



AUTOMOTIVE SOLUTIONS

Planning and installation concepts for
centralized warehouses, dealers, importers and workshops



SSI SCHAEFER – The system with built-in quality

Systems without limits



SSI SCHAEFER has for several decades been one of the world's leading suppliers of complete, high-quality systems for warehouses, general commercial premises and offices – and for the waste-handling and recycling sector.

Regardless of whether you are looking for boxes to fit a set of shelves, or a turnkey workshop or shelving system; an office desk or multiple-function plant facilities – each element is guaranteed to match every other, allowing you virtually complete freedom to bring together any combination of modules into the commercial or office facility of your choice, and to extend the system at will. Our international presence, long experience and outstanding customer service are all major advantages for you when it comes to timely planning and setup strategies. Our high-quality consultation and general services are designed

to gain your trust – right from the initial contact. Our long years of experience and worldwide presence have given us a knowledge base that we use to the full throughout our manufacturing and assembly processes, and in the development and execution phase of each project. Full service and perfect quality, with the DIN EN ISO 9001 stamp of approval – all under one roof.

Our policy of investment in the very latest plant machinery and advanced manufacturing technology, maximum strictness in quality assurance and unforgiving test procedures are all designed to guarantee that quality will remain at its present high level far into the future. You can always be sure that any SSI SCHAEFER product you acquire will perform safely and reliably – even under extreme conditions.

SSI SCHAEFER – for systemised competence.



Pallet racking



Mobile shelving for light-to-medium shelf loads



Cantilever racking

The system with built-in variety

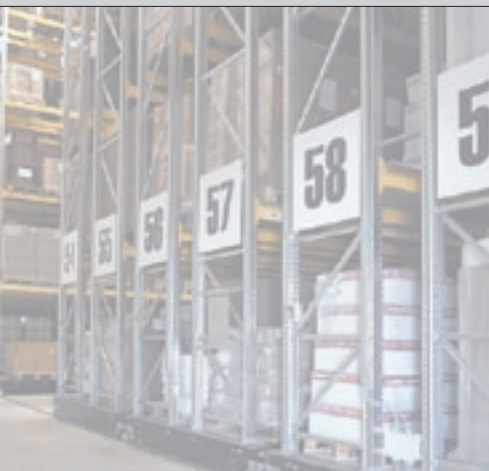
Automotive systems



Modular shelving



Drive-in racking



Mobile shelving for pallets and storage of long items



Automotive systems



Warehouse and storage mezzanines



Security technology

All activities in the automotive sector centre on the day-to-day requirements – whether they are big or small – that operations lay down. And this applies to cars, trucks, large commercial vehicles or motorcycles, or indeed anything on wheels.

SSI SCHAEFER supplies cost-effective systems designed to offer long-term improvements in efficiency, operationally orientated solutions for the reduction of outlay, and customized components – all from a single source.

SSI SCHAEFER, besides being a manufacturer with many years of experience and unequalled technical competence, also offers future-orientated know-how in the automotive sector – a sector where markets are apt to change at alarming speed. Customers and constantly changing internal requirements assume a series of new challenges where organizational procedures and flexibility are concerned.

This is why a primordial objective must be to reorganize procedures with a view to providing increased efficiency in all areas of the organization.

Leading through service, customer relations and warehousing technology ...



Automotive products from SSI SCHAEFER are used all over the world to provide intelligent and reliable solutions for the task in hand.



Quality, innovation and customer orientation are the chief guiding elements on which SSI SCHAEFER bases all its new ideas regarding the development and creation of new products and systems, whether for current markets or those of tomorrow – at home or abroad.



Automotive systems from SSI SCHAEFER

Points to note on the optimisation of general procedures and warehouse processes

1. Systems and solutions for the vehicle sales sector

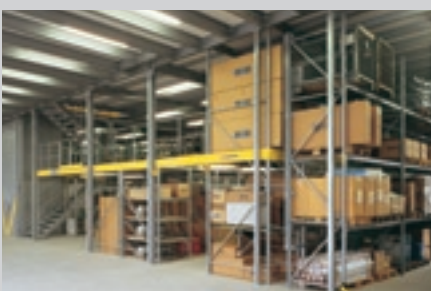
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- Totally integrated functions for the dealer's premises
- Eye-catching designs for use in the showroom
 - Reception and service areas; customer consultation points and showroom workstations
 - Brand concepts for vehicle showrooms
- Storage systems for
 - Goods IN/OUT and night delivery
- Small and loose components, medium-sized, large and oversized or bulky items
 - Multi-storey warehouses and Goods-lifts
- Workshop and production area
 - Material issuing, secure storage of materials and tools
- Cabinet, material-handling and archive-storage systems
 - Integral workbenches and recreation-room fittings
 - Hazardous-substance storage within the workshop or warehouse
 - Industrial waste disposal

2. Centralized-warehouse concepts and spare-parts logistics

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- Service-orientation and customer relations
- Centralized-warehouse concepts
- Optimisation in Goods IN/OUT
- Reusable-container and pool systems
- Containers for warehouse, commissioning and transport use

3. Points to note on the optimisation of general procedures and warehouse processes

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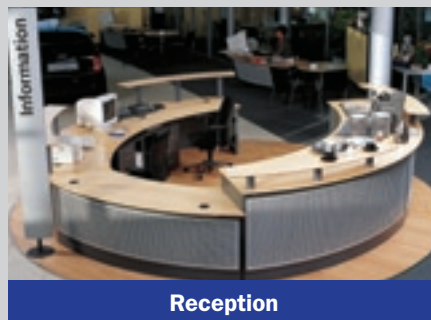
- Grouped and numerical warehousing systems and locator technology
- Compact storage equipment for
 - Small and loose components – operating variants compared
 - Customer tyre storage – operating variants compared
- SSI SCHAEFER NOELL PICKOMAT®

Automotive sales – totally integrated functions for the dealer's premises ...

State-of-the art process optimisation through careful fine-tuning to your sales strategy

SSI SCHAEFER produces a whole range of equipment designed for use on your premises. This includes carefully-designed storage systems, functional office equipment, customer-reception counters and the complete fitting-out of workshop facilities. All meticulously planned down to the smallest detail, supplied ready-to-use – with the entire system existing from a single source. The clear thinking of our attitude to design runs like a common thread through all our systems.

From the container designed to fit the shelf, to the shelf designed to fit the shelving system, to the equipment modules designed for compatibility with the overall system setup – each and every element



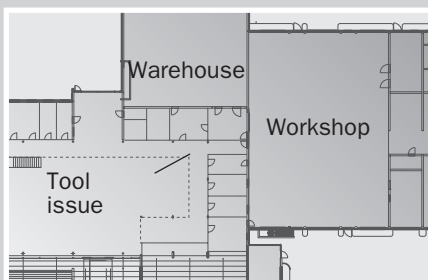
Reception



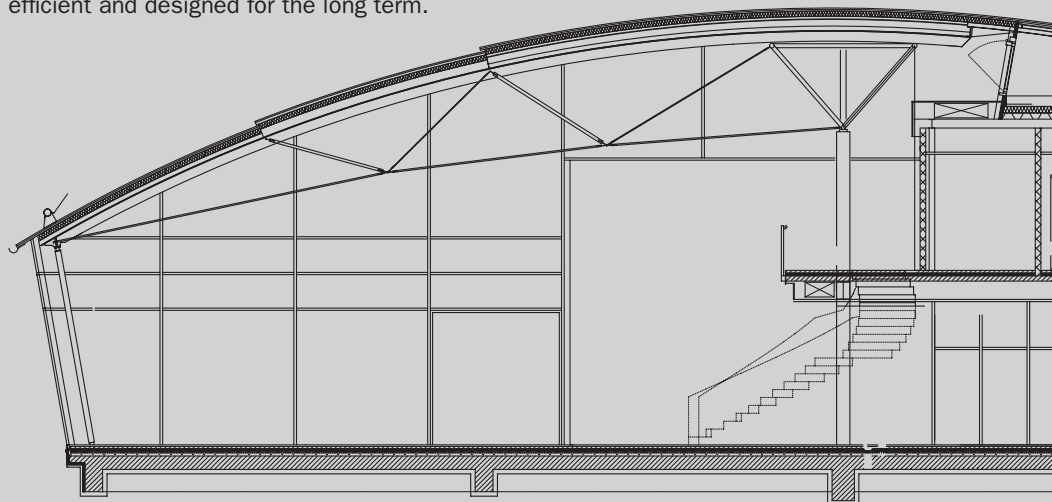
Consultation and sales

is fully compatible with its counterparts, thus allowing you virtually complete freedom in the modular configuration of your production plant or office. Effective, cost-efficient and designed for the long term.

