

SSI SCHAEFER

update

Company magazine from the SSI SCHAEFER Group

Top topic: Green Logistics

Innovative Products



Reduce process costs with
INTERCEPT® technology

Retail Best practice



JYSK: Creating a cosy atmosphere at home

New Product innovation



Warehouse automation with
new robot technology



Dear reader,

In a market that continues to become increasingly globalised, ever more demanding customer requirements create an increased need for expert logistics knowledge. A need that SSI Schaefer has been successfully satisfying for many years with innovations, strong customer orientation and solution-oriented procedures. We will continue to follow this strategy in 2010 and in the process place greater emphasis on one critical factor in particular: environmental protection.

Green logistics is not a fashion trend, but a crisis-proof, much-discussed topic. While each individual company leaves its own CO₂ footprint, demand for efficiency and 'greenness' is growing.

We see it as our objective to organise internal business processes with holistic logistics strategies and products in a more environmentally friendly way that is more efficient in terms of resources and costs by balancing the economic and ecological impact.

There is a vast variety of approaches for creating green material flow chains. In this edition of the "Update", SSI Schaefer will be covering several of them!

We very much hope you enjoy reading the magazine.

Harrie Swinkels
Managing Director, SSI Schaefer, Giebelstadt



Contents

2 Editorial, T op topic	13 Workshop Equipment
4 Innovative Products	14 Retail and Distribution Best practice
5 Retail Best practice	15 Food Best practice
8 New Product innovation	16 Frozen Goods Best practice
9 Company news	18 Pharmaceuticals and Chemistry Best practice
10 Automotive Best practice	20 Best practice
12 Retail Best practice	



Consistently **green** based on solution-oriented thinking

SSI Schaefer views responsibility for the environment and subsequent generations as a business responsibility. As a result, both internal business processes and the range of products and services will continue to be consistently adapted to meet the challenges of Green Logistics. The aim is to initiate processes that specifically meet the high requirements of sustainability taking equal account of ecological, economic and social aspects. They should have both a positive effect on the environment and on the efficiency of the processes, and have a beneficial impact on staff.

In actual fact, the Schaefer world has been green for many years already: Environmentally friendly production processes ensure a high level of environmental compatibility in development, manufacturing and disposal. With that in mind, the production site at SSI Schaefer in Hranice is certified to

ISO 14040/44 for its optimum environmental balance and to ISO 14001 for its excellent environmental management system. In addition, SSI Schaefer supports ecologically focussed research projects by the European Community, including environmentally friendly paints with no emissions or special waste.

Furthermore, the key themes in sustainability have been taken into account in developing system designs for users in the intralogistics sector that consider the requirements of green logistics. The general contractor, with its range of holistic green logistics processes, offers the corresponding technology and the expertise required to allow customers to meet these new requirements in the best possible way. The solutions range from technologies used, to the development of ultra-silent conveyor technology, or IT for both environmentally friendly, efficient and

cost-reducing processes, including the ergonomics@work! concept, and right down to the design of advanced, ergonomic workstations. Whether it's the recovery of energy obtained by generators in storage and retrieval systems, creating complex recycling and re-usage concepts or the use of regenerative energies taking into account current funding programmes in the new development and redevelopment of warehouses; in project implementation with SSI Schaefer, green is at the forefront from the planning stage to handover.



Contact for Green Logistics:
muhlfinder@ssi-schaefer-noell.com

Reduce process costs with INTERCEPT® technology!

For the first time, SSI Schaefer is developing and producing extruded containers with the award-winning and highly regarded INTERCEPT® technology. The intralogistics specialist is thus offering the opportunity to protect goods against corrosion under extreme conditions, reduce process costs and protect the environment.



To protect against corrosion, goods are treated with complex processes such as applying oil or wax. The protective substances are then removed using work-intensive operations; a procedure that generates significant cost and that has a negative impact on both the environment and on employees due to the chemicals used.

“The internationally patented INTERCEPT® technology means that these procedures can be completely avoided to reduce process costs and achieve CO₂ savings”, explains Frank P. Krökel, Managing Director at

COMPtrade Technologies GmbH and licence holder for INTERCEPT® in Europe and Africa. From the automotive, electronics and food industries, to machine engineering through to museums; the technology protects virtually all materials in all climatic conditions against the decomposition process. The same applies to the INTERCEPT® containers from SSI Schaefer.

The transport containers, manufactured for the first time using injection moulding, permit the production, dispatch and storage of components without preservation methods that use mineral oil. “The development here goes far beyond standard container management”, explains Krökel.

“With the expertise from COMPtrade, the intralogistics specialist offers comprehensive process consulting focussing on saving operating costs, optimising workflows and achieving a significant competitive advantage.”

In addition to their excellent protective effect, the containers offer permanent ESD protection, do not emit any chemical gases, can be recycled, and meet all work safety requirements.



This technology has its origins in a development that even now is used to protect the external shell of the Statue of Liberty in New York

The containers are available in three different versions:

1. Containers with corrosion protection provide long-term protection for components made from iron and non-ferrous metals, alloys, plastics and some organic materials; and no oils or another secondary protective materials needing to be used on the components.
2. Conductive ESD containers have improved abrasion properties in comparison with traditional containers with ESD protection without the addition of carbon-black.
3. Containers with ESD and corrosion protection offer a unique combination of ESD properties plus long-term corrosion protection in moulded containers.

