

CUSTOM FIT: SOLUTIONS FOR THE FASHION INDUSTRY

Maximum logistics expertise and high readiness for delivery with system solutions from a single source.

[ssi-schaefer.com](https://www.ssi-schaefer.com)



SSI SCHÄFER

THE APPROPRIATE COLLECTION FOR FASHION LOGISTICS



“SSI SCHAEFER proactively advanced our basic concept according to our spirit. The implemented solution increased our productivity by 15 %! The slim conveying system occupies 15 to 20 % less storage space than similar solutions by other providers. SSI SCHAEFER implemented the system faster than expected. All in all a flagship project”.

Danilo Georg,
Spokesman of the Managing Board,
Baur Fulfillment Solutions



Thanks to continuous stock availability and fast delivery, the fashion industry has experienced rapid growth in recent years. Trying on clothes in front of your mirror, returns at no charge and low prices due to hard competition have significantly increased the requirements towards the internal material flow for producers and manufacturers.

Especially when dealing with multiple sales channels, the complexity of logistics processes increases. Customers do not only expect low prices, but also the best service.

Intralogistics challenges:

Solutions that meet a variety of requirements are needed:

- Storage of a wide product range
- Fast delivery after receipt of order
- Efficient completion of daily and seasonal peaks
- Optimized return handling
- Efficient execution of very small orders
- Minimizing product touches
- Shop-friendly delivery
- Accurate IT systems

To meet these complex requirements, SSI SCHAEFER has developed a modular intralogistics system for the fashion industry. With SSI SCHAEFER by your side you will always

be prepared to meet and overcome both current and future intralogistics challenges.

SOLUTIONS FROM SSI SCHAEFER

- Overhead conveying technology with RFID enabled carriers
- Handling of individual items instead of whole cartons
- Automatic buffering and sequencing
- Innovative storage system
- Automated guided vehicles
- Intelligent conveying system
- Automated and manual picking systems
- WAMAS® and SAP Software solutions

SSI SCHAEFER – BECAUSE QUALITY NEVER GOES OUT OF FASHION

Future-proof logistics solutions need to seamlessly blend in with your individual processes. They must be infinitely variable and able to flexibly adapt to new framework conditions. You need specialists for this. You need experts who don't just focus on individual services, but on full solutions.

All-in-one solutions from a single source
Our wide range of products and services forms the basis of industry-specific solutions that we can tailor to your needs. With such a portfolio, our experts can provide bespoke solutions that cover all areas of your internal material flow. Our customers benefit from the fact that we make all of the SSI SCHAEFER Group's components ourselves. Having more than 10,500 employees globally makes us a strong and reliable partner.

At SSI SCHAEFER, holistic thinking has been the key to our success for many decades. As a global general contractor, we implement complete logistics systems. Our team of consultants provide comprehensive system planning and project management services, which are certified by the International Project Management Association (IPMA). This approach enables us to provide turn-key systems with tailored service and maintenance packages. Upon request, we can also plan and build your project with our in-house construction department.

Dedication and commitment
If you know anything about SSI SCHAEFER, you will be aware that we put our customers at the center of everything we do.

- This includes the obligation:
- ✓ to always provide the optimum solution
 - ✓ to always be there for our customers
 - ✓ to always keep our word

You can expect us to be fully dedicated to your concerns. Whether it be the devotion that our employees give to developing new solutions or the all round service we ensure during the life cycle of your systems, we will always be by your side, no matter where you are in the world. As a family company, we always think of the future and plan for the long term.

