SSI Carrier

The highly-dynamic pouch sorter system for e-commerce and omni-channel distribution

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SSI SCHÄFER

SSI SCHAEFER – Your Specialist in Intralogistics Systems

You cannot buy future-proof logistics solutions off the rack. They must fit smoothly into your individual processes, be continuously extendable and flexibly adaptable to new conditions.

This is what you need specialists for. Experts who do not look at individual component performance but on entire systems. At SSI SCHAEFER, this integral thinking has been the basis of our work for many decades. It is supported by our wide product and solution range, which we continuously extend with innovations. Our target is to develop the best solution for your needs.

Ideal answers to current challenges
A practical solution for customers, a complex task for trade companies – that is the new reality – especially of e-commerce:

- Multi-channel distribution from one warehouse
- Fast change in the product line
- High increase in returns handling
- Fast availability of goods (same-day delivery)

The solution of our specialists:
A modular system, ideal for e-commerce, but with many other application options. This allows to achieve a major cost reduction in fulfilling very small orders. At the same time, it creates the possibility to process a continuously changing mixture of both larger retail and smaller direct orders in any combination with a high level of efficiency. The SSI Carrier is the centerpiece of the solution.

The modular system of SSI SCHAEFER and the included SSI Carrier provide you with a system solution for a dynamic and efficient storage and sorting system with special focus on fashion and e-commerce.

At a glance

- **Overhead conveying system with RFID enabled carriers:**
  Space-saving high-performance solution with maximum process safety thanks to RFID.

- **Handling of individual items instead of full cartons:**
  All items are inserted in separate pouches and handled individually. This allows the system to convey, buffer and sequence them as required.

- **Multi-order picking**
  One of the many advantages of multi-order picking is the fact that less single items have to be picked and therefore less personnel is required.

- **Sequencing of picked items:**
  Used for optimizing packing or loading. Ensures shop-friendly delivery.
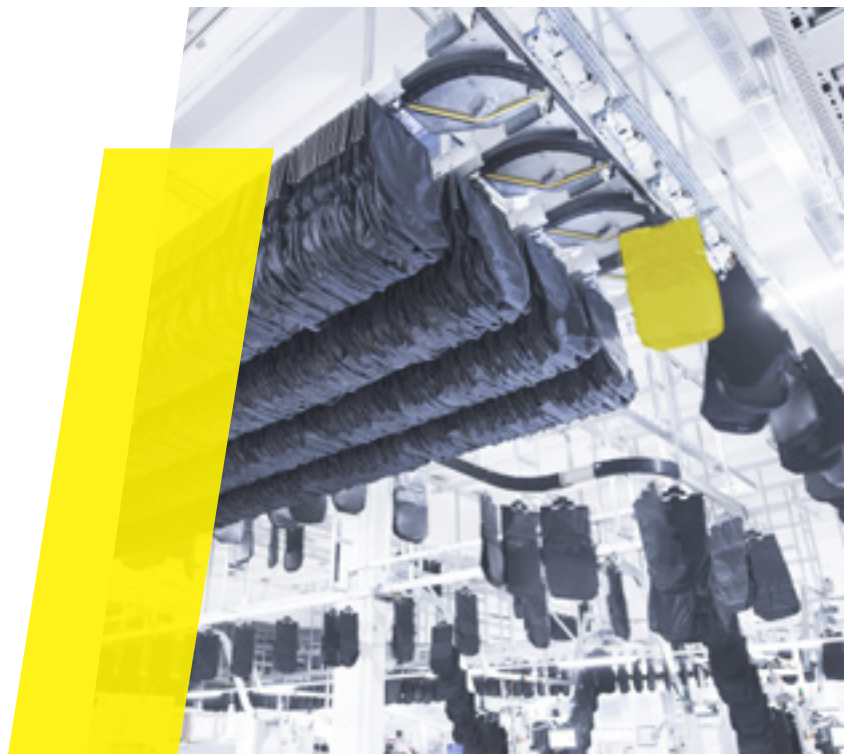
SSI Carrier:
The Intelligent Way From
Loading to Packing

The SSI Carrier is a modularly designed pouch conveyor used for hanging transport of different items like shoes, electrical devices, toys, household appliances, cosmetics and garments.

The core of the system is the primary load carrier – the so-called carrier. The roller adapter running on the inside receives, transports and identifies different secondary load carriers such as hangers or pouches, depending on requirements.