Frank P. Krökel, Managing Director at COMPtrade Technologies GmbH and licence holder for INTERCEPT® in Europe and Africa



InBrief

Entry into the hall of fame

At the Waste Expo in Las Vegas, North America's largest waste and recycling trade fair, Michael L. Knaub, Sr. Vice President and Managing Director of the SSI Schaefer Waste Technology Division, was entered into the EIA (Environmental Industry Association) Hall of Fame.

The highest possible award in this sector is given to people who have provided considerable support for various organisations and initiatives in the waste industry over a period of many years.





Creating a cosy atmosphere at home

SSI Schaefer, Giebelstadt has implemented the largest distribution centre in Denmark for Danish furniture manufacturer, JYSK. A holistic material flow concept, powerful system components, ergonomic workstations and an optimally customised warehouse management system ensure efficiently coordinated workflows in three interconnected high bay racking systems and two linked, automatic small parts stores.

The Danish furniture manufacturer, JYSK, known in Germany as the Danish Bed Warehouse, has put its new central ware-

house into operation in Uldum. At 1.43 million m³, it is the largest logistics warehouse in Denmark.

A system with enormous dimensions and a steel construction from SSI Schaefer that on two levels has everything a modern warehouse and conveyor technology system could offer: The high bay racking system alone, with 134,000 storage spaces, covers a wall area of 42,000 m². In addition, equipment including almost 3.5 km of pallet conveyor technology and gravity roller conveyors, 41 loading and discharge stations, 12 pallet (un)

loaders, 3 vertical conveyors and 21 shelf servicing devices form the backbone for the material flow of the pallets. A further 12 shelf-servicing devices in the automated storage system provide a holistic solution with a clearly structured goods flow and automated work process throughout. The scale of this project represented a significant challenge, and not only to the system planners.

“This level of automation has increased our productivity levels hugely”, summarises Troels Larsen, Project Manager for the new JYSK logistics centre in Uldum.



Efficient concept for upholstered furniture

As part of the planning work for a building extension and the expansion of the warehouse capacity, upholstered furniture manufacturer COM40 in Poland now has an optimum goods flow due to a semi-automatic mobile racking system combined with manually controlled storage and retrieval devices from SSI Schaefer, Switzerland.

COM40 is a dynamic, young and growing upholstered furniture manufacturer. The company was founded in 2000 and has

in a short period of time become one of Poland's leading furniture manufacturers. The current range includes 30 different items of upholstered furniture in over 250 variations. In addition to its own store, the company supplies Polish furniture stores and operates across the whole of Europe. IKEA is one of its largest customers.

SSI Schaefer won the contract with the concept of a semi-automatic mobile racking system combined with manually operated storage and retrieval systems.

The 93,000 pallet storage spaces in the mobile racking system for semi-finished and finished products are divided into 3 sections of the hall. In the existing hall and in the new sections, conveyor technology and telfers provide reliable support for the material flow. A customised interface provides a secure connection to the customer's warehouse management system. Efficiency and work safety are increased considerably due to automated goods movements.



For electronics of the future

After a construction period of 8 months, Future Electronics has successfully put its new Asian Pacific distribution centre in Loyang Industrial Estate, Singapore into operation. Their implementation partner was SSI Schaefer, Singapore.

The company is represented with 169 offices worldwide and is firmly positioned as one of the world's top three electronic component distributors for semiconductors and electromechanical components.

At over 10,000 m², the new distribution centre now offers all the necessary capacities for electronic components as well as an improvement in throughput times.

The warehouse equipment consists of a 2-storey modular shelving system with 25,000 dividing shelves and freestanding pallet racking with 540 storage spaces. The systems offer sufficient space for all approx. 30,000 components. In addition, automated container conveyor technology, high-performance picking systems and four Schaefer Carousel Systems (SCS) from SSI Schaefer, Germany ensure rapid order processing at Future Electronics in Singapore.

Double the storage capacity for QVC

In planning and developing a central warehouse for more than 25,000 products at QVC, Great Britain's largest TV and internet mail order house, SSI Schaefer, Giebelstadt, has successfully doubled the company's storage capacity.

To improve customer service and to create space for future growth as well as warehouse expansion, QVC decided to increase the warehouse capacity and avoid the need for expensive out-sourced warehousing.

SSI Schaefer and QVC worked closely together to achieve these aims. The first stage was to install 8m high drive-in racking for pallets. These are to be used to store more than 5,000 fast-moving and large volume articles and generate an increase in the initial warehouse capacity.

The next stage was to install a 35 m tall high bay racking add-on unit that includes 29,000 storage positions, modular shelving, roller conveyors for pallets, chain conveyors as well as an automatic positioning system within the shipping section.

The current output of the high bay rack-ing

system is 200 inward and outward movements per hour. In the event of any future expansion, this can be increased to up to 300 outward movements per hour.

"Setting up the high bay racking system provides QVC with significantly greater storage flexibility and helps to improve customer service", reflects Andy McNaughton, Managing Director at QVC.