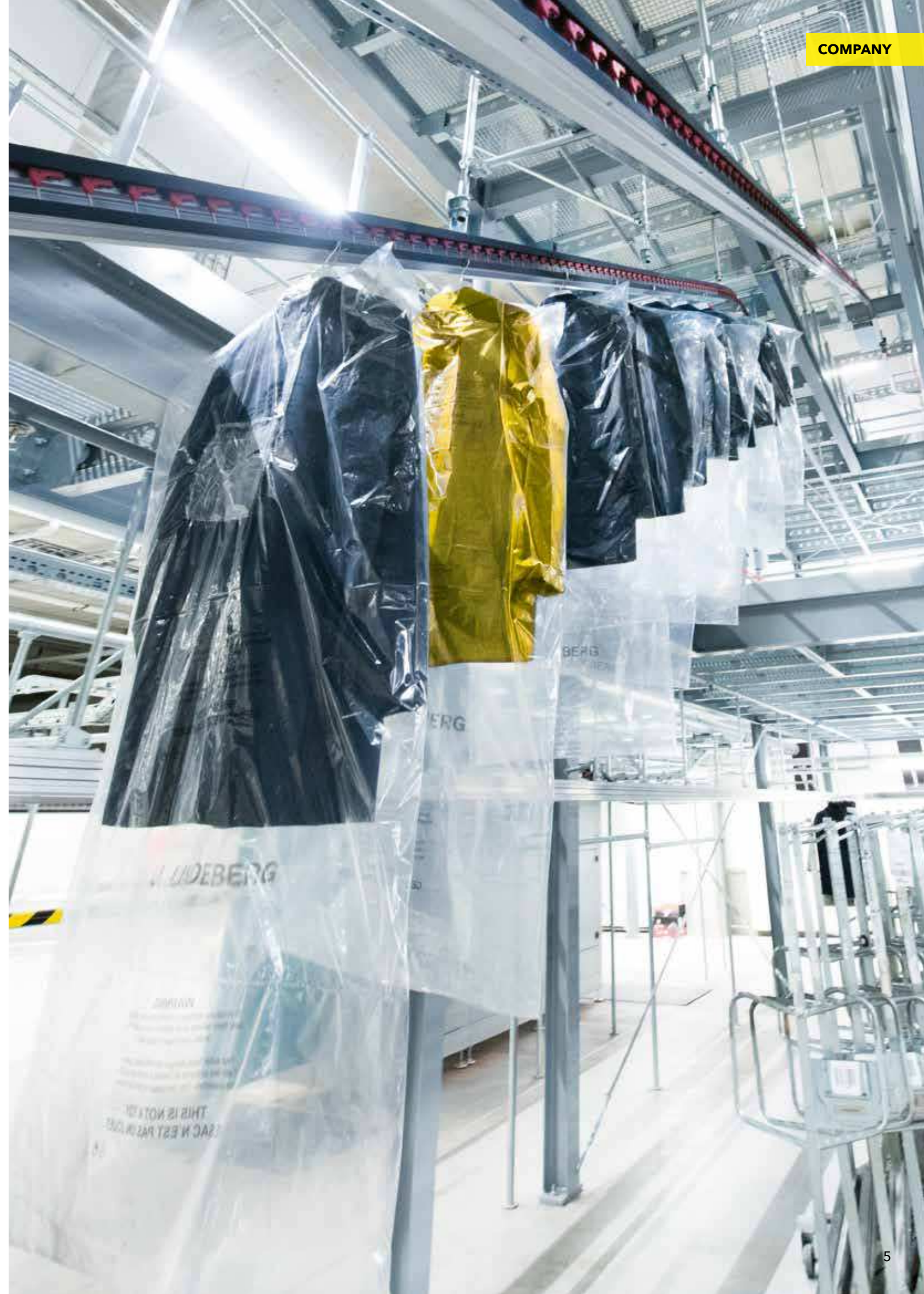
Specialists for the fashion industry



The changed market behavior of customers leads to an ever increasing individualization of intralogistics solutions, as well as demand for the best technologies and efficient processes. SSI SCHAEFER has succeeded in adapting to meet these specific challenges thanks to its specialization in the fashion industry.

Our specialist fashion team has vast experience working on projects with leading international fashion companies.

This results in customized solutions for all industry-specific challenges. We develop and implement modular and scalable intralogistics solutions for projects of all sizes. Our solutions are always designed to adapt seamlessly to your processes and interlink with each other if required.





Stockmann: 3D-MATRIX Solution® for flat goods

For the Finnish department store chain Stockmann, SSI SCHAEFER developed an overall solution which is designed for a performance of 55,000 order lines with 180,000 individual items per day. A pin conveyor automatically transports the individual items from the goods-in area to one of the three levels of the static warehouse area with a capacity of more than 350,000 garments. Picking is carried out in batches using RF terminals.

