatch area or the intermediate storage area in a pallet warehouse, always taking into account the consolidation of all the order pallets according to client requirements and shipping routes.



Be innovative • Be committed • Be successful

www.witron.com

ATS Principle





Benefits of the ATS solution

- ▶ High cost-efficiency due to a fully automated process chain throughout the system, no longer any need for staff-intensive repacking and order picking
- ▶ 100% zero-error picking due to order generation in the AS/RS
- ▶ Capable of handling and synchronizing extensive tote flows due to a modular system structure and central supply and removal of totes at the same time
- ▶ Generation of store-friendly dispatch units according to client-specific requirements
- ▶ Use of very short transport routes without error-prone parts in the material flow like conveyor junctions and merge points
- ▶ Central identification at receiving
- ▶ No physical labeling or checking of transport units required anymore, since indirect target tracking can be used thanks to branch-free transport and short conveyor lines
- ▶ Low energy and construction costs due to modular, compact design
- ▶ Exclusive use of standardized and highly available IT, control and mechanical components



About WITRON:

WITRON Logistik + Informatik GmbH, established in 1971 (headquarters Parkstein, Bavaria, Germany), designs, realizes, and operates customized logistics and material flow systems that generate sustainable competitive advantages for its clients. WITRON has all the decisive key elements of a successful project under one roof: logistics design, information and control technology, mechanics design and production, as well as functional responsibility as general contractor for logistics.

The WITRON Corporate Group has 5,100 employees worldwide. WITRON's annual revenue in 2021 amounted to 1,05 billion Euros. Other WITRON branches are located in Rimpfing (Germany), Arlington Heights, Illinois (USA), Toronto (Canada), Venray (The Netherlands), Stoke-on-Trent (UK), Madrid (Spain), Strasbourg (France), Singapore and Sydney (Australia).

WITRON
Logistik + Informatik GmbH
Neustädter Str. 21
92711 Parkstein
info@witron.de



Be innovative • Be committed • Be successful

www.witron.com