Warehouse automation with new robot technology

SSI Schaefer, Graz, has developed the first fully automated pick cell that can be seamlessly integrated into existing warehouse architecture. The SSI Schaefer Robo Pick achieves up to 2,400 picks/hour and is particularly appealing to wholesalers and mail order houses based on its special features.

Attempts to make the picking process cheaper and simpler using pick automation had previously failed due to the lack of flexibility in image processing. The intralogistics specialist has solved this problem and developed the SSI Schaefer Robo Pick that now takes care of work that previously had to be carried out manually.

The image processing cell in the system identifies the position of the goods being picked in less than 1 second, and controls the universal pick robot. The products are then carefully placed into the relevant order container in accordance with the order request, with no teaching required, i.e. the individual programming of the properties and the appearance of the articles. Depending on the order structure, between 10 and 20 orders can be processed simultaneously.



In comparison to manual picking, the robot, which is more cost-effective than a conventional workstation with the same output, reduces the error rate for the pick quota by a factor of 10 to 100.





Lean Factory – the group for streamlined process chains

How do you eliminate waste, shorten throughput times and increase productivity levels? These are much-discussed topics in industry. The Lean Factory – a network of companies – offers a comprehensive product range that focuses on implementing streamlined structures based on Toyota principles all along the value creation chain. SSI Schaefer is part of this unique network.

11 market and sector leaders, including the Leonardo Group, Toyota, Bosch, Würth, Orgatex and SSI Schaefer, have combined forces with the aim of eliminating all superfluous work processes in production. Each company, as a manufacturer of specific hardware components, brings its solutions to the

group. The skills of SSI Schaefer here are based on modular on-line shelving systems for various applications, such as pallet and modular shelving for the supermarket principle. Containers and workshop equipment, as well as individual warehouse and logistics solutions are also included in the offering.

An openness to forging new paths and finding access to continually improving processes in production (CIP) means that the intralogistics specialist enjoys in-depth exchanges with the other companies. Due to a variety of synergistic effects, lean solutions tailored to the customer's needs are developed to achieve continuous optimisation of company competitiveness. The cus-

tomers receive all the services required for a streamlined production line all directly from one source.

In the training centre in Stuttgart, interested parties have the opportunity to experience full production lines set up in line with lean principles live and direct all year round. This means that customers come into direct contact with the products and can immediately see their value. To provide additional demonstration options, free roadshow events will be taking place at various locations across Germany. In 2009, over 2,500 visitors took part in these events. The roadshows also provide the opportunity to speak to experts about different sectors and individual topics.

Partner conference in Hanover at Parker Hannifin GmbH

At the end of last year, the SSI Schaefer partner conference took place at the Hanover office with reference customer Parker Hannifin – a leading manufacturer of drive and control technology – in Bielefeld. Here customers had the opportunity to assess pallet and modular shelving systems in a narrow-aisle tech-

nology layout.

The warehouse concept implemented by the intralogistics specialist provides Parker Hannifin with maximum levels of flexibility and the ability to deliver rapidly. In addition, it will be possible to expand the logistics centre in the future as required.



Two in one go

Customised warehouse concepts

The company Hans Hess Autoteile GmbH has expanded its main warehouse in Cologne even further with a 3-storey modular shelving system including integrated conveyor technology. At the same time, in the same hall complex, the warehouse of sister company Motair Turbolader GmbH is being equipped with a 2-storey platform construction.

SSI Schaefer, Neunkirchen has designed and fitted a customised warehouse for each company following intensive collaboration. The hall sections were interconnected via conveyor technology as well as a rapid-open gate.

The first area for Hans Hess houses a pallet storage system for temporary storage with a connected 3-storey modular shelving system. The existing automated conveyor technology was also integrated into the system as requested.

At Motair, a 2-storey platform is used to store 40,000 parts. To protect the sensitive components, the intralogistics specialist strictly segregated the clean area from the dirty area and marked these in colour.



Dynamic processes in the

For the new logistics centre for the Carat Group in Castrop-Rauxel, SSI Schaefer, as the general contractor, new type of material flow concept incorporating container conveyor technology. Transparent goods flows and modern picking strategies ensure efficient processes in order processing.

Concentrating two individual warehouses at one location, increasing the storage area and improving processing, the specifications of the Carat Group, one of Germany's leading supply companies for the automotive trade, were clearly defined.

The 25,000 m² floor is now divided into five areas for hazardous goods, returns, large goods and narrow-aisle pallet storage and more. The individual sections are primarily static warehouses using fork lift trucks. For the storage and order picking processes for smaller articles, container conveyor technology and two automated systems from the intralogistics specialist have been integrated.

Due to this clearly structured, transparent system design, the central store achieves a high level of efficiency with the minimum of dynamic systems.

A practical tool for the Bosch world

For just-in-time supply systems for their automated production lines, Robert Bosch GmbH, Hildesheim has replaced outdated system containers for 50,000 new workpiece carriers during ongoing operations. The individually customised concept designed by SSI Schaefer, Neunkirchen is an intelligent, multi-path solution providing optimised, flexible processes.