ADVANTAGES FOR STOCKMANN

- Efficiency: handling of different order types in one warehouse
- Reducing costs through automation of formerly manual processes
- Flexibility: easy handling of the ever-changing quantities of the different order types
- Universal: handling a large product portfolio with one system, from large items to cosmetics and decorative items to hanging garments

Shuttle systems

We offer customized shuttle systems for optimized warehousing with fast material transport and short access times.

- Flexible capacity
- High performance
- Guaranteed quality by our own production
- High solution reliability
- Highest security of investment



Single-level shuttle Cuby



Multi-level shuttle Navette

MULTIFUNCTIONAL, MODULAR, INTELLIGENT: HIGHLY DYNAMIC SHUTTLE WAREHOUSE WITH AUTOMATED BUFFERING AND SEQUENCING

Goods on hangers, flat goods and other items in a single warehouse from which all sales channels are supplied - a development which is prevailing more and more in the fashion sector. We have developed our modular system which meets all requirements for such automated, multifunctional distribution centers. The solutions we have successfully implemented for our customers: beeline GmbH and Stockmann prove this.



The focus is on the patented 3D-MATRIX Solution® consisting of automated storage modules which work together as a highly dynamic whole system.

The intelligent combination of the system components provides high flexibility and efficiency without interventions and set-up times, for example during seasonal changes in the product line.

"The completely scalable system concept also offers us a high degree of flexibility for our variable range of items and leeway for further growth. SSI SCHAEFER's solution has thoroughly impressed us."

Elina Laine,
Logistics Manager Stockmann



"The quality of delivery, speed, and sustainability were the basic reasons for the change from the former static stock-keeping to the order processing with dynamic, resource-efficient components. With the SSI SCHAEFER's concept we currently work 10 million items per month and with the new logistics center we are well prepared for the future both technically and ecologically."

Ulrich Beckmann,
Founder and Managing Director of beeline



“The collaboration with SSI SCHAEFER was held trustfully in an atmosphere of full cooperation and mutual support.”

Albin De Macedo,
Logistics Manager at Segré,
Longchamp

LONGCHAMP
PARIS



WEASEL®: transport of bins



WEASEL®: transport of hanging goods



Transport of pallets

EFFICIENT: MATERIAL FLOW WITH AUTOMATED GUIDED VEHICLES

How can you guarantee an intelligent material flow from finished goods warehouse to picking without a static conveying system? A question that is especially important when talking about small areas or ensuring highest flexibility. SSI SCHAEFER developed a special answer for leather goods manufacturer Longchamp. Their centerpiece is an armada of automated guided vehicles (AGVs).

The project included the installation of new rack systems, the integration of new technology into the bin conveying system, as well as delivery and start-up of the new vertical conveyor and pallet conveying system.

Four goods-to-person picking areas are replenished with automated guided vehicles. The AGVs transport pallets over more than 300 m from the pallet warehouse to the picking area. Once the AGVs have arrived at their destination, they automatically place the pallets in a two-level rack storage system.

While the fast movers are replenished directly by the AGVs, SSI SCHAEFER installed a pallet conveying system equipped with a vertical conveyor for the slow movers which is also replenished by AGVs and allows access to the higher levels

of the picking platforms. Replenishment by AGVs also allows the number of short picks to be reduced and ensures that the pallets containing the required items are quickly transported to the correct position shortly after receiving the order.

Our AVGs almost autonomously move through the warehouse. Our SSI SCHAEFER fleet controller serves as communication partner for superordinate systems (MFS or WMS, WAMAS®/SAP) by assigning orders and controlling smooth, high-performance processes. This way we integrate our AVG fleet seamlessly into very large systems, but also into existing ones.

WEASEL®: driverless but always on track

The conveying vehicle WEASEL® can handle bins, cartons, trays and hanging goods, serving as universal transport system. The goods are delivered gently and safely to the desired destination.

- Products of up to max. 35 kg
- Standardized control software
- Speed: up to 1 m/s
- Climbing ability: up to 20 %
- Temperature range: between 2 °C and 50 °C
- Simple connection to the in-house material flow system

AUTOMATED GUIDED VEHICLE



INNOVATIVE AND PATENTED: SHOP-FRIENDLY DELIVERY AND SUPPLYING SHOPS WITH COLLECTIONS AND SINGLE ITEMS FROM ONE WAREHOUSE

At the warehouse of fashion manufacturer Desigual, items arrive from production at different times over a period of several weeks rather than all at the same time. To create a cost-effective process with in time deliveries, Desigual has to start order picking while storing the first items.

