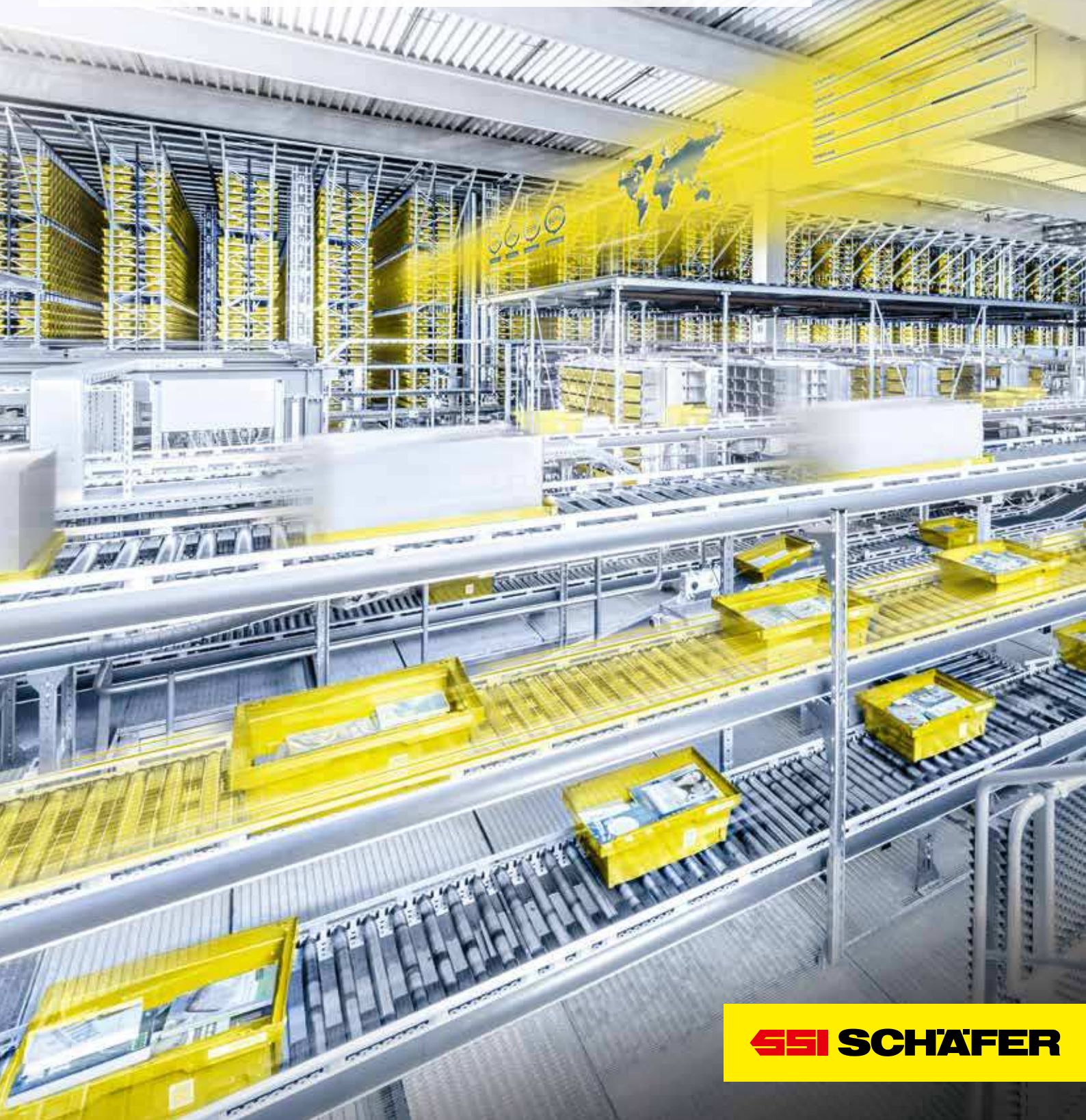


SMART CONVEYORS

Modular Conveying Solutions for Any Load Carrier
to Optimize Material Flow

ssi-schaefer.com



SSI SCHAEFER

YOUR STRONG PARTNER FOR LOGISTICS

Future-proof logistics solutions must fit seamlessly into your processes, be infinitely expandable, and readily adaptable. Our broad range of products and solutions is the foundation for individually designed and customized solutions.

