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Vertical Lift LogiMat®

Powerful technology for the storage and picking of small parts



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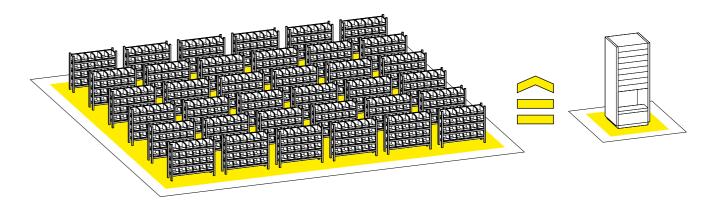
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LogiMat[®]: We improve the performance of your storage and picking processes

The vertical lift LogiMat from SSI Schaefer is your all-in-one storage and picking solution. With its numerous main functions and unique additional options, the LogiMat not only improves the performance of your storage processes, it also guarantees an ergonomic and safe operation in your warehouse. The LogiMat can be used as an autonomous system or integrated into a wider picking application.

Your advantages:

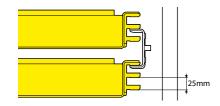
- ▶ Highly convenient "goods to person" concept
- ▶ Reduces the floor area required for storage by up to 90% compared with conventional static storage solutions
- ► Travel times reduced by more than 70%
- ▶ Automated processes and ergonomic design improve performance by more than 20%
- ▶ Compact design has economic and environmental advantages
- ▶ Makes optimal use of the available room height



The vertical lift LogiMat is a well-rounded complete solution offering numerous main functions as standard features. It is intended for all companies seeking a high-performance storage and picking system which includes all the most important functions.

Thanks to its scalable concept, the scope of functionality of the LogiMat can be customised precisely to the individual customer requirements: as much as is needed, as little as possible.

- ▶ The compact design makes maximum use of the available room height
- ► Continuously variable storage of the trays in a 25 mm grid



- Visual, automatic display of the capacity utilisation and an overview of the filled and empty trays in the vertical lift
- ▶ Defragmentation and relocalisation of the stored trays
- ► Storage strategy with FIXED height for highly compressed storage
- ► Storage strategy with intelligent height optimisation (IHO)
- ► Modular design with standard components
- ► Low-maintenance system thanks to high-quality components and robust design
- ► Flexible tray design with frame and base designed to optimise space and weight
- ▶ 3 drive packages available for selection
- ▶ Elevator drive with low-maintenance gear drive







- ▶ Automatic stored article monitoring to ensure that the goods to be stored lie within the permissible dimensions both vertically and horizontally
- Vertical shaft monitoring to detect any protruding trays before starting the elevator
- Safety light barrier for securing the operating opening against accidental access during storage or retrieval
- Predefined access permissions to trays and functions
- ▶ Intelligent lighting in every operating opening
- ► Programmable logic controller (PLC)

Unique:

- The LogiMat features the tilt mechanism LogiTilt, which enables the ergonomic retrieval of goods and reduces the reaching depth for operators
- ► Thanks to LogiWork, the height of the output table can be adapted to the height of the employee
- ► Touch user interface with intuitive navigation
- ► Ergonomic operating opening with unique optional features
- ▶ Up to 4 operating openings per vertical lift at any position as standard feature

Expand the functionality of your vertical lift as needed with three predefined options packages. In this way, the LogiMat can be easily and practically adapted to your requirements with regard to ergonomics, performance and maintenance. By selecting an options package, you also profit from an advantageous cost-

benefit ratio.

Options package 1 **Ergonomics**



For optimal and efficient work steps with minimal strain on operators. This package contains the options:

- LogiBar
- LogiPointer
- LogiStainless
- LogiTilt
- LogiWork

The focus is placed on the operator

Options package 2 **Performance**



For the highest requirements in speed and efficiency. This package contains the options:

- LogiBar
- - LogiGate
 - LogiPointer

When speed is of the essence

Options package 3 Maintenance



Work safety and investment security are the priority in this package. This package contains the options:

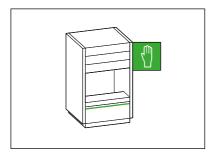
- LogiDual
- LogiPower

- LogiCircle
- LogiDrawer
- LogiLight
 - LogiSpare

Maintenance made easy

LogiBar

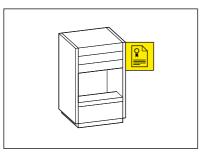
OPTIONS



Reduced travel times and increased picking per- Extended warranty formance via confirmation of goods retrieval by the continuous confirmation light barrier under the operating opening

LogiCircle

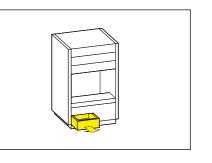
configure it to your needs with great flexibility.



All vertical lift options are of course also available individually. This

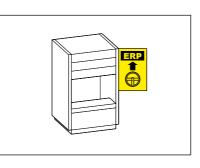
allows you to precisely assemble the type of LogiMat you want and

LogiDrawer



Drawer under operating opening

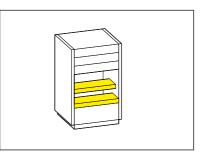
LogiDriver



Standardised PLC interface for connection to customer systems

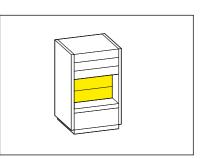
LogiLight

LogiDual

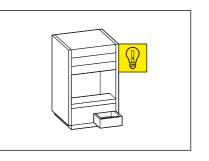


Parallel, time-delayed tray movements for improved performance. While goods are being removed from the first tray, the next tray is already moving to the operating opening

LogiGate

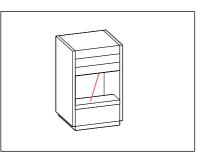


Interior automatic lifting gate for protection of operator, machine and stored articles as well as reduced noise emissions



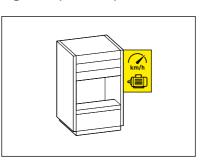
Additional shaft lighting and extra lamp in control

LogiPointer



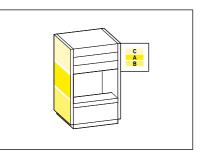
pointer system

LogiPower (Fast Drive)



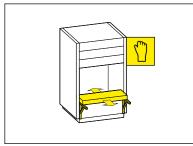
cess times during picking

LogiPriority



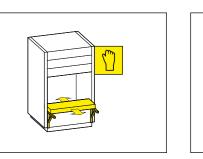
Sorting of the goods into ABC categories and prioritisation of the access times for the stored goods

LogiPull



Manual full tray extension

LogiSpare



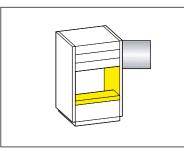
Spare parts package

LogiSpeed

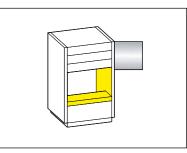


gentle transport of the stored articles

LogiStainless

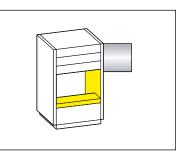


Individual travel speed adjustable for each tray for



Long-lasting corrosion- and scratch-resistant plated steel

LogiTilt

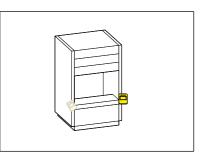


covering of the operating opening with chrome-

Output table tilting mechanism for ergonomic re-

trieval of the