The load carriers are equipped with RFID transponders. The resulting accurate and error-free handling ensures maximum reliability. The system stands out by high performance, universal applicability for weights of up to 2.5 kg and low-maintenance operation.

One single load carrier for accumulating, buffering, distributing and sorting

The innovative modular SSI Carrier System impresses particularly by its flexibility in use.
Accumulating, buffering, distributing and sorting are all facilitated with one single load carrier type.

Dynamic buffer
Returns are directly introduced from the returns area into the dynamic buffer where they become immediately available for new order picking. Cross Docking means that the goods are stored directly in the dynamic buffer. The pouches stored there are used with priority for new orders and sent to the batch buffer. This represents an optimal solution for just-in-time or same-day delivery.

Matrix sorter
The matrix sorter is used for sorting load carriers in order to create correctly sequenced customer orders from batches. For this purpose, entire lines are retrieved from the batch buffer and then undergo one or several sorting steps. After that the correctly sequenced orders can be repacked at the packing stations or processed further.

At a glance

- Accuracy and error prevention of the RFID technology ensure high process stability of the system

- Optimized sorting process

- Fast re-availability of returns

- Parallel processing of multiple sales channels

- User-friendliness thanks to simple use

- Additional energy efficiency, low-maintenance and durability by compressed air-free design

- Everything from one source: production, planning, steel structure, IT, installation, start-up, service

Intelligent, Modular and Easily Scalable

The modular SSI Carrier System allows creating individual solutions for automatic sequencing of hanging transport units. Thanks to the standardization of components, extensions can be easily implemented at any time.

The central elements of the SSI Carrier System:

Carrier
Roller adapter which can take over, safely transport and identify different load carriers. Extremely smooth operation, stability and long life span. Increased storage density thanks to reduced size of carrier.

Circulating conveyor
Transport device used for horizontal and vertical conveyor bends. The total conveyor length is almost unlimited, no additional tensioning elements are needed. Small installation dimensions, low noise, high fail-safety thanks to redundant drive.

Accumulation conveyor
Used for conveying, accumulating, separating, sorting and buffering of load carriers on horizontal conveyors. Small installation dimensions, most delicate product handling.

Switch
Diverter element, e.g. used as link between circulating conveyor and accumulation conveyor within storage loops or the matrix sorter and for in-feed and take-away to/from work stations. No independent drive required, thus energy efficient.

Intelligent control

The sophisticated, user-friendly software and control system by SSI SCHAEFER perfects this overhead conveying system. Cutting-edge visualization technology and optimum interfaces to the customer system ensure that it can be smoothly integrated into almost any type of warehouse. All processes within the goods-in area are administered by the customer's host computer. The processes at the loading stations are controlled by the SSI SCHAEFER software.

During buffering, the stock available in the SSI Carrier System is linked with the inventory order of the host system. During sequencing, the software carries out the picking orders of the host system and performs an internal optimization. Starting from the unloading stations, the host system is responsible for controlling the goods-out process.

At a glance: The SSI Carrier System

- High performance of up to 10,000 parts per hour on one conveyor

- Permanently controlled transport of load carriers

- One single drive system with five different functions: conveying, accumulating, distributing, buffering, sorting

- Simple spare parts management due to modular design

- Optimal use of space with a compact and adapted steel structure

- Long life span thanks to low maintenance conveying system

- Extremely high sorting accuracy and process safety

- Optimum packing density defined by loading

- Integrated, automatic empty adapter handling

- Transport of hangers and pouches possible

- Sophisticated and user-friendly software for controlling and checking all functions

Six Reasons
for Choosing
SSI SCHAEFER

■ Stability
As a financially independent family business, SSI SCHAEFER is committed to long-term solutions. You can trust that our team of experts will be there for you today, tomorrow and in years to come.

■ Efficiency
SSI SCHAEFER solutions are scalable and able to grow with your business. You can always upgrade or retrofit.

■ Quality
As a systems specialist and original equipment manufacturer, SSI SCHAEFER provides tailor-made and high-quality solutions from a single source, specifically designed to meet your challenges.

■ Reliability
Thanks to our worldwide Customer Service & Support network, SSI SCHAEFER ensures smooth operation of your system, both during and after installation.

■ Know-how
SSI SCHAEFER solutions are always up-to-date with the latest technological standards and can be easily integrated into an existing (IT) landscape.

■ Internationality
As a global organization, SSI SCHAEFER has local offices worldwide. With over 70 operative subsidiaries, our team of experts speak your language.

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