Every day, 18,000 starter motors leave the highly automated production lines belonging to the automotive supplier. The individual subassemblies for final assembly had always been supplied in thermoplastic injected foam containers “that were expensive and often heavier than their contents, and did not permit any options for product modifications”, according to Helmut Lehmann, Department of Order and Delivery Planning/Logistics Projects at Bosch.

As the intention was to continue using the existing robots for the assembly process, SSI Schaefer supplied a newly developed workpiece carrier tailored precisely to the requirements of the relevant assemblies using different replaceable inserts.

50,000 containers and inlays in 7 variants are now in circulation at Bosch. “The multi-use solution is considerably more cost-effective and more flexible than before”, reflects Lehmann.



CARAT
UNTERNEHMENSGRUPPE

static warehouse





Warehouse becomes part of a world of experience

The company Fahrrad XXL Feld GmbH, Sankt Augustin, is highlighting the meaning of its name using an apparently 'floating' platform integrated into the sales area. Special feature: The system designed by SSI Schaefer, Neunkirchen fits into the world of sporting experience with visual appeal, and sets itself apart from the industrial standard.

With a commercial area of around 11,000 m², the sports supplier specialist is one of Germany's leading bicycle and hobby sport centres.

"As we were planning to expand our sales area due to increasing demand,

we wanted to achieve maximum use of the space and storage volume as well as optimise the logistical processes with regard to customer service", explains Peter Feld, Managing Director at Fahrrad XXL Feld. In other words, the full-range supplier was striving for direct delivery of the goods during the sale. To do this, the new warehouse needed to be integrated directly into the sales area, without it looking like an industrial warehouse.

Of 16,000 bicycles, up to 1,000 units in the new platform were fully assembled and available in some places with 2 storeys. The levels are connected by stairs, with rails ensuring simple in-

ward and outward storage. Non-galvanised parts were painted slate grey to match the sales area.

"This professional solution is a 100% match for our requirements and undoubtedly contributes to a high level of customer satisfaction", summarises Feld.





The company Brockhaus Heuer GmbH, Plettenberg is expanding its workshop equipment with the newly developed pick@work assembly workplace system. The system from SSI Schaefer, Neunkirchen combines ergonomic workstations with pick-by-light and leads staff step by step through the picking and assembly process via displayed instructions.

When high quality tools such as the Heuer Compact Vice are produced, every grip during the assembly process must be in the perfect position. The essential requirement for this is workshop equipment that permits optimum working practices.

How expert knowledge becomes a commodity

With pick@work through the assembly process at Heuer Compact Vices

To optimise the work process and increase productivity levels, the company decided to implement the new pick@work workstation that was developed to coordinate assembly workstations and optimise components.

The employee selects the jobs via the display, and the storage locations are illuminated in the correct sequence for picking and assembly. The part is removed from the relevant storage location. Photos then lead the employee step by step through the assembly process. The complexity of the process becomes lessened, the error rate is minimized and quality is assured.



The spray mist consists of a large number of tiny droplets with diameters less than 50 µm

In collaboration with the company Brandexx, SSI Schaefer, Neunkirchen has developed the safe@work racking system SLR specially for spare parts storage, tools output and workshops: A fire monitoring, extinguishing and information system that uses an integrated extinguishing device to fight the fire directly in the workshop shelving.

safe@work

New fire prevention solution between fire extinguishers and sprinklers

With safe@work the smoke detector detects the fire at an early stage and signals it wirelessly to the central control. This immediately activates the integrated extinguishing unit in the shelving. The fire itself is extinguished using water mist. At the same time as the extinguishing is in operation, the system permits notification to the central fire alarm system which will notify the fire emergency service if triggered. The concept ensures continuous function monitoring, without being integrated into the room itself, and covers an area of up to 60 m² with an extinguisher column.

With a new mobile racking system from SSI Schaefer, England, TNT Archive Services Division is expanding to create urgently needed storage capacities.

TNT Archive Service concentrates on the professional storage of physical documents, microfilms and data storage media. The British team organises the UK government's archive, for example. Due to a growing customer base and the associated storage requirements, the company decided to implement a logistics solution from SSI Schaefer.

Largest mobile racking system in the UK

TNT provides government storage

In the new 14 m high mobile racking system implemented during the expansion of an existing hall, over 800,000 containers will soon be housed on 13 levels. With the increase in capacity of more than 200,000 spaces, the new system is the largest and most impressive in the UK.



Increased capacity for Ritzenhoff glasses

A mobile racking system with around 12,000 storage spaces forms the heart of the new logistics centre for glassware manufacturer Ritzenhoff in Marsberg, Germany. Compelling system technology, high quality of the individual components and safety aspects has created a future-proof storage foundation.

As the glass producer was planning a new logistics centre due to increasing demand, the intention was to merge four storage sites, optimise storage capacity and logistical procedures as well as set up areas for value-added services. Ritzenhoff originally planned the entire project in-house. After creating a rough concept, the process of system selection began for their "flexible semi-automated warehouse."