Designs, concepts and solutions from SSI SCHAEFER



Three-point concept for the vehicle showroom: Goods IN/night delivery, warehouse, workshop issue and Spare-parts sales



Industrial waste disposal and recovery systems



Hazardous-substance storage



Recreation-room fittings

... Now more than ever the very focus of the customer's interest



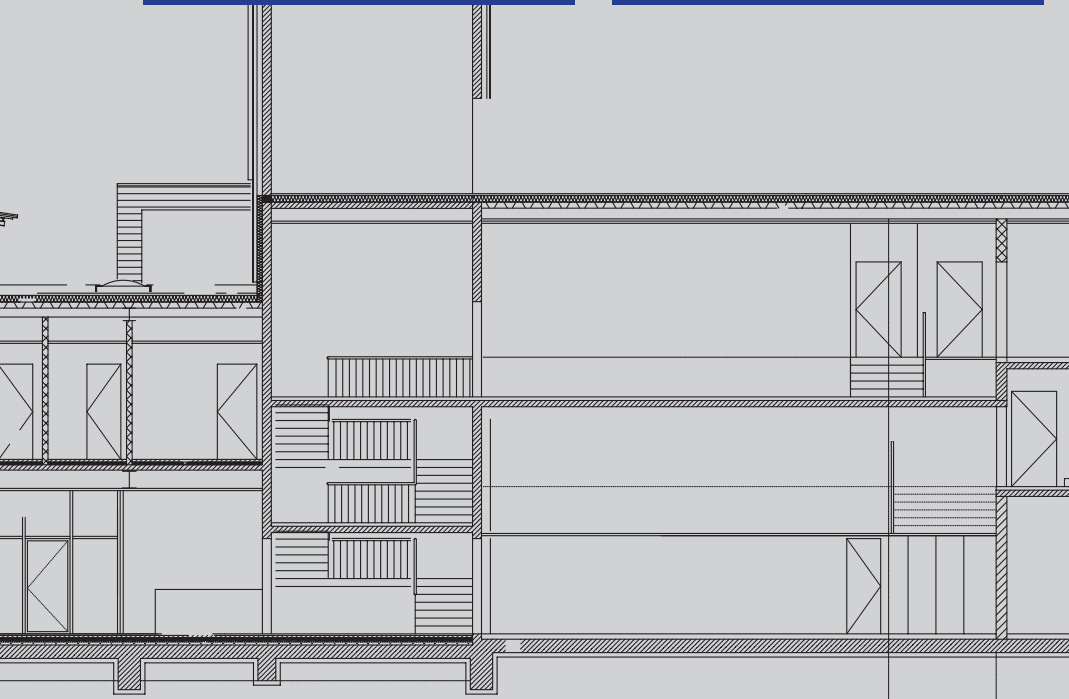
Service reception



Night delivery



Storage of small and loose parts



Storage of medium-sized items



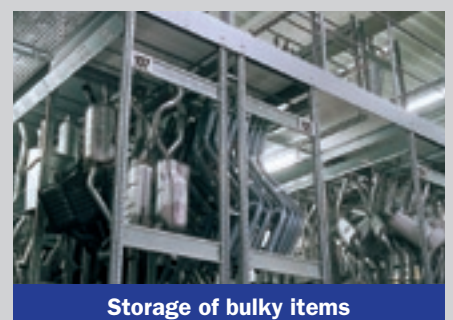
Storage of large items



Workshop fittings



Issue of materials



Storage of bulky items

First impressions count

A successful sale starts here



Your reception area, information desk and office are where your customers – both actual and potential – gain their first impressions of your organization. High levels of functionality for customer and employee share maximum importance with clear design and recognition factor.

A sense of order attained and conserved thus takes on a special significance. With its optimised organizational solutions, SSI SCHAEFER fulfils the prerequisite for efficient working at individually-configured workstations.



A clear set of services

Customer service with a relaxed atmosphere

Fully configurable containers with passive ventilation for printers and computers, counter units with integrated screen-display space – the range leaves nothing to be desired.

The range is designed to be attractive but discreet, so it will not distract from your vehicles – thus providing a solid platform for the promotion of your brand.

Service reception



Workstations designed to fulfil objectives

Consultation in an ordered atmosphere



There is nothing quite like a disordered, cluttered desk to make your customers doubt the value of your advice.

The key factors where the configuration of customer-consulting points is concerned are functionality and flexibility, if this air of uncluttered order is to be preserved.

The ideal customer-consulting point is a properly-designed desk with adequate drawer space. Our functional furniture is the best way of ensuring that your customers feel at ease whenever they visit your premises.



A sale successfully closed

Functional workplaces for your sales staff

Careful brand consistency does not just apply to your customer reception point in the showroom – it is just as important to the design of the back office where your detailed sales negotiations are concluded.

This is where SSI SCHAEFER offers individualized solutions based on a global concept.



The branding concept for today's vehicle showroom ...

Customer relations with a high recognition factor



... High-tech ambience from SSI SCHAEFER



First impressions count. Especially when the first impressions in question are intended to reflect a leading brand. A mix of spaciousness, soundness and reliability – paired up with high technology and modernity. An ambience that puts both customer

and employee at ease – making them feel that they have come to the right place. SSI SCHAEFER applies these design concepts to your dealership premises – in an individual, stylish and thoroughly organized way.



A future-orientated approach to showroom fitting ...

Consistent design to ensure brand identification

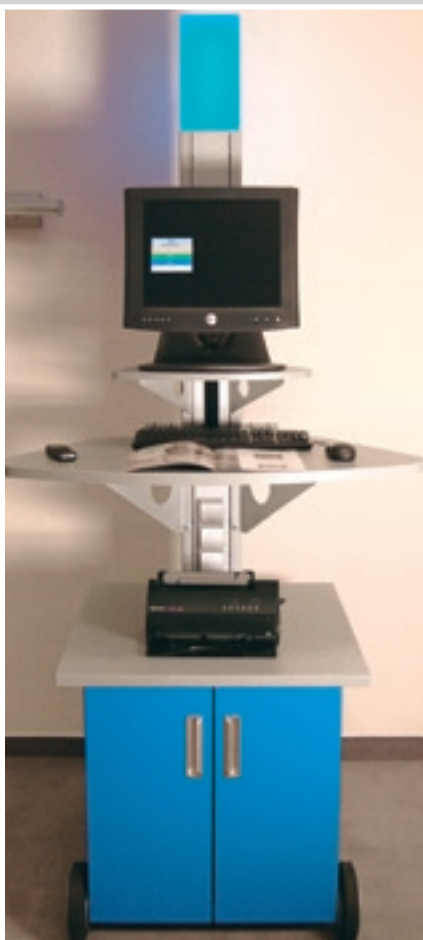


... Functional furniture designed to harmonize with the brand concept



We work in close collaboration with you to develop a design concept for high-quality furniture that fits perfectly into your working environment and organizational structures – down to the smallest

detail. An attractive design and optimised functionality, combined with a high level of recognition, promote the image of your brand, while giving your customers just the right impression.



Greeting station



Goods IN/OUT

The warehouse-based starting and end-points of the logistics chain

Movable surfaces in the Goods IN area are an absolute must where functional warehousing is concerned. Only in this way is it possible to guarantee the smooth entry and interim storage of large delivery shipments.

Mezzanine systems offer the advantage of being able to operate at individual shelf

levels. These units are available with two-leaf doors, sliding barriers or gates.

Equipment such as forklift trucks or simple goods lifts can be used for loading items at the individual shelf levels. SSI SCHAEFER also offers complete single-supplier solutions in this area. Warehouses with a large sales element

require a Goods OUT section with picking shelves for touring purposes, etc.

Sections separated off for night deliveries by means of robust steel grilles with single- or twin-section barriers are naturally also included in our range.



Storage mezzanine with rear grilles in Goods IN section, with pallet shelf to provide buffer storage



Sigma C mezzanine system

Goods IN – night deliveries

Round-the-clock functionality and security



The shortening of lead times is the basic factor where any totally customer-centred service concept is concerned. This means that your Goods IN section must be ready for operation virtually around the clock, with the acceptance of night deliveries making your operation more flexible.



Sections partitioned off using steel-grille dividers and end-walls



Freestanding night delivery section with partitioning

Storage of small and loose items

Space optimisation means less walking along shelves, thanks to practically-oriented warehouse solutions



Whether you need to store bulk dry goods or fiddly small parts – SSI SCHAEFER offers a wide range of systems designed to optimise to the maximum the available space and volume capacity. This includes, along with other items, a large selection of standard and customized containers with adjustable partitions.



The use of labelling strips



Storage of medium-sized and boxed items

Maximum use of available volume with ease of access thanks to a comprehensive range of system accessories



The systematic storage of medium-sized and boxed items requires a shelving system with a maximum degree of flexibility. A range of different shelf widths and heights allows the shelves to be adjusted so that no space is wasted when storing items packed in containers or boxes. This allows you to maximize the efficient use of available space.



Storage of large items

Gain free space and safety with these robust warehousing solutions



Twin-level storage mezzanine with protruding, cantilever-type platform

Practically orientated planning and design are key factors where the handling of large items is concerned. Storage surfaces and access passages must be appropriately proportioned to allow the fast movement of goods into and out of the warehouse. Practical large-compartment and extra-wide shelving solutions are SSI SCHAEFER's answer to this need, and can be customized to suit the exact requirements of the individual warehousing operation. This naturally applies both to single-storey and multi-level configurations. The use of free space at higher levels now becomes a profitable proposition. The professional solution is to take advantage of this space using systems from SSI SCHAEFER.



Storage of vehicle bumpers



Extra-wide shelf in large-component store

Storage of bulky items

Optimum handling and flexibility with maximum variations and fast adjustment

Our wide range of systems – with pallet, cantilever and compartment shelves – is what allows us to offer such a large selection of configurations, all designed to provide the practically-oriented solutions that the market demands. We are forever pushing the limits of what is possible, while constantly setting the benchmarks by which modern warehousing solutions are judged.

The traversing sections are fitted with holes to take the separator bars used to divide off each section or individual large item. Terodaem covering helps protect warehoused items from the rough handling they might receive while in store.

The range is rounded off by our wide selection of accessory items.