At the same time, continuous repeat orders are carried out for replenishing the stocks at the shops. Their characteristics are a small delivery volume per order and the request of minimum cycle time.

SSI SCHAEFER developed a - at first sight - quite unusual solution: the decoupling of picking and shipping cartons, controlled by the in-house logistics software WAMAS®. The vital difference of this patented procedure to all existing systems is the design of the sorter end positions combined with a split tray sorter process: The end positions are designed as channels and installed directly underneath the sorter. Customer cartons are supplied dynamically beneath the channels in the correct sequence for emptying. Thus, Desigual achieves 4,000 orders with 54 physical end positions.

THE ADVANTAGES FOR DESIGUAL

- Efficiency: increased picking performance to more than 22 million deliveries per year
- Flexibility: order picking starts while storing the first items
- Performance: maximum performance in a minimum space, quantitatively as well as qualitatively
- Innovation: smart solution concept with logistics software WAMAS®



WAMAS® - the software to meet your requirements

WAMAS® Modern logistics is no longer conceivable without software-based process optimization and visualization. For this reason we have developed WAMAS®, a software that is as modular as our solutions. With WAMAS®, we combine our components with an intelligent intralogistics cycle.

The functionalities of the WAMAS® logistics software are not limited to the storage and administration of goods. WAMAS® controls and checks all intralogistics processes, from goods-in to picking and goods-out.

In addition to highly developed logistics processes, WAMAS® perfectly meets all requirements for warehouse automation. It has a comprehensive function portfolio, from warehouse management to transparent monitoring and check functions as well as interfaces to different ERP systems.

WAMAS® manages the complex processes in the manual or fully automated warehouse regardless of the conveyed material (carton, bin, pallet).



„The decision to go into a partnership with SSI SCHAEFER opened up new, unexpected possibilities. The innovative solution concept was successful. We can supply 100,000 garments per day, thanks to our automated warehouse, we can stock up to 3,000,000 pieces and process 5,000 orders at the same time. We deliver efficiently around the clock. We have everything within reach and ensure the same for our customers.“

Site Management Desigual

Desigual®

DYNAMIC, FLEXIBLE, FAST: SYSTEM SOLUTIONS FOR PICKING SMALL ITEMS AND HANDLING RETURNS

Picking small e-commerce orders can be expensive in traditional distribution systems. The same goes for returns handling. To meet these challenges, we have developed a modular system enabling solutions with the same efficiency for both small and large orders.

The focus is on an overhead conveying system with RFID enabled carriers. This not only saves space but also ensures an excellent performance as well as the highest process reliability using RFID technology. The system can process all items precisely, buffer and sequence them exactly according to requirements. The items are handled individually and not in cartons.

The picked items are automatically sequenced in order to optimize packaging and shipping. Thus, all items required for a particular order can be transported together to a packing station and transferred to the end customer in best shape. The SSI SCHAEFER modular overhead conveying system is complemented by the SSI Single.

SSI Carrier: the overhead conveying system of a new generation

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. Accumulating, buffering, distributing and sorting are all facilitated with one single load carrier type.

ADVANTAGES OF THE SSI CARRIER

- High performance of up to 10,000 parts per hour on one conveyor
- Extremely high sorting accuracy and process safety
- Optimum packing density defined by loading
- Permanently controlled handling of load carriers
- One single drive system with five different functions: conveying, accumulating, distributing, buffering, sorting

“With SSI SCHAEFER, we found exactly what we were looking for: a loyal and trustful partner, a flawless implementation in a very short time, a significant reduction of our running costs and finally an excellent price/performance ratio.”