Efficient Shipping and Conveying

Deciding factors in finding the ideal transport solution are grouped items, required throughput, and desired load carriers. They set the parameters for the required system components.

From transporting goods with conveying systems for hanging, small, or large load carriers to using automated guided vehicle systems, we offer a wide range of products. Combined with our conveyor system connections, we offer a complete package for scalable solutions.

Exceptional quality and compatibility of our components guarantee that the entire system runs smoothly, ensuring optimum security of your investment.

FEATURES & BENEFITS

- Increased profitability and efficiency of the internal material flow
- Wide range of solutions for any load carrier
- Complete solutions from a single source
- Extensive service ensuring a long system life-cycle
- Modular, scalable transport solutions for a variety of requirements
- Long-term productivity thanks to our reliable, high-quality components



Complete Solutions from a Single Source

As a global general contractor, SSI SCHAEFER offers complete logistics solutions, including tailor-made conveying systems, flexible warehouse, picking, and handling systems, as well as customized service and maintenance packages.

WAMAS® With our in-house developed WAMAS® logistics software, we combine intralogistics components to create an intelligent overall system. Clear visualizations and comprehensive tools manage processes, resources, and stock levels, ensuring efficient warehouse operation.



1 OVERHEAD CONVEYING SYSTEMS



2 CONVEYING SYSTEMS FOR LARGE LOAD CARRIERS



3 CONVEYING SYSTEMS FOR SMALL LOAD CARRIERS



4 AUTOMATED GUIDED VEHICLES



OVERHEAD CONVEYING SYSTEMS FOR FAST AND SPACE-SAVING TRANSPORT

Many goods, such as clothing, cosmetics, home appliances, or electrical devices are most efficiently transported in a hanging position. Our wide portfolio of SSI Overhead Conveyors can be used in various industries to cover a range of applications customized to fit your needs.

FEATURES & BENEFITS

- Fast and easy assembly with light-weight, standardized conveying system elements
- Excellent space utilization by taking advantage of vertical height
- Ergonomic work stations for feeding and packing areas
- Standard transfer points to connected conveyor systems allow for easy linking with work stations
- Suitable for storage, sorting, and transport
- High performance rates and efficiency

The SSI Carrier Can Be Used as Highly Dynamic Pouch Sorter

The modular, scalable SSI Carrier system for e-commerce and omni-channel distribution is impressively versatile. A single load carrier can transport, accumulate, buffer, sort and sequence goods. The SSI Carrier features high throughput, low maintenance and universal applicability for weights of up to 2.5 kg. The centerpiece is an internal roller adapter, which receives pouches or hangers, transports them and can be reliably identified via RFID chip.

YOU BENEFIT FROM

- ✓ Single part access ensures fast sorting and efficient handling of returns
- ✓ Parallel processing of multiple distribution channels
- ✓ Gentle product transport and material buffering on motorized accumulation conveyors
- ✓ Horizontal layout ensures excellent utilization of space
- ✓ Superb sorting accuracy and process safety
- ✓ User-friendliness thanks to simple user interface



The Fulfilment Factory® Ensures Efficient Distribution for E-commerce

The modern overhead conveying system with RFID-enabled carriers serves as the basis for the Fulfilment Factory concept. The innovative solution from

SSI SCHAEFER is for e-commerce applications, which require split case order picking. Users benefit from significant cost reductions when fulfilling small orders.



The SSI Single Is an Allround Genius

The SSI Single is used to transport, sort, and store hanging goods on horizontal and multi-platform conveyor lines. Depending on the requirements, various conveyor types and functional units can be used and combined interchangeably.

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SCALABLE AND MODULAR CONVEYING SYSTEMS FOR LARGE LOAD CARRIERS

SSI SCHAEFER offers tailor-made solutions for internal material transport of a wide range of large load carriers. The modular design is fully customizable to your requirements.