Exhaust-pipe storage



Hanging storage for springs



Horizontal storage of brake cables in cantilever-type shelf

Storage of vehicle-body sections

Competence plus experience equals solutions



The large number of different models of vehicle on the market naturally results in the existence of myriad body parts for those vehicles. SSI SCHAEFER technology gives you maximum flexibility and the possibility to reconfigure your warehouse at very short notice.

Pre-perforated system components and separator elements provide order and security. Use integrated warehouse solutions in conjunction with covered mezzanines to increase the free space at your disposal.

Freestanding cantilever-type shelves permit the storage of all imaginable types of automotive-sector components.

Take full advantage of SSI SCHAEFER's wide experience and range of competence when implementing your warehousing plans.

Whether bonnet lid, wing or bumper – every item has its place



Bonnet lids – upright storage in shelf section



Storage of extra-long components in cantilever-type shelf

Storage of vehicle glass

Safe storage in upright or horizontal position



Windscreens and tailgate glass require particularly careful handling. The safety factor plays a key roll when storing these items – as breakages are costly!

Optimum positioning allows smooth movement into and out of storage, while ensuring that the stored items are kept firmly in place with a very limited amount of play. Freestanding and cantilever-type shelves, used in conjunction with narrow or wide cantilevers, permit the storage of either boxed or shrink-wrapped components.



Upright storage in shelf section



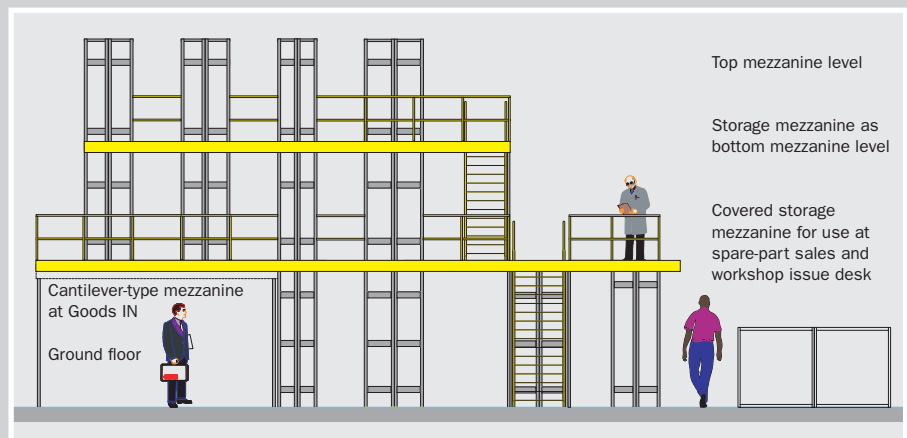
Horizontal vehicle-glass storage with adjustable level settings, cantilever lengths of 600 or 800 mm

Optimisation of vertical space with multi-level systems

Storage and handling on several levels

There are multi-level configurations for any type of storage requirement. Small and loose components, large and bulky parts, medium-sized and boxed items – they can all be optimally stored in the narrowest of available spaces. With easy access via the shortest possible routes.

Multi-level warehouse designs created by SSI SCHAEFER take accessing frequency fully into account, along with convenient handling, to make your operating procedures as efficient as possible.



Schematic diagram of cantilever-type and shelf-bearing system mezzanines



Transfer points in Goods IN area



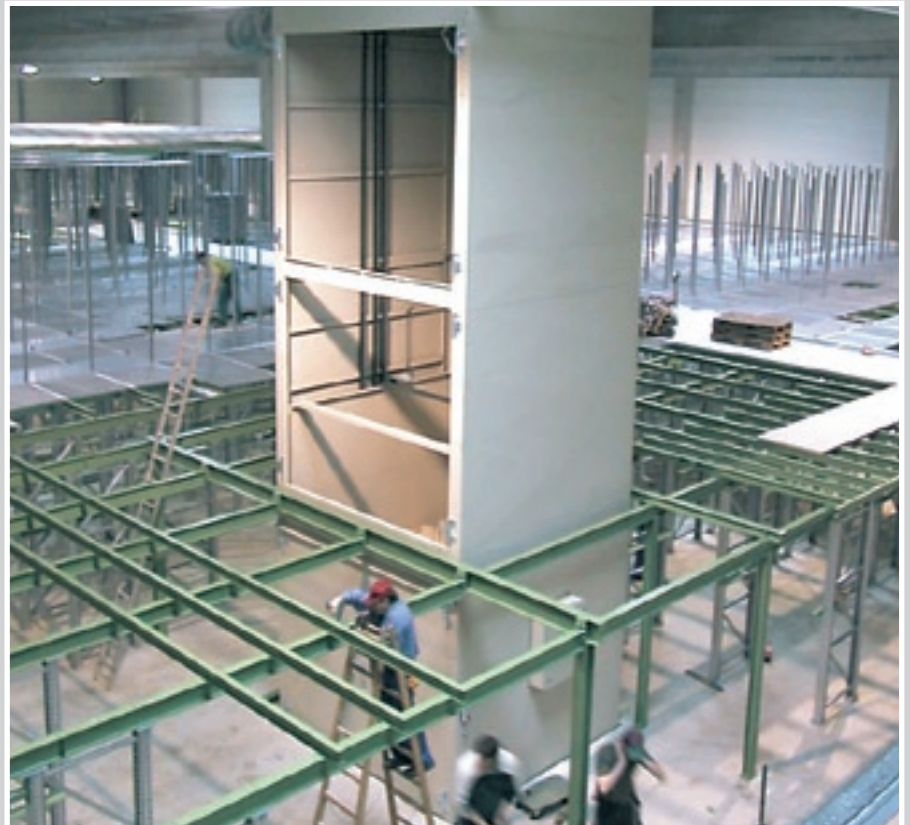
Three-level storage mezzanine with transfer point and railing barrier

Fully-integrated Goods-lift systems and handling devices

Handling of large and bulky items –
with professional working procedures and fast access

The inclusion of Goods-lifts improves access convenience – especially where heavy and bulky items are concerned. And SSI SCHAEFER can of course also integrate a goods lift to optimise the handling of boxed items and small parts.

Whether for two floors or multi-level configurations – goods lifts get things moving in your warehouse.

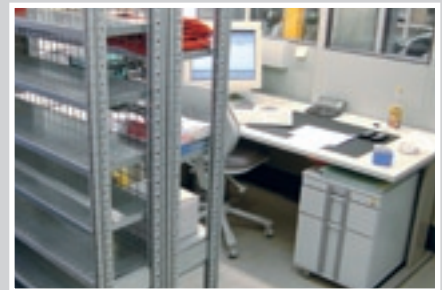


Interfaces between warehouse, workshop and production area

Warehouse and workshop administration



Use our issuing desks and tool cabinets – in conjunction with our functional, robust and fully-organized office-furniture systems – to create a perfect working environment for the staff in your warehouse and workshop.



Fully-organized service points for customer and workshop

Tool- and material-issuing points for a smooth and reliable flow of material



A functional material and tool-issuing desk is the key to smooth workshop operation.

This ensures the easy handling of tools and spares, while keeping searching and waiting times to an absolute minimum and guaranteeing customer satisfaction at the spare-parts counter.

Modular cabinet systems and single cabinets with standardized system dimensions are the building blocks that SSI SCHAEFER uses to create its tool-issue desks.

Cabinets with drawers and sliding doors, or open shelving systems, offer maximum flexibility and a range of variations for virtually any need.



Material-issuing desk and self-service wall display with fixed shelf compartments in customer-service area



Workshop issuing desk with lockable cabinets



System cabinets for issuing desks with standard height and bar-counter access

You will find further information on this subject in our „Workshop and Production Equipment“ catalogue

Secure storage of materials and tools

System cabinets for workshop and production



The need to stock a wide range of small items makes efficient warehousing vital. And large tools also find their ideal storage space with cabinet systems from SSI SCHAEFER.



Fixed-shelf cabinets form a self-service access point



Lockable secure storage with barrier doors in shelf section



Lockable tool-storage drawers



Wide-ranging configuration for maximized use of space

Material-handling and archiving systems

Transport devices, warehouse trolleys, small-item storage at the place of use and safe storage of important archives in compact sliding file shelves complete our range of items for use in workshop and production.



Wall shelves for installation above workbench



Issue of tyres from store for customers



Tyre transport trolley



Shelf stands with open storage containers



Transport trolley for detachable hardtops



Fixed-configuration trolley



Compact archive storage with smoothly operating rail-free sliding shelves

Optimised workplace configuration

System workbenches

Are you looking for an optimised workplace for your employees? No problem – our system-workbenches are of modular design and can be extended at any time. In any configuration: whether arranged in a row, as a team-island or an individual workstation. SSI SCHAEFER provides the system components for your workshop.

The individual combination of standard system modules, variants and special accessories allows all the requirements

of an up-to-date bench-based workstation to be fulfilled.

Important system components such as electrical and compressed-air hookups, cable and hose drums, work surfaces made of special materials, wall-mounting segments and PC and monitor brackets provide the details that complete your bench-based workstation or direct-issue point.



Designer workstation in direct-issue area, based on drawer-cabinet modules



Workbenches with built-in chests of drawers

Fittings for changing rooms and recreation areas

Recreation-room fittings

The fact that thousands of SSI SCHAEFER lockers are now in use testifies to their quality. You can of course count on all our lockers complying with relevant safety-at-work legislation and directives.