The contract for the mobile racking system with almost 12,000 storage locations and the racking construction with two replenishment, live storage shelving for packages and a pallet live storage system was awarded to SSI Schaefer, Neunkirchen. A total of around 15,000 pallet storage locations are now available for 3,500 different articles. "Short access times, need-based availability and high capacities," Bernd Giesler, Technical Manager in Marsberg, is happy.



Unique logistics concept for the drinks industry

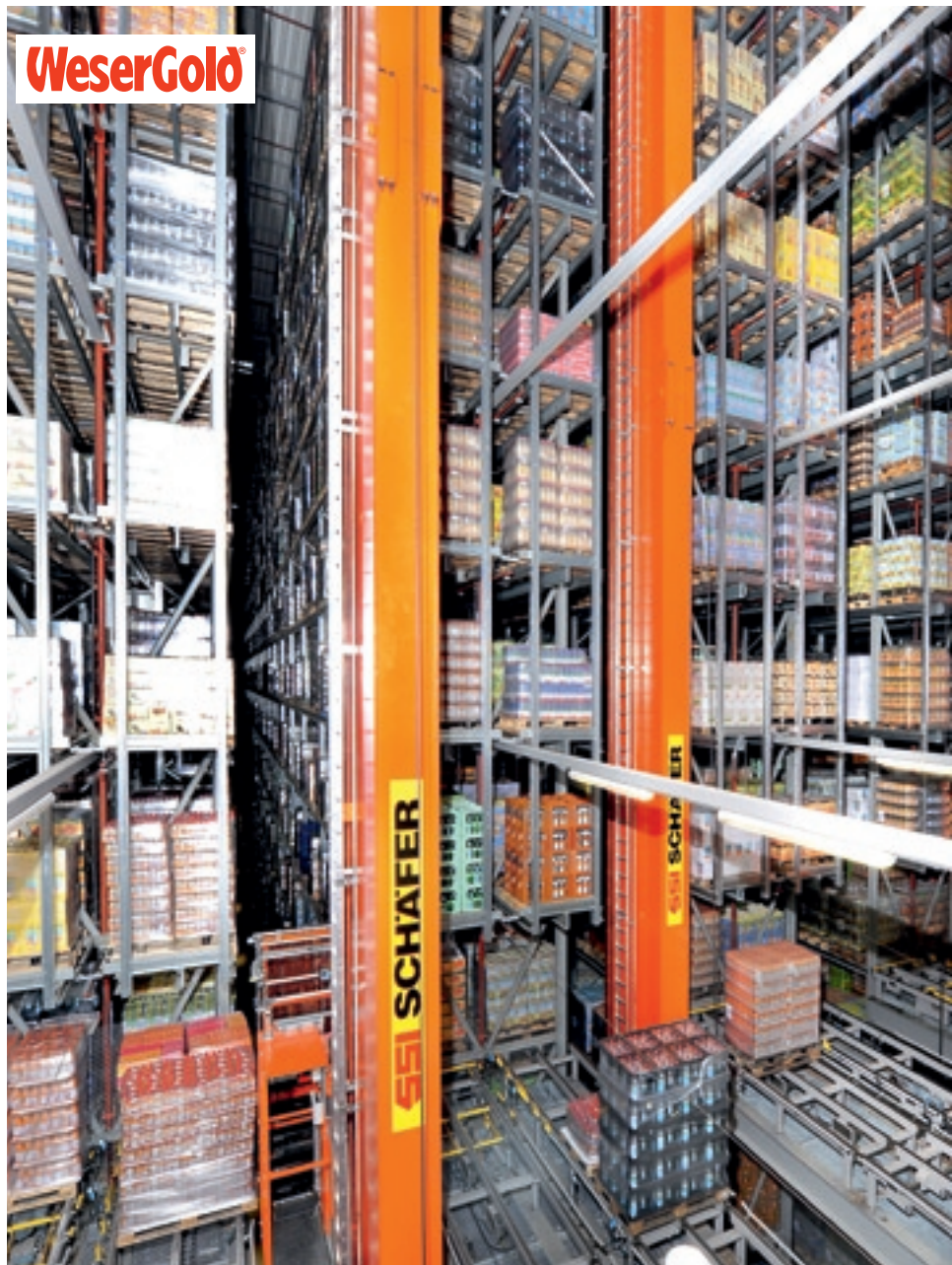
By combining four external warehouses to form a new central distribution warehouse in Rinteln, drinks manufacturer Wesergold has raised its distribution and intralogistics to a whole new future-oriented level. The contract for the planning, conveyor technology, shelving construction and the turnkey implementation of the project was awarded to SSI Schaefer, Giebelstadt.



For the general contractor, the warehouse set up with steel construction from SSI Schaefer and the interlinking of production lines represents an efficient sector-specific solution for the drinks industry.

The key highlights of the system are automation and the demanding material flow concept, with which the drinks manufacturer has levelled out its throughput volume while at the same time reducing stock levels at peak demand.

Here, a powerful high bay racking system forms the heart of the system. The high bay racking system is directly connected to the production lines via a transport bridge with telfers, and offers storage spaces for 38,700 euro pallets.



LIDL relies on SCP

LIDL, Germany's leading food dis-counter, has decided in favour of the innovative picking system from SSI Schaefer, Giebelstadt.