Site Management LOXXESS

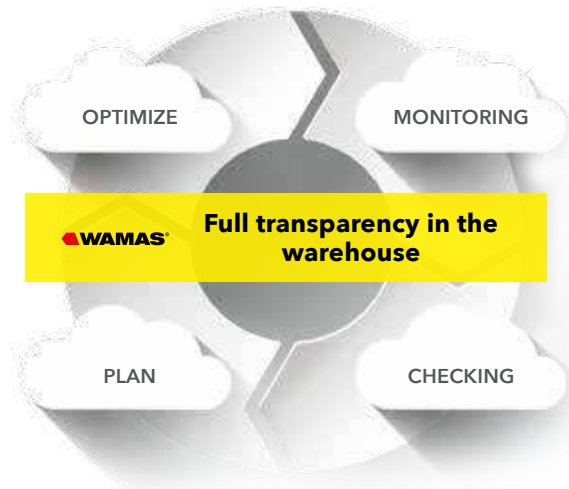
SSI Single

For transporting garments on hangers we offer a multi-functional standard solution: the SSI Single. Using different conveying systems, we are able to implement nearly any warehouse layout. The system is of course compatible with other applications, such as packing machines

- Transport weight up to 5 kg per hanger
- Transport of single garment hangers or special adapters
- Single item identification or formation of trains
- No empty carrier storage or buffer conveyor required
- High system performance



INTRALOGISTICS 4.0: USE IT SOLUTIONS FOR INTEGRATED PLANNING, MANAGEMENT, CONTROL AND COMMUNICATION



WAMAS® Logistics Software

Our internally developed WAMAS® logistics software enables us not only to meet these requirements, but to exceed them. WAMAS® is the link between goods-in, storage, picking and outbound delivery and all intermediate process steps. Efficient warehouse operation is ensured through clear visualizations and consistent management tools for processes, resources and stock. From initial consultation through to go-live, we provide you with comprehensive, global service expertise.

Certified SAP Competence

As a certified SAP Silver Partner, we support you in selecting, introducing and operating SAP solutions. Thanks to our comprehensive expertise in this area, we can implement SAP Extended Warehouse Management (EWM) for you according to your requirements. You can rely on our support as your experienced, SAP-approved implementation partner.

Our standard WAMAS® software combines all intralogistics components in one intelligent system.

To create effective intralogistics, a strong connection between IT and intralogistics technologies is required today more than ever. Modular software systems need to have the capacity for development and customization in order to communicate with your own company's Enterprise Resource Planning system. At the same time, you have to be able to analyze the material flow in real time to be able to spot any problems early on.

OPTIMIZE PROCESSES AND SAVE COSTS: IMPROVED PERFORMANCE THROUGH MODERNIZATION

As some vintage piece of fashion becomes en vogue again by some selective improvement, your system performance can be improved with new warehouse technologies and software releases. Up-to-date logistics technology optimizes warehouse and picking processes and reduces costs. Earlier investments can also be updated and aligned with the latest market requirements. This is all regardless of whether your system was provided by SSI SCHAEFER or another supplier.

We analyze your logistical situation together with you to increase sustainable performance and profitability. Due to our long-time expertise, we advise you on optimization potentials and recommend perfectly customized solutions.

AFTER PREPARING A RETURN ON INVESTMENT ANALYSIS, WE OFFER YOU THE FOLLOWING:

- Optimization of organizational and warehouse processes
- Implementation of new picking methods
- Expansion to new warehouse areas
- Extension/modernization of mechanics, electrical engineering, control
- Software and hardware upgrading

CUSTOMER SERVICE & SUPPORT: INNOVATIVE SERVICE PORTFOLIO FOR MAXIMUM AVAILABILITY OF ALL SYSTEMS

Even after your installation has been commissioned and is operational, our experienced experts will be on hand to support you with a comprehensive service portfolio, offering a suitable solution for any requirement.

PREVENTIVE SERVICES

- Maintenance
- Inspection
- Safety Inspection
- Rack Inspection
- Training and Certification
- System Monitoring

REACTIVE SERVICES

- 24/7 Technical Support
- Technicians on Call
- SSI Augmented Support

LIFE CYCLE MANAGEMENT

- Retrofit
- SMP
- Global Spare Parts Service

SSI SCHAEFER Maintenance Philosophy (SMP)

With our improved SSI Resident Maintenance® solution, we offer our customers "more than just service".

The SSI SCHAEFER Maintenance Philosophy is based on three core elements:

- ✓ Expert employees (SSI Resident Maintenance® Team)
- ✓ Best-practice processes for technical maintenance and repair work
- ✓ Integrated service tools and systems





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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