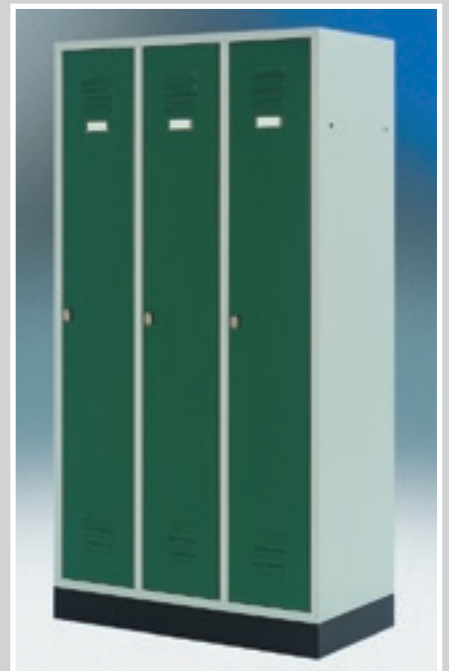
Our recreation room fittings provide your employees with ideal changing facilities.



Chairs and tables for use in recreation rooms



Four-locker units with built-in bench



Three-locker unit with base section



Coat-hanger unit with small lockers



Locker-width of 400 mm with hinged door



Locker-width of 600 mm, with two separate components

Safety technology

Storage of hazardous substances in the workshop and production area – safety precautions

The incorrect storage of hazardous substances can lead to serious injury and grave material damage.

Organizations that fail to store hazardous substances correctly are likely to suffer these consequences:

- Infringement of applicable legislation (e.g. VbF/TRbF, GefStoffV, WHG, ZH1/119, or your local equivalents)
- Cancellation of liability insurance
- Personal liability of company management for any injury, loss or damage that might arise
- Major costs for cleanup and waste disposal
- Incalculable production downtime losses resulting from cleanup costs and claims for damages
- Long-term damage to the organization's public image
- Loss of trust on the part of your customers and employees

SSI SCHAEFER hazardous-substance storage cabinets offer the best way of avoiding these scenarios. Because our products are designed for use in real situations. Along with adequate ventilation designed to avoid accumulations of explosive mixtures of gases, these items are naturally configured to conform to

relevant fire-prevention standards (e.g. DIN 12925, part 1 [April 1998] and TRbF22, or your local equivalent).

SSI SCHAEFER hazardous-substance cabinets – the key to avoiding accidents and their consequences



So what exactly is “incorrect storage”?

Examples include clause 3 section 3 of the German hazardous-substance regulations (GefStoffV), which defines incorrect storage as being left in the workplace in an unsecured state for more than 24 hours.

The German regulations covering inflammable substances (VbF, clause 2, section 2) define incorrect storage of these substances as follows:

- Substances not required for immediate use
- Substances not required to continue a process currently under way
- Substances not required for the carrying out of lab tests

And where should these substances be stored?

The use of normal storage facilities is not permitted except for in certain exceptional circumstances. All other storage requires the use of special storerooms or safety cabinets designed to strict specifications.



Highly inflammable



Easily inflammable



Hazardous to health



Poisonous



conditional

Irritant



Hazardous for the environment

Systems for the storage of hazardous substances

Hazardous-substance storage cabinets, drum storage

Fire-resistant hazardous-substance cabinets are used for storing inflammable liquids in working areas. These guarantee optimum security when working with hazardous substances such as solvents. Hazardous substances must also be securely stored to prevent them causing groundwater contamination.

SSI SCHAEFER offers a wide variety of solutions to meet your requirements in this area – whether for barrel racks mounted above a drip tray or secure cabinet storage for small individual containers.



Hazardous-substance storage cabinet with folding doors



Easy access with optimised use of space



Chemicals cabinet



Environment-protection cabinet



Barrel storage



Oil drip-tray



Barrel storage with drip trays

Industrial waste disposal and recovery systems

For the ordered sorting of waste ...



Large waste bins

SSI SCHAEFER lays the basis for hygienic and convenient raw-material recovery, while ensuring that recyclable waste is handled in a conscientious and environment-friendly manner.

Our wide range of different collection containers with various configuration possibilities permits their use in all manner of areas, while reducing costs and making them compatible with any common type of collection equipment.



Large refuse container



Front-loading container



Modular container



Bin for used cleaning rags



Large waste bin in galvanized steel

Today's waste-disposal systems need to be safe, reliable and designed for the long term. And SSI SCHAEFER is the specialist supplier of choice worldwide, wherever there is a need for totally reliable and tried-and-tested handling systems for recyclable waste, designed to feed reusable materials back into the manufacturing cycle and effectively dispose of all residue.

We work in collaboration both with publicly owned and private waste-collection agencies – and also with a great number of other organizations – to develop systems designed to fulfil virtually any need in this area.

Large collection bins and large refuse containers made of plastic

... and its safe disposal

SSI SCHAEFER's large refuse containers offer the following main advantages:

- Low weight with large capacity
- Maximum stability when under load
- Easy and convenient to handle and move around

Outstanding quality characteristics include:

- Additional strengthening ribs around upper rims
- Ergonomic angled moulded handles on hinged lid
- Robust and reliable four-hinge-and-pin design

Available in different colours to aid in the sorting of recyclable materials and waste.



Large refuse containers made of plastic, available in various colours and with volume capacities of 60 to 360 litres



Automatic container tipper: for the easy handling of large refuse containers

The automatic tipper reduces effort to a minimum, while simplifying the emptying process and saving valuable time. The hydraulically-operated, mechanical tipping mechanism is designed for the emptying of heavily-loaded refuse containers.



Large refuse container with capacity of 0.66, 0.77 and 1.1 m³

Robust refuse containers for industrial and workshops use

Containers made of galvanized sheet-steel



Large refuse container made of galvanized steel with capacity of 1.1 m³



Large refuse bin made of galvanized steel, with 240-litre volume capacity



OLEOCONT®, special container for oil-based waste

Our large refuse containers made of galvanized steel provide a lightweight but robust system for the collection of waste and residues. A wide selection of flexible configurations and accessories turn this range of containers into a true all-rounder for the efficient collection of industrial waste.



Optional forklift insertion points



Optional trailer coupling and towbar



Special OLEOCONT® container made of galvanized sheet-steel, with securely fitting lid, designed for the safe collection and disposal of waste oil-based substances. This container can be supplied to order with an oil filter and outlet adapter. Rubber-tyred wheels provide mobility.

This large refuse bin made of galvanized steel is a special container for use at industrial waste collection points where there is a major fire hazard. The 240-litre capacity container is equipped with robust sidewalls, an easy-to-shut lid and smooth-running rubber-tyred wheels.

Large-volume recovery containers

Front-loaders and tipping containers

Front-loading systems are noted for their high efficiency. One-man operation of the collection system saves time and money – for both public- and private-sector collection agencies. These galvanized-steel containers are designed for the collection of many different types of waste.



Large quantities of waste require collection systems with high volume capacities. Tipping containers must be equally suitable for use with hydraulic or cable-operated

tipping mechanisms. This is how we offer an efficient and advanced collection system for use in real situations.



Centralized-warehouse concepts and spare parts logistics

Point of departure: service orientation and reaction speed

The achievement of a high level of service is nowadays a basic prerequisite for gaining customers and ensuring their continued loyalty to your organization. The key factor in this respect is the smooth functioning of the logistics chain.

The systems and concepts supplied by SSI SCHAEFER take fully into account and amply fulfil the wide-ranging requirements of modern logistics. Only perfect organization, which fulfils customer requirements at all the main points along the chain, can succeed in reaching these objectives in the short term.

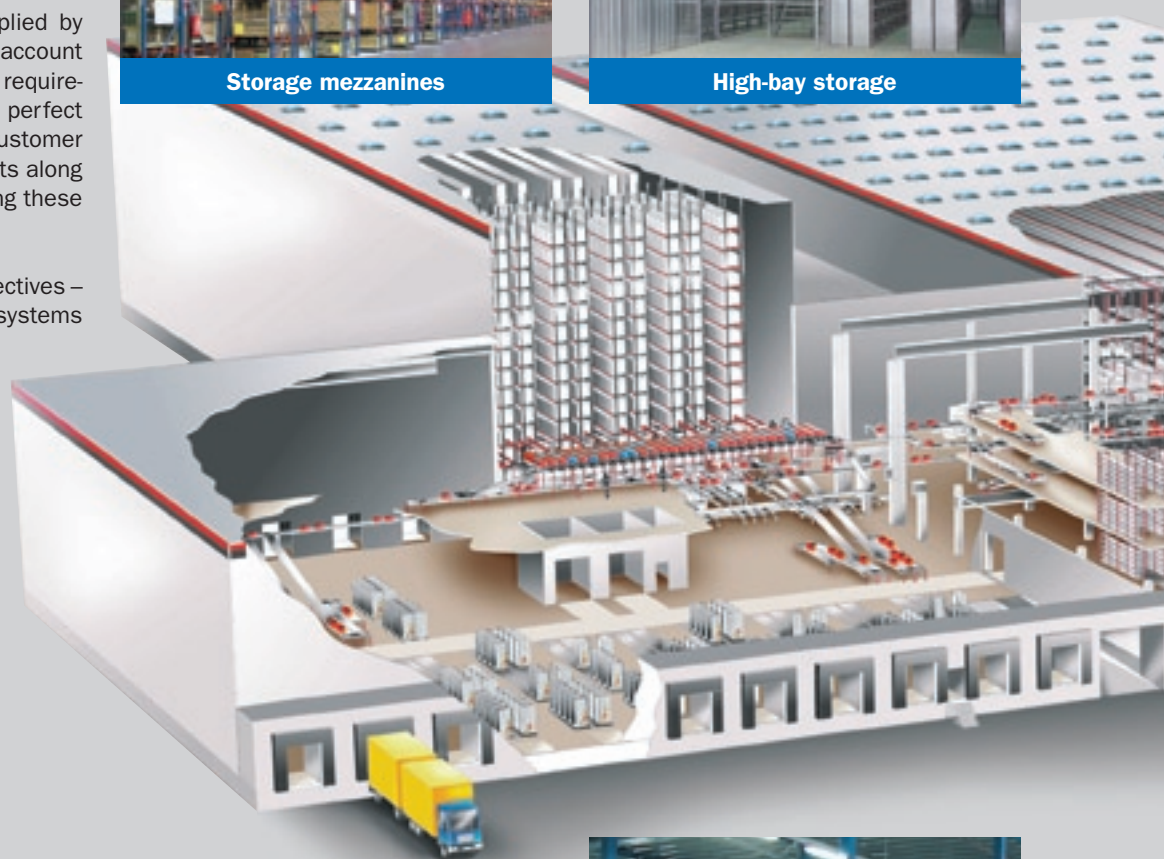
Fast and efficient fulfilment of objectives – with warehousing concepts and systems from SSI SCHAEFER.