The food retailer is expanding its logistics centre at the Kirchheim/Teck site to include an automated picking warehouse. The intralogistics specialists are

to set up a large high bay racking system with five aisles and around 15,000 pallet storage spaces with the corresponding pallet conveyor technology. A tray warehouse is being set up next door with around 16,000 storage positions on five levels. For efficient picking processes, the Schaefer Case Picking (SCP) offers order-based picking of individual packages in parallel multiple access. The system ensures optimally packed

pallets to ensure optimum transportation and goods unloading in stores. Up to 70,000 packages can be processed each day using this system.





Second giant freezer cabinet for Wagner Pizza

For the company Wagner Tiefkühlprodukte GmbH, Nonnweiler-Otzenhausen, one of Europe's largest manufacturers of frozen pizzas, SSI Schaefer, Neunkirchen, just a few years after the construction of a first high bay racking warehouse, is now providing the steel construction for a second fully automated warehouse system.

"Due to our growth over recent years, our warehouse capacities were simply no longer able to cope", confirmed

Gottfried Hares, Managing Director at Wagner, regarding the new investment being made to double capacities. Across a length of 120 m, there is space for around 11,000 pallets in the 31 m high frozen storage area with a continuous temperature of -24°C.

Work safety was a key issue during the entire construction phase. The objective: To exclude any accident risk as far as possible, and to ensure safety during routine activities in the worst-case

scenario. An in-house Wagner height rescue team provided professional support with on-site safety measures, in the form of completing special rescue exercises, for example. Working side by side, both teams ensured a seamless erection process.

In future it will be possible to load up to 7 HGVs with pallets, instead of just 3. All sales of goods from Wagner both in domestic and foreign markets are now controlled by Nonnweiler.

Double pack: Expansion and new building for MUH

Eight years following the erection of the fully automated high bay racking, the company Milch-Union Hocheifel eG, Pronsfeld – one of the most modern operations in the European milk industry – has continued to invest in an in-house logistics area. Each day, more than three million litres of milk are processed there.

The partner company for the activities completed in 2009 was once again SSI Schaefer, Neunkirchen, signifying the continuation of successful collaboration between the two companies over many decades.

The centrepiece of this extension was the setup of a 7-aisle high bay pallet racking silo including roof and wall cladding. Built as an extension to the existing warehouse, this offers space for around 15,000 pallets with a length and height of 115 x 27 m. In parallel, the existing high bay racking system was extended by approximately 36 m.

Following commissioning in 2010, the storage capacities in Pronsfeld will increase to around 36,000 storage spaces, making the Milch-Union Hocheifel company truly fit for the future.





With the investment in a new warehouse complex – equipped with the latest mobile racking technology from SSI Schaefer, Switzerland – the Dutch meat importer Zandbergen has expanded its storage capacity by approx. 500% to 30,000 tonnes.

10,000 pallets at -25 °C

The company, based in Zoeterwoude, is one of Europe's leading meat importers and guarantees its customers just-in-time deliveries of top quality.

Of a total of six mobile racking systems, two are operated fully automatically using laser-navigated narrow-aisle fork lifts.

The concept of materials handling support and optimisation of the goods flows was also implemented in the conventional, manually operated hall sections.

This has created a consistent solution with optimised goods flows that combine the exceptionally compact storage of the mobile racking technology with the benefits of fully automated operation. This makes it the first system of its kind in Europe for the refrigerated goods sector.

Refrigerated storage creates jobs in Eastern Central England

In 2009 in the market and port town of Wisbech in the Eastern English country of Cambridgeshire, a new logistics centre was constructed with warehousing and distribution functions for frozen food. At the heart of the centre is a pallet high bay racking system set up as a silo racking solution.

On behalf of the Dutch logistics service provider, Partner Logistics, SSI Schaefer, Neunkirchen constructed the backbone for this giant warehouse with the delivery and assembly of the structural steelwork. At a height of 32 m, this was absolutely critical even during the construction phase. On an area of 144 x 90 m, the warehouse provides the space for up to 91,000 pallets with frozen chips.

With continuous ice-cold temperatures of -28 °C, up to 12 euro and up to 6 Chep pallets provide storage behind one another in channels. The high level of space utilisation of these multi-depth inward storage options is particularly useful for energy-intensive refrigerated warehouses.

After commissioning in Spring 2010, the logistics centre employs around 130 people.



New, ultra-modern central store for pharmaceutical industry

With the latest warehouse technology and three temperature ranges from up to -15°C, the new Fresenius Kabi central warehouse in the Graz Cargo Center meets the high standards of the pharmaceutical industry as well as the requirements of national and international authorities.