With the SSI Heavy Load Conveyors we have just the right transport solution for any application, whether for pallets, roller containers, or any other large load carriers. Connect

the various areas within your warehouse and benefit from optimized material flows and overall performance.

FEATURES & BENEFITS

- High throughput and long service life
- Optimized workflows due to our ergonomics@work!® concept
- Modular and scalable conveyor technology
- Long-term supply of spare parts and extensive consultation
- State-of-the-art technology and reliable components
- Consistently high quality thanks to our in-house production



Pallet Conveying System

Our pallet conveying system offers an excellent option for cost-effective processes. The modular design, factory-assembled components, and a frequency-controlled drive system allow a flexible internal transport and ensure optimized material flow between production, warehouse, picking, and shipping.

In addition, our plastic belt technology enables material transport with and without load carriers and allows the transport of materials up to 1.6 meters wide. Return of empty pallets is eliminated, increasing your performance.



Roller Container Conveying System

Our roller container conveying system allows you to efficiently integrate roll carriers into your system. The conveyor system can optionally be equipped with pallets for mixed transport. This innovative system with its ability to automatically load material directly onto roll carriers eliminates an extra operations process.



PALLET CONVEYING SYSTEMS PROVIDE EFFICIENCY FOR HEAVY MATERIALS

Our pallet conveying system components are known for flexibility, easy assembly, and low maintenance requirements.

Built-in modularity, special support profiles for chain and roller conveyors driven by moving conveyor elements, belt and telescope conveyors - these system components, coupled with an extensive range of accessories offer limitless possibilities for customized conveying system design. Our

conveying systems are designed for pallets with an individual weight of up to 1,500 kilograms, ensuring efficient transport of pallet cages and a variety of pallets such as Euro pallets, DIN, industrial, chep, semi- and special pallets.

YOU BENEFIT FROM

- ✓ Modular support profiles for chain and roller conveyors
- ✓ Effortless adaptation to a wide range of load carriers
- ✓ Customizable chain and roller conveyor lengths
- ✓ Conveyor system elements are delivered pre-installed
- ✓ Low-maintenance lifting stations and continuous vertical conveyors
- ✓ Easy and quick changing of carrier rollers thanks to tangential drive

Efficient in Freezing Conditions at La Lorraine

SSI SCHAEFER set up fully automatic logistics centers and equipped them with state-of-the-art technology for the Belgian La Lorraine Bakery Group at its locations in Poland and the Czech Republic. The technology included 3- and 5-aisle fully automatic deep-freeze high-bay warehouse with a high-volume pallet handling capacity. Automatic conveying systems combined with energy and resource-saving components significantly reduced the overall operating costs of the logistics centers.



Rail-Guided Vehicle Systems and Electric Monorail Systems Serve as Flexible Connections for Your Pallets

Highly flexible intralogistics are required to ensure the needs-based supply of raw materials, auxiliaries, and resources to production lines as well as removal of finished goods from the lines. With its wide spectrum of connecting

conveyor systems, including rail-guided vehicle systems and electrical monorail systems, SSI SCHAEFER is able to offer state-of-the-art technological solutions connected to pallet conveying systems.

Rail-Guided Vehicle Systems ensure Space-saving Warehouse Routing

Rail-guided vehicle systems consist of a fully-automated floor conveyor and rail-guided vehicles. They retrieve the pallets and transport them at a speed of 90 m/min. Cross-traffic is eliminated because the same system components can be used for storing and retrieving. The result ends in an efficient material flow in a small space.



Vinamilk Receives First Rail-Guided Vehicle in South East Asia

Vinamilk, a leading dairy company in Vietnam, was able to build the first nationally modern temperature-controlled logistics center with the help of SSI SCHAEFER as general contractor. The fully-automatic, 370 m long system loop consists of 15 rail-guided vehicles located in the 8-aisle high-bay warehouse. It is directly connected to production and feeds pallets from production to all required areas from the logistics center to shipping areas.