Storage mezzanines



High-bay storage



SPACE-GAINING SYSTEMS
solutions@ssi-schaefer.co.uk



Sorting systems

Objective: customer satisfaction and long-term loyalty



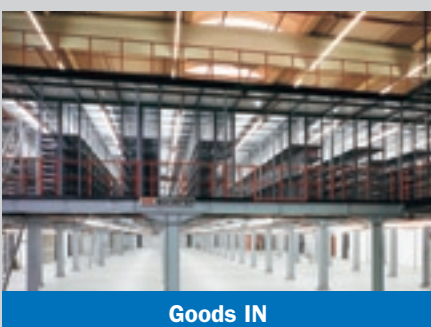
Mini-load® (AKL)



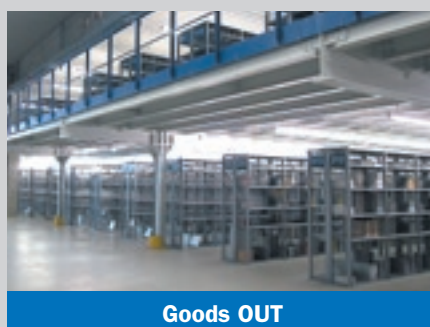
Automated pallet warehouse



Hazardous-substance storage



Goods IN



Goods OUT



Materials-handling technology

Material-flow and warehousing technology in Goods IN/OUT areas

Smooth and efficient procedures
to ensure maximum utilization of space



The correct use of available space helps the warehouse to run efficiently and smoothly. Modern warehousing technology from SSI SCHAEFER takes this into account, thus contributing to improvements in your organization's bottom line.

Optimized accessibility for fast moving items is supported by shelving modules with tilted shelves which are placed perpendicular to the end of shelving rows.



The seamless matching of shelving systems and materials-handling technology

Multi-level warehouse solutions for Goods IN/OUT areas

Cantilever-type mezzanines, storage mezzanines
and covered storage mezzanines



The optimal fulfilment of day-to-day operating requirements is fulfilled by the flexible application of a large range and variation of systems.

These include cantilever-type mezzanines in the Goods IN area with upper storage mezzanines, storage mezzanines with full-length support frames designed to carry distributed loads of up to five tons and covered storage mezzanines that double your handling floorspace.

SSI SCHAEFER plans, supplies and sets up the definitive system.



Material flow with reusable containers

Container systems designed to improve handling procedures in the Goods IN/OUT areas



Sloping-sided reusable container with lid

We achieve simple, secure and fast handling thanks to planned and carefully fine-tuned logistics structures. Container management is becoming more and more important in this respect, as floorspace requirements for return transport and access speeds are directly reflected in handling costs.

SSI SCHAEFER has the right container solutions for your logistics system: folding, nesting or stackable in any direction; dust-, air- and shower-protected and with optimum security to prevent unauthorized access.



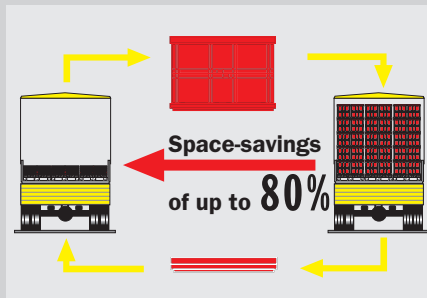
FK-boxes with roller pallet for transport



Sloping-sided POOLBOX® transport container



Reusable container with hazardous-substance approval



Sloping-sided stackable containers with hazardous-substance approval



Folding-lid FK box in the commissioning warehouse

Pool systems reduce costs

Concepts and practical solutions through a combination of container systems and identification



Heat-embossed container



Reusable container with barcode label



Reusable container with despatch label

Special container configuration helps ensure smooth flows of material.

Washable and wear-resistant heat-embossing increases brand recognition, ensuring – when used in conjunction with barcode labels – that the container finds its way around the processing cycle.



Speak to our specialist consultants about the possibilities and advantages offered by pool systems. We help you to optimise your material transport.

Containers for warehouse, commissioning and transport use

A complete range of boxes and containers for
use in central warehouses and vehicle dealerships



Open storage containers in assembly area



Combined use of open boxes and shelf containers for the storage of small items



Folding-lid box



Folding-lid boxes in commissioning area

Tried-and-tested systems for all requirements

The range of possible applications for SSI SCHAEFER boxes is virtually limitless



Euro-Fix boxes in Goods OUT area

Our wide and carefully designed range includes more than 2000 different types, configurations and sizes. All designs have been fully tried and tested in countless real situations.

This means greater reliability for you – as the hard conditions of everyday operation are always a better indicator of quality than any test ever will be. You can rely on the configuration and material quality for each type measuring up to that promised.

Use the know-how of SSI SCHAEFER – the re-inventor of the box.



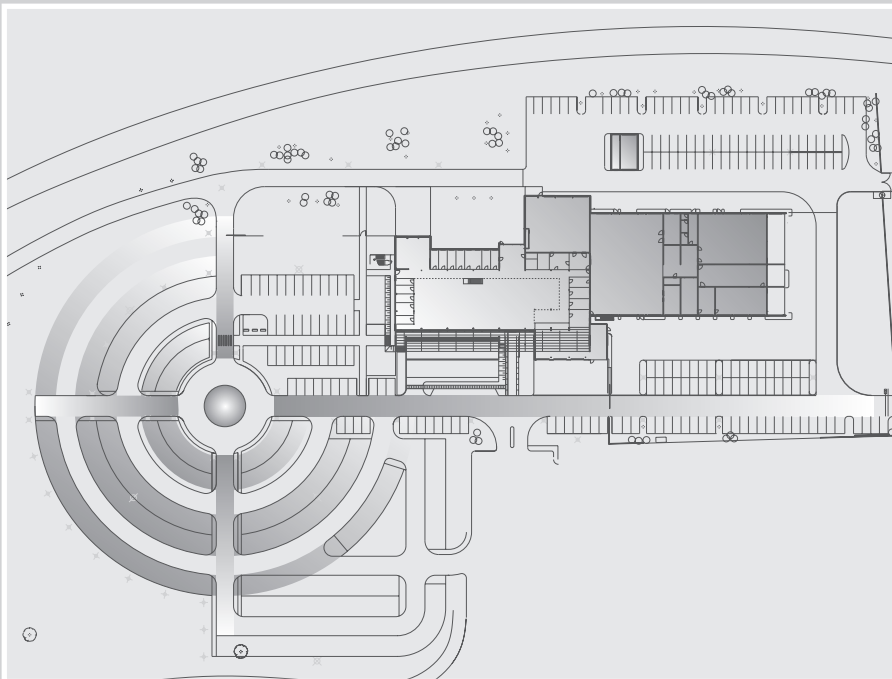
Mesh boxes on pallet shelves



Euro-Fix boxes in mini-Load® (AKL)

Points to note on the optimisation of general procedures and warehouse processes

Warehouse organization –
competence in all phases of the planning process



The right concept created with the right system. Practically-oriented solutions derived from the SSI SCHAEFER philosophy of "Solutions that fit."

Our expertise in warehousing technology is what allows you to create and implement your vision.



Careful planning and analysis of onsite conditions make it possible for us to convert your objectives into real floor-plan and flow-cycle systems. Go from initial chaos to tried-and-tested service solutions for warehouse and production.

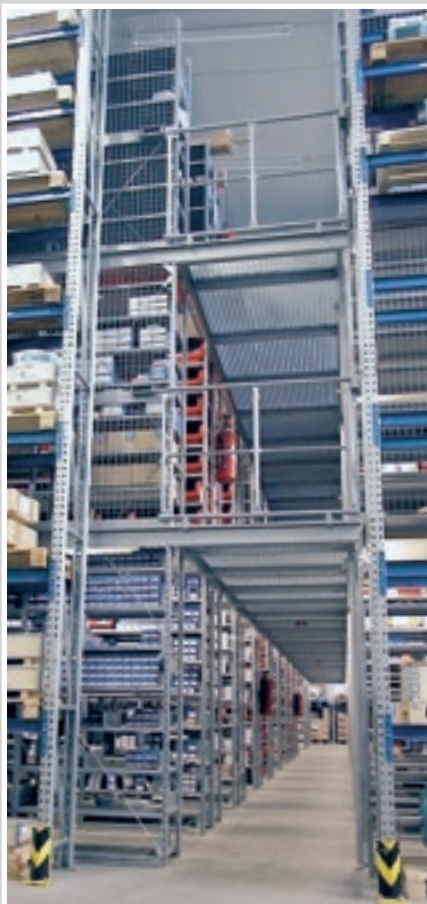


Before warehouse reorganization ...