Fresenius Kabi Austria, a subsidiary of the international health company Fresenius SE has been involved in the development, production

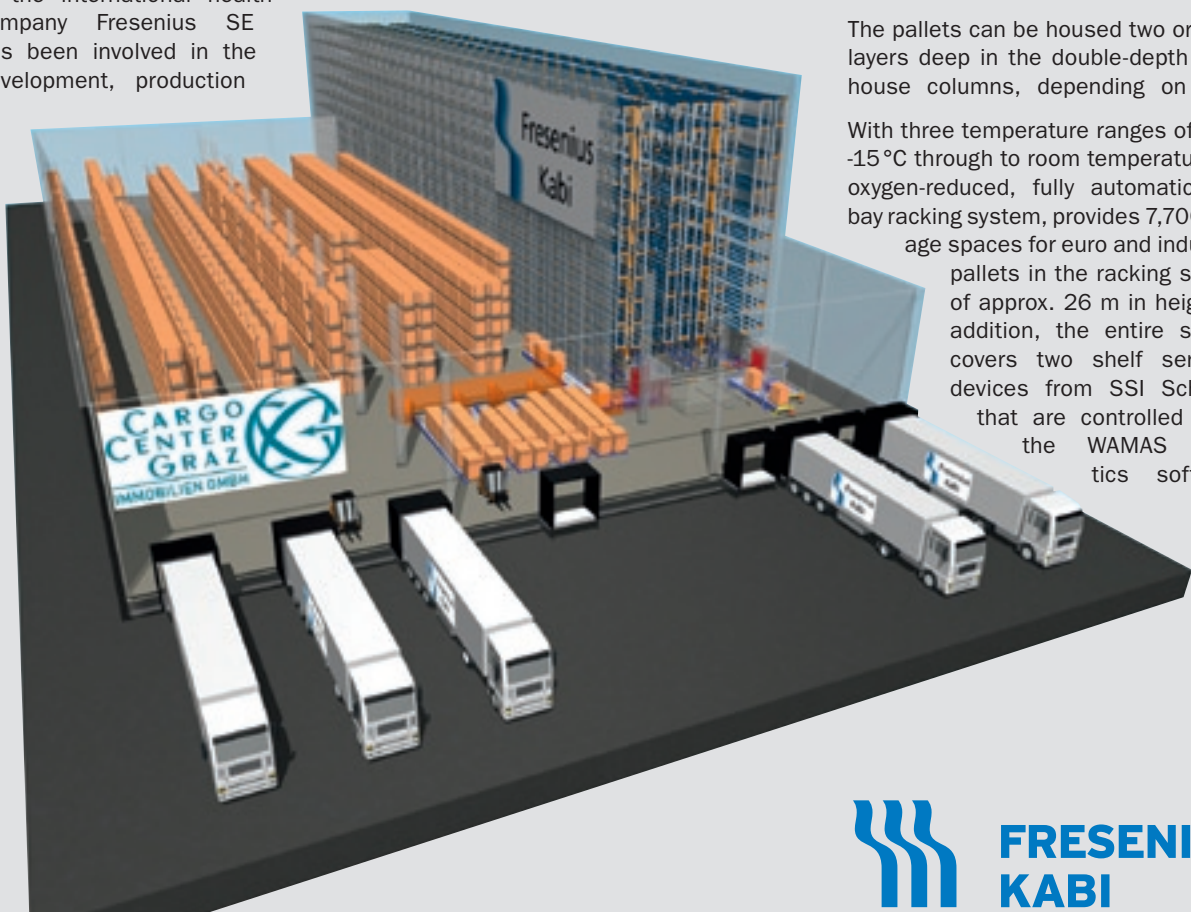
and sale of pharmaceuticals and medical products for infusion and nutrition therapy since 1997.

For the pharmaceutical company's new, central logistics centre, Salomon Automation, Friesach, Graz, planned and implemented a fully automatic high bay racking system with two shelf-servicing devices.



The pallets can be housed two or three layers deep in the double-depth warehouse columns, depending on type.

With three temperature ranges of up to -15°C through to room temperature, an oxygen-reduced, fully automatic high bay racking system, provides 7,700 storage spaces for euro and industrial pallets in the racking system of approx. 26 m in height. In addition, the entire system covers two shelf servicing devices from SSI Schaefer that are controlled using the WAMAS logistics software.



Maximum storage density in the minimum space

With the installation of the warehouse and picking system SCS (Schaefer Carousel System), SSI Schaefer, Spain, the headquarters of Cofares – the largest distribution centre in the pharmaceutical sector on the Iberian peninsula – in Madrid has moved to the latest state of the art technology.

The SCS, consisting of 4 carousels with powerful conveyor and control technology now offers a capacity of up to 6,000 containers. In the meantime, a pick-to-tote picking station ensures high, continuous throughput and tireless working, while flow racks provide increased storage capacity for over 8,000 containers.



More capacity for medicines

Based on the latest conveyor technology and picking machines from SSI Schaefer, Graz, the company Jacoby Pharmazeutika AG, Hallein, now has a future-proof automated system with sufficient reserves, that ensures the maximum possible support during peak business times.

When the starting pistol for the project was fired, the pharmaceuticals company had already outgrown its capacities. Working on 2 levels in the warehouse also represented a hindrance to further development.

To fully exploit all the potential in the project, Jacoby acquired a neighbouring plot of land for the new logistics. The company was striving to process the entire goods flow on just one level, as well as to achieve future-oriented automation and optimisation of the internal processes.

To achieve this aim, in addition to around 1 km of built-in roller and belt conveyor technology, etc., SSI Schaefer installed a fully automated A-Frame system with custom configuration and a throughput of 1,200 containers/hour at the site. This ensures the optimum goods flow and the highest possible level of support for peak time operations.