Electric Monorail Systems Facilitate a Flexible Material Flow

Electric monorail systems are rail-mounted transport systems with individually driven and controlled vehicles that provide efficient material flow while requiring only minimal space. The vehicles can provide various areas with pallets - quickly, fully automatically, and reliably. Thanks to the modular design, electric monorail systems can be easily adjusted to any material flow.



3



CUSTOMIZED AND ERGONOMIC CONVEYING SYSTEMS FOR SMALL LOAD CARRIERS

SSI SCHAEFER supplies everything you need for any small load carrier type, from load carriers to control systems and conveying systems. Our highly compatible components ensure seamless processes.

With our SSI Compact Load Conveyors we offer some of the world's largest lightweight conveying system modules with low maintenance and high throughput. Our range of

conveyor elements guarantee a customized solution for any application: from carton and bin conveying system to case conveyor technology and sorting systems.

FEATURES & BENEFITS

- Expandable, lightweight conveying system modules
- Reliable components ensure consistent productivity
- State-of-the-art technology guarantees high efficiency and throughput
- Low operating costs
- Suitable for low temperature environments to -30 °C
- Optimized workflows thanks to our ergonomics@work!® concept

ergonomics@work!®

Wherever people use our conveying systems we place high value on ergonomics. Work processes and environment must be individually adapted to each employee to lower their physical strain.

Special work stations, developed as part of SSI SCHAEFER's ergonomics@work!® program, significantly improve ergonomics at the workplace. For example, our multifunctional manual de-palletizing and palletizing work stations reduce strain, particularly with regard to tasks involving lifting, moving, and carrying.



Sorting Systems Accelerate the Material Flow by Automatic Sorting

Sorters speed up material flow and processes in all areas of the plant - whether in the warehouse or in the distribution center. SSI SCHAEFER offers a wide range of sorters and sorting systems for multiple applications.

From unit sorters for fully automatic sorting of lightweight and flat goods to parcel sorters for packages of up to 50 kg - we offer the best possible solution for your needs.



beeline
group

A Twin Sorter for Fast Picking at beeline

For the central logistics center of beeline, a supplier of fashion jewelry and accessories, SSI SCHAEFER implemented a system with two-step batch picking, an innovative twin sorter concept, and state-of-the-art automation. A Pick to Bucket system and sorter sort items at their destination and then directly transfer them to the shipping cartons. These service-based processes can pick up to 56,000 items per hour and order.

CARTON AND BIN CONVEYING SYSTEMS ENABLE A MODULAR SYSTEM DESIGN

From warehouse automation to production and machine integration – the SSI SCHAEFER carton and bin conveying systems cover a wide range of applications.

We provide conveyor modules for bins, cartons, trays, and products with a maximum load capacity of 50 kg. The functions range from conveying, sorting, diverting, storing, and accumulating. The mix-and-match conveyor modules ensure ultimate flexibility.

Our high-performance accumulation roller conveyor adds seamless accumulation of varying material lengths to our portfolio. It is used mainly at sorter in-feeds or in shipping.

YOU BENEFIT FROM

- ✓ Tried and true technology for highest availability
- ✓ Modular system in a standard design with standard dimensions
- ✓ Integrated cable channels
- ✓ Standard spare parts for powered roller, motorized roller, belt conveyor, and roller belt conveyors
- ✓ Low-noise operation
- ✓ For use in low temperature environments to -28 °C

State-Of-The-Art Media Logistics Center for KNV

SSI SCHAEFER implemented a central high-performance logistics center for Koch, Neff & Volkmar GmbH (KNV), the leading media wholesaler in Germany. The results show how high availability and redundant system design can be combined into an extremely compact design concept. A total of 21 km of carton and bin conveying systems combining semi- and fully-automatic components were installed within the entire distribution center. With more than 1 million stored items, around 75,000 packages leave the cargo center daily.

KNV • LOGISTIK



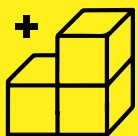


24/7 Distribution Center for Fashion Retailer LC Waikiki

LC Waikiki is the leading fashion distributor in Turkey, currently supplying more than 760 stores worldwide. The SSI SCHAEFER solution offers 100,000 storage spaces for double-deep storage. In addition to a dispatch buffer with Schaefer Carousel Systems and the WAMAS® logistics software, the solution includes a carton conveying system with deformation sensor for overseas cartons.

The Case Conveying System Offers of a Wide Range Applications

The SSI SCHAEFER case conveying system with its standard components is suitable to transport bins and cartons as well as products packed in shrink-wrap, such as assorted dry goods typically found in grocery stores. We offer components with different functions such as inserting, diverting, aligning, and separating. Depending on the specific processes and products, they can be combined to create an efficient conveying system and can also be connected to automated guided vehicle systems.



Maximum Design Freedom with Flexible Modules

Our modular and scalable conveying system solutions enable you to cost-effectively streamline your internal material flow. High-performance single components are developed into application-oriented solutions which are easily adaptable to varying material flows. Your benefit: minimum operational risk with maximum design freedom.

4

AUTOMATED GUIDED VEHICLES BRING YOUR WAREHOUSE IN MOTION

SSI SCHAEFER offers a wide range of products for intralogistics and production-related process automation and support using automated guided vehicle systems. The portfolio includes a wide range of innovative solutions for small load carriers (SSI Compact Load AGVs) and large load carriers (SSI Heavy Load AGVs) and guarantees reliable material flows around the clock.

FEATURES & BENEFITS

- Only limited infrastructural changes required
- Flexible and scalable automation of internal material flow
- Easy adjustment to dynamic market requirements
- Increased operational safety and improved work conditions

Flexible Material Transport of Small Load Carriers Thanks to SSI Compact Load AGVs

The compact class SSI Compact Load AGVs from SSI SCHAEFER is suitable for transporting small load carriers. Typically, vehicles like SALLY from DS AUTOMOTION or WEASEL® from SSI SCHAEFER are used for picking and production/assembly environments to make transport

more flexible. The transport system WEASEL® is designed for a variety of applications for reliable transport of bins, cartons, and hanging goods of up to 35 kg. It runs along an optical track, eliminating complicated installation processes.



C+C Krug: The Path to Automation

The plastic electroplating specialist C+C Krug GmbH took the path to semi-automation of logistics processes together with SSI SCHAEFER. C+C Krug opted for a solution consisting of three SSI LOGIMAT® storage lifts, a bin and carton conveying system, two automated guided vehicles (AGV) type WEASEL® and two transfer locations. The warehouse concept has been designed for expansion to be carried out over various construction stages. The WEASEL® connect the storage and the production area barrier-free and safe for persons. The use of surfaces and space remains flexible.

Transporting Large Load Carriers with AGVs – SSI Heavy Load AGVs

For large load carriers such as pallets, roller containers, mesh boxes or large plastic boxes, you can consider various automated guided vehicle systems with a forklift or different conveyor elements. The determination of the appropriate AGV solution accounts for a variety of framework conditions and factors.

With our strategic partner DS AUTOMOTION, we offer a broad portfolio of automated guided vehicles for large load carriers and cover typical market requirements. The range of services offered thanks to the collaboration between DS AUTOMOTION and SSI SCHAEFER will increase on account of another partnership with the specialist Rocla.













Framework conditions

- Load carrier
- Weight
- Transport task
- Warehouse environment

Solution expertise

- Lift Truck
- Platform AGV
- AGVs for heavy loads
- AGVs for the automation of assembly lines

Classification by function

	Low Lifter		Very-Narrow-Aisle (VNA)		Picking
	High Lifter		Platform		Multiple Pallet
	Reach Truck		Conveyor Deck		Heavy Duty
	Counterbalance		Lift & Carry		Assembly Line

Dynamic AGV Fleet for Longchamp

How to guarantee a fully automated material flow from the finished goods warehouse to picking without needing to install a static conveying system? SSI SCHAEFER developed an ideal solution for Longchamp, a manufacturer of leather products. Automated guided vehicles automatically take the pallets from the receiving warehouse and bring them to the specified warehouse locations in the picking area. In the process, they seamlessly integrate into a system consisting of racking systems, bin conveying systems, belt lifts, and pallet conveying systems. The SSI SCHAEFER WAMAS® logistics software ensures their smooth interaction.



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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