... and after warehouse reorganization.

Improve your procedures with tried-and-tested technology and professional project management



Customer and supplier working together

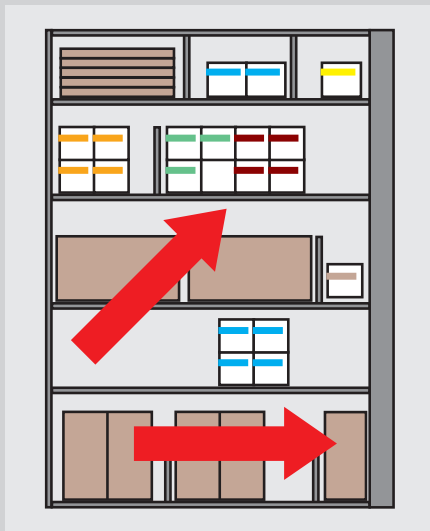
Our decades of experience and the implementation to date of thousands of logistics concepts are your guarantee of having chosen the right supplier.

SSI SCHAEFER works hand-in-hand with SSI SCHAEFER NOELL and SSI SCHAEFER PEEM to offer competence right across the range of integrated logistics solutions – all from a single supplier.



Comparison: organizational principles in the warehouse

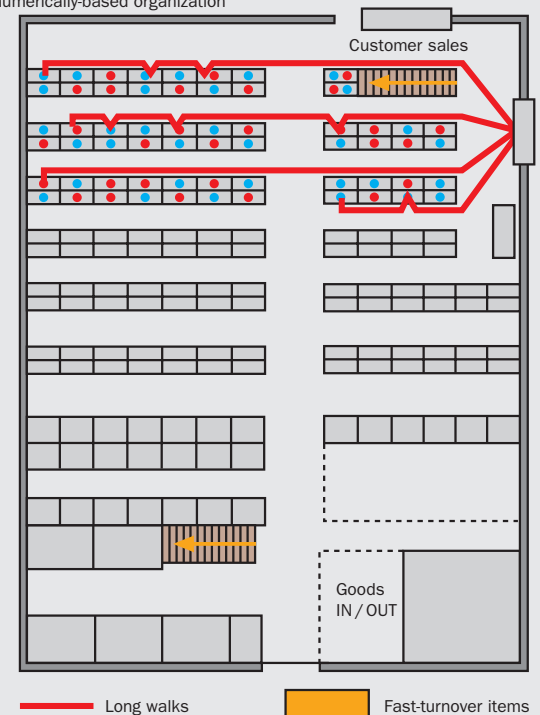
Numerical and grouped-numerical warehousing – clarity and easy implementation thanks to flexible warehouse systems



The electronic data-processing system catalogues all articles by part number rather than handling frequency.

- Long learning curve for understanding of the system
- Access by trained personnel only
- Low level of storage density
- Results in large amounts of unused floorspace (up to 40% of total)
- Does not permit storage according to size or length
- Long walks and delays in access
- Does not permit storage according to handling frequency
- Difficult to regard as an overall whole
- High staffing costs

Before and after warehouse reorganization: the change from numerically-based organization

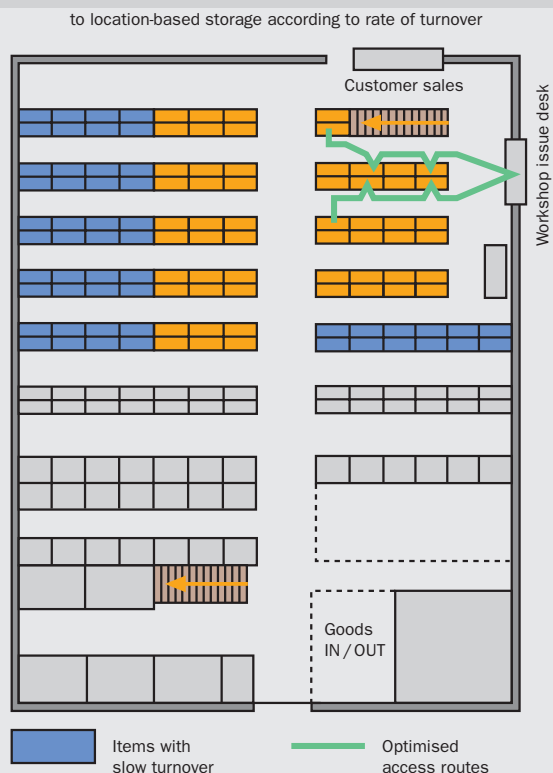


Grouped-numerical warehousing – simple to organize but hungry for space



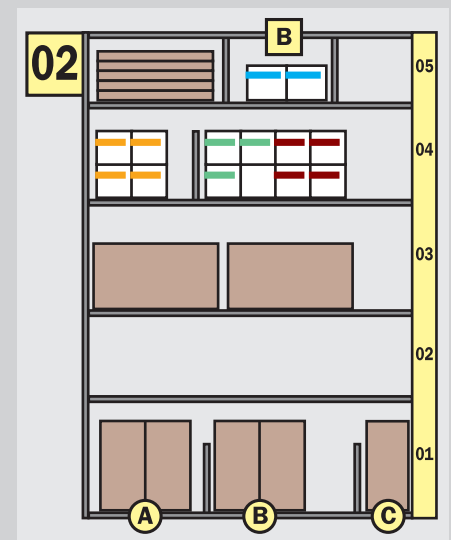
Floorspace-utilization improved by implementing warehouse technology

Locator technology – compact warehousing concepts with a combination of warehouse-technology modules



The most effective system of warehouse management is based on locator technology. This involves dividing up the warehouse according to coordinates. Each article is tracked by the electronic data processing system in its position and administered according to handling frequency.

- Easy-to-understand warehouse management
- High-density storage
- Increased warehousing capacity
- Shorter walks and fewer delays in access
- Faster Goods IN and Goods OUT processing
- System can be operated by temporary staff
- Reduced personnel costs
- Storage according to fast or slow turnover
- Permits storage according to size or length
- Permits storage according to handling frequency
- Permits storage according to ergonomic factors
- No need to relocate stocks when part-numbers change
- Shorter payback times



Example: locator number 02B01A
 02 = shelf-row 2
 B = shelf B
 01 = compartment number 1 (first from bottom)
 A = area A within compartment



Warehousing with locator technology – denser and more compact

Maximum use of available volume with sliding-shelf systems

Future-oriented service concepts and customer relations with creative and flexible warehousing solutions

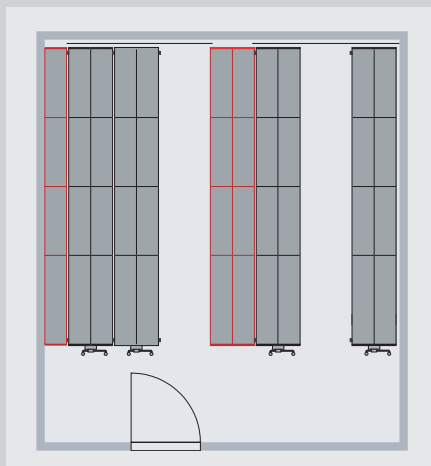
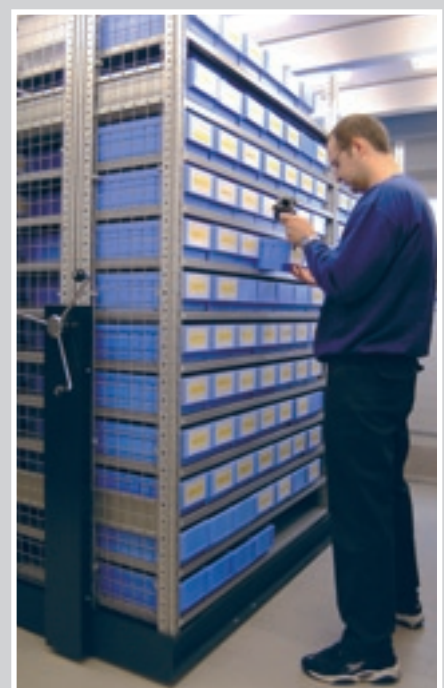


Combined compact storage with sliding shelves for small components and customer tyres on vehicle dealer's premises

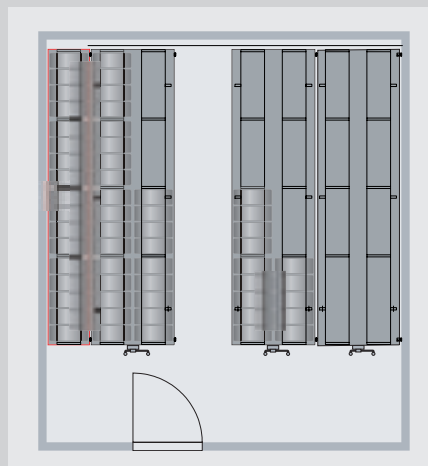
The maximum utilization of available space and/or the minimizing of space requirements in new buildings takes on vital importance where the cost-optimisation of the vehicle-part distributor's premises are concerned.

Rail-less or linked sliding-shelf systems from SSI SCHAEFER set benchmarks in quality and reliability. They form the keystone of your operational and procedural optimisation, whether in the C-component area, small-parts warehouse or for customer relations based on the "customer tyre store" concept.

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Space compression in the small-parts storage area



Improved utilisation of space in the tyre storage area

Compact storage of small parts and loose items

Sliding-shelf systems and mezzanine structures – operational variants for reductions in floorspace – the alternatives compared



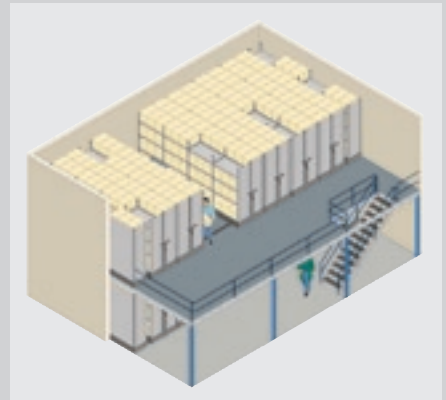
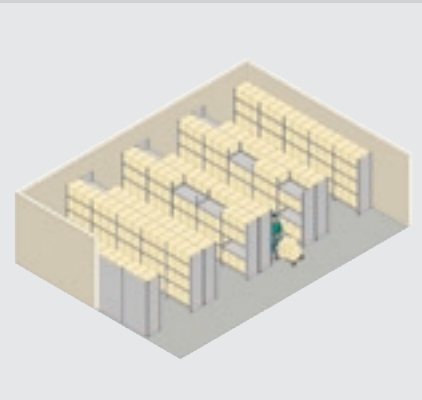
Fixed-position shelving system



Rail-mounted system



Multi-level mobile shelving system – without rails



Fixed standard-type shelving system

Building cost	26.000,00 €
Costs of shelving system, four levels	4.000,00 €
Total	30.000,00 €

Floorspace utilisation rate of storage area **37%**
 Storage capacity **160 compartments areas**
 Cost per storage area (incl. building) approx. **187,50 €**

Rail-less mobile shelving storage, single-level

Building cost	26.000,00 €
Costs of sliding system	6.400,00 €
Costs of shelving system, four levels	6.775,00 €
Total	39.175,00 €

Floorspace utilisation rate of storage area **65%**
 Storage capacity **280 compartments areas**
 Cost per storage area (incl. building) approx. **139,91 €**

Storage capacity increased by	75%
Cost reduction per storage area of around comparison to example 1	25%

mobile shelving storage, two-level, height approx. 5,200 mm

Building cost	26.000,00 €
Costs of mezzanine construction	6.100,00 €
Costs of sliding system	11.100,00 €
Costs of shelving system, four levels	10.900,00 €
Total	54.100,00

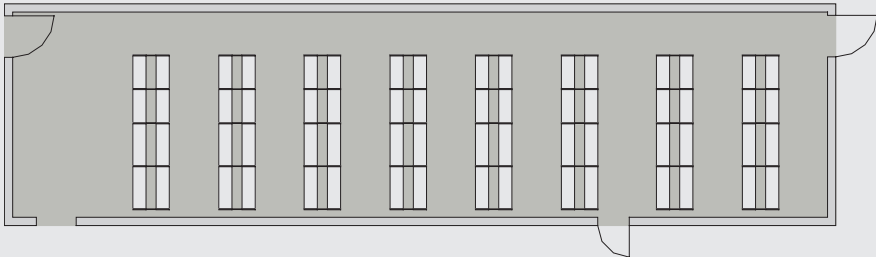
Floorspace utilisation rate of storage area **105%**
 Storage capacity **448 compartments areas**
 Cost per storage area (incl. building) approx. **120,76 €**

Storage capacity increased by	180%
Cost reduction per storage area of around comparison to example 1	35,6%

Tyre storage concepts for customer convenience

Single-level operating variants – comparison of fixed and sliding shelf systems

Example 1: Single-level shelving system, fixed
Storage capacity = 192 sets of tyres

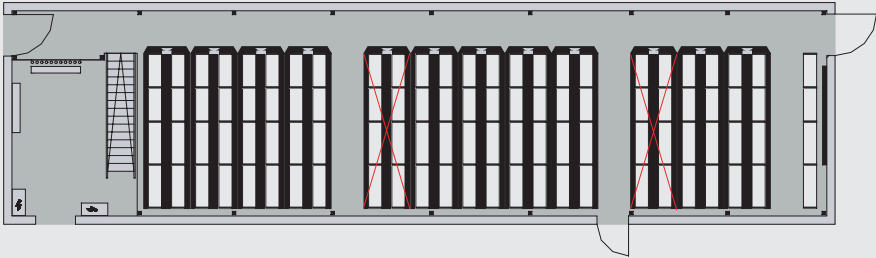


- Advantage:**
- Lower investment costs
 - Amortized in short term

Fixed shelving system, single-level		
Floorspace occupied	22 x 6,6 m	145 m ²
Room height	5 m	
Storage capacity		192 Sets



Example 2: Single-level sliding-shelf system – without rails
Storage capacity = 312 sets of tyres



Sliding-shelf system, single-level		
Floorspace occupied	22 m x 6,6 m	145 m ²
Room height	5 m	
Storage capacity		312 Sets
Additional capacity with respect to example 1		62,5 %

- Advantage:**
- Lower investment costs
 - Amortized in short term
 - Increase storage capacity
 - Efficient use of floorspace



Tyre warehouse with special wheel traverses



Fully-organized and compact tyre storage

Optimised use of space with sliding-shelf systems

Tyre storage on two levels and compact storage

Sliding-shelf system, two-level

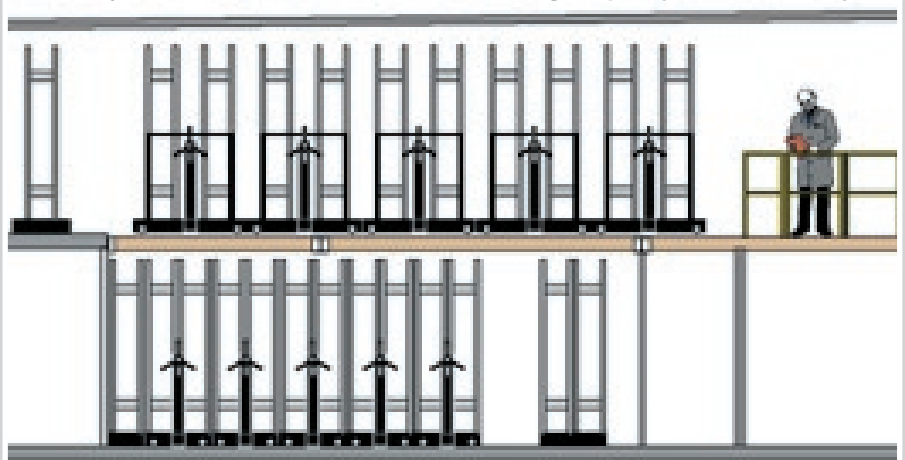
Floorspace occupied	22 m x 6,6 m	145 m ²
Room height	5 m	
Storage capacity		624 Sets
Additional capacity with respect to example 1		225 %

Advantage:

- High annual turnover
- High storage capacity
- Efficient use of floorspace and volume
- High reserve capacity

Example 3: Two-level sliding-shelf system with intermediate mezzanine floor – rail-less system

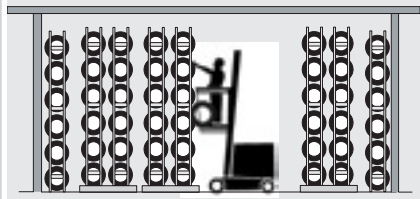
Storage capacity = 624 sets of tyres



Sliding-shelf system with shelf-operation device

Floorspace occupied	22 m x 6,6 m	145 m ²
Room height	5 m	
Storage capacity		749 Sets
Additional capacity with respect to example 1		290 %

Storage capacity = 749 sets of tyres



Advantage:

- Very high storage capacity
- High annual turnover
- Efficient handling
- Very efficient use of floorspace and volume
- High reserve capacity

Example 4: Compact storage in sliding-shelf system with shelf-operation device – electrically actuated system

Storage capacity = 749 sets of tyres



Electrically actuated heavy-duty sliding system, length 22 m – extendible and flexible

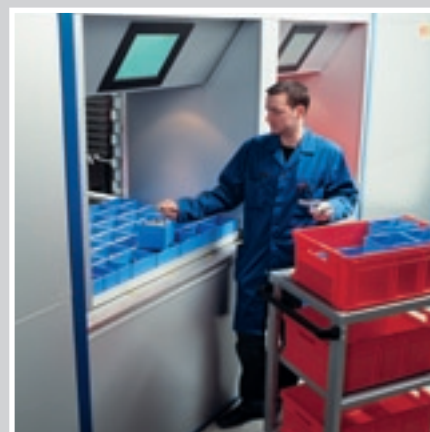
High-density storage modules for small parts – PICKOMAT[®]

Dual container preparation

The use of two integrated outlet openings virtually eliminates waiting times, because while a order picking is taking place at one opening, the next one is already being prepared,

allowing picking lists to be processed directly at the Pickomat automated picking system.

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solutions@ssi-schaefer.co.uk



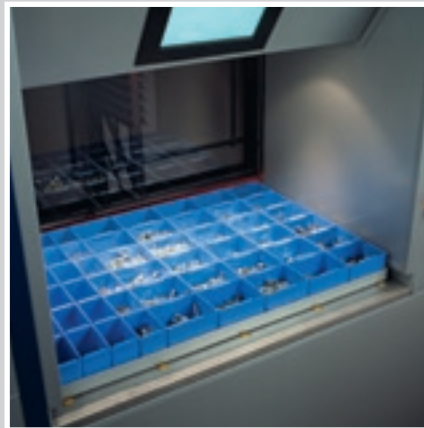
Order picking at two outlet openings



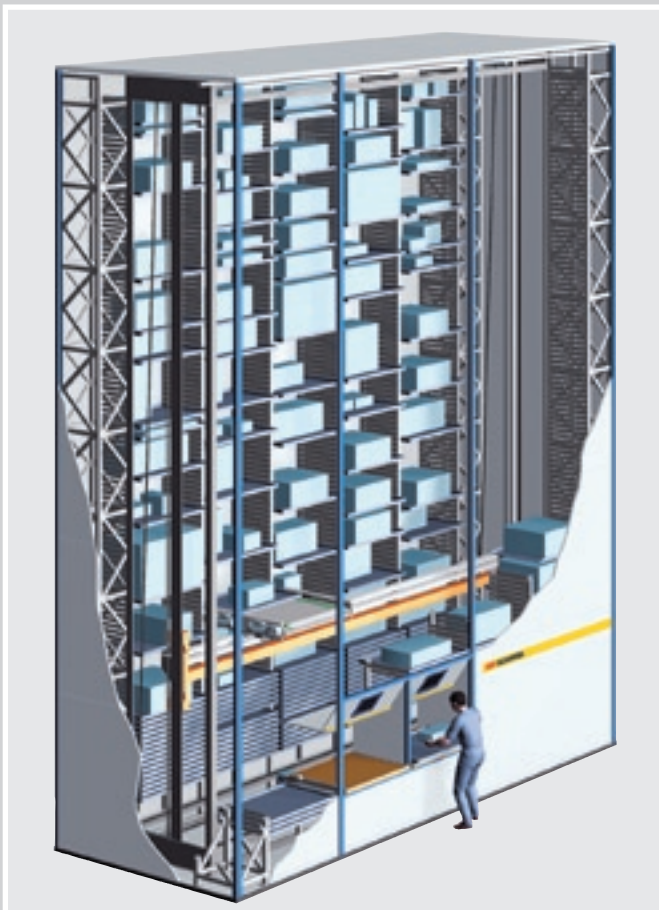
Three-dimensional container storage

Direction Y, Z or X – the right way to the storage position

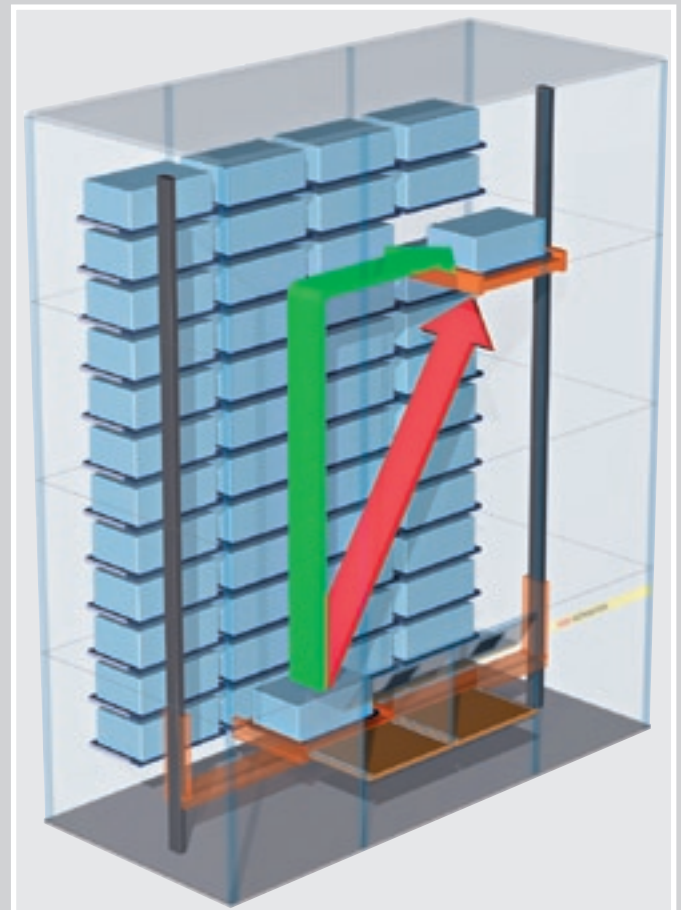
Whatever the direction – PICKOMAT® always chooses the direct route. The extractor unit, which is mounted on a moveable beam and uses a totally new type of lifting technology, enables PICKOMAT® to move along the time-saving X-axis as well as the habitual Y- and Z-axis. Fast operation paired up with reliable and thoroughly tried-and-tested technology – that's PICKOMAT® in a nutshell.



Each valuable space is occupied by storage boxes



Dual container preparation



Movement along all three planes

Notes

Notes

This image shows a full page of blank graph paper. The background is a solid light gray color. Overlaid on this background is a precise grid of thin, dark gray horizontal and vertical lines. These lines intersect to form a series of small, identical squares across the entire surface of the page, providing a guide for drawing or writing.

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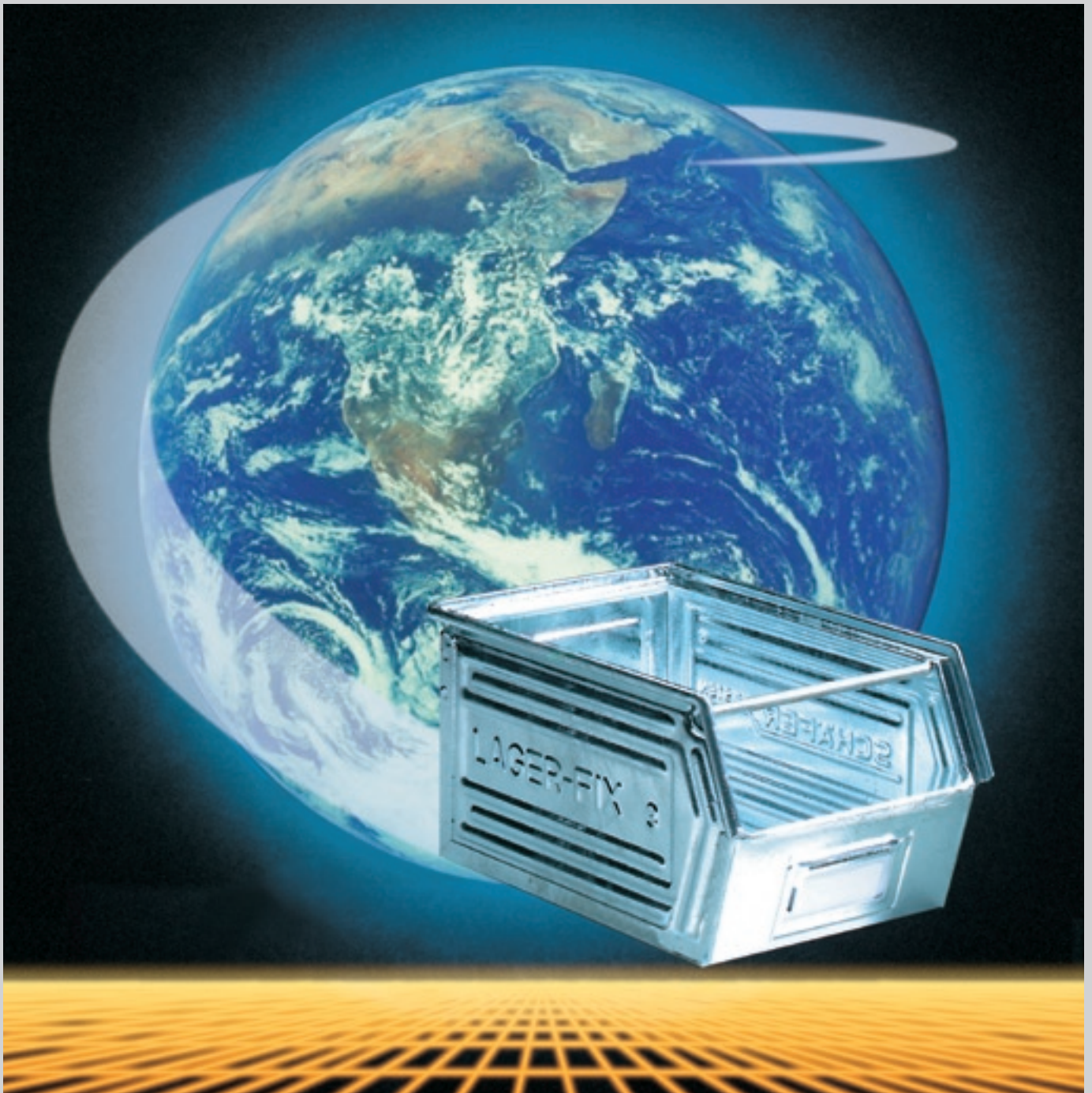
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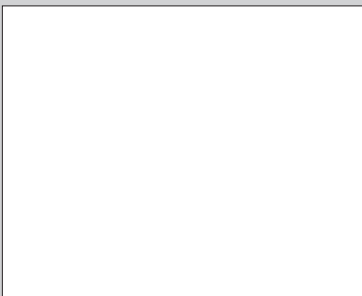
Our onsite presence is an absolute must if products are to be correctly matched to their respective markets worldwide. This presence includes stand-alone companies

and representative offices, qualified specialist staff with an internationally-orientated attitude, state-of-the-art production plants and – not least – sufficient stocks

to permit maximum levels of availability and first-class customer service.

SSI SCHAEFER – worldwide presence.





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