This new distribution logistics centre is now in full-scale operation. This means that Jacoby has created reserves in both wholesale business and depot business for the next few years.



WAMAS® for fast delivery

At UNIFIX-SWG GmbH, wholesaler in the field of fastening technology and chemicals, the installation of the WAMAS warehouse management system with Pick-by-Voice picking in Terlan, Italy, is ensuring rapid delivery and a high quality delivery service.



Salomon Automation, Friesach/Graz, Austria converted the existing manual warehouse in stages into a new, semi-automated system. The WAMAS warehouse management system was installed and modifications were implemented in multiple stages for the work in the picking stations connected via the conveyor technology.

The picking is now carried out using Pick-by-Voice. The routing to the conveyor paths is carried out by WAMAS until in the outward goods section the products are temporarily stored in a fully automated small parts storage system and the orders are conveyed closed to the packing stations.

In a storage area of 5,700 m², the company now profits from both a reduced error rate and increased levels of work quality and productivity.





Hanging on the line

At Otto Kessler GmbH & Co. KG, Schöfengrund, Germany, an unusual version of a R 3000 modular shelving design is in use with a plastic-coated steel cable for storing and picking high quality leather gloves.

The Kessler Group owns the world's largest production site for table-cut gloves and manufactures for the top names in fashion.



The manufacturer maintains stocks of over 3,500 leather glove models in the new shelving units of 110 m².

To ensure the optimum overview of the articles, SSI Schaefer, Neunkirchen has used platform support profiles each with 6 dividing shelf levels as the fastening elements for plastic-coated steel cables. Fixed taut across the entire length of the shelving, these cables are used to fasten the items of clothing. Behind each of the suspended gloves, there is a compartment with the corresponding sample pairs.

No everyday project

130 workstations in the new administration building at Fuhrländer AG were equipped by SSI Schaefer with the latest office furniture. The challenging overall design conforming to architectural specifications was realised with individually designed standard systems and intelligent custom manufacturing. Together with the shelving systems and components supplied for the warehouse in the Fuhrländer production hall, this created a comprehensive total solution.

Wind power plants have also been produced by the Liebenscheid in the Westerwald area of Germany since Autumn 2008. Fuhrländer has acquired its new production and administrative headquarters at Siegerland airport.

The planning work and final arrangements were completed within one month. For example, 130 desks were selected from the Planova 2500 systemised range. In addition, desks that were utilised fulfil EU Directives on work safety and for computer workstations as well as offering a number of practical features.

Over 150 equipment pods and rotor hubs for wind power plants are manufactured by the company Fuhrländer AG in the 200 metre long factory hall each year. The shelving systems installed by SSI Schaefer provide efficient access to the required materials.

Trade shows and events for the first six months of 2010

LogiMAT Stuttgart | 02 – 04 March

VW Hausmesse Cologne | 18 – 20 March

MATERIALFLUSSKONGRESS Munich | 15 – 16 April

HANNOVER-MESSE Ind. Automation Hannover | 19 – 23 April

SSI PARTNERTAG

INTERCEPT® Korrosionsschutz Bremen | 04 May

AUTOTECHNICA Brussels | 09 – 12 May

INTERSCHUTZ Leipzig | 07 – 12 June

AUTOMATICA Munich | 08 – 11 June

update publishing notes

Publisher and party responsible for the content: SSI SCHÄFER / FRITZ SCHÄFER GMBH • D-57290 Neunkirchen

Public Relations / Editor: Julia Windmüller – eMail julia.windmueller@ssi-schaefer.de

SSI SCHAEFER LTD.

83/84 Livingstone Road
Walworth Industrial Estate
GB-Andover, Hampshire SP10 5QZ
Phone +44 / 12 64 / 38 66 00
Fax +44 / 12 64 / 38 66 11
eMail solutions@ssi-schaefer.co.uk
www.ssi-schaefer.co.uk

SSI SCHÄFER

FRITZ SCHÄFER GMBH
Fritz-Schäfer-Straße 20
D-57290 Neunkirchen
Phone +49 / (0) 27 35 / 70-1
Fax +49 / (0) 27 35 / 70-3 96
eMail info@ssi-schaefer.de
www.ssi-schaefer.com

SSI SCHÄFER NOELL GMBH

i_Park Klingholz 18-19
D-97232 Giebelstadt
Phone +49 / (0) 93 34 / 9 79-0
Fax +49 / (0) 93 34 / 9 79-1 00
eMail info@ssi-schaefer-noell.com
www.ssi-schaefer.com

SSI SCHÄFER PEEM GMBH

Fischeraustraße 27
A-8051 Graz
Phone +43 / (0) 3 16 / 60 96-0
Fax +43 / (0) 3 16 / 60 96-4 57
eMail sales@ssi-schaefer-peem.com
www.ssi-schaefer.com

SALOMON AUTOMATION GMBH

Friesachstraße 15
A-8114 Friesach
Phone +43 / (0) 31 27 / 2 00-0
Fax +43 / (0) 31 27 / 2 00-22
eMail office@salomon.at
www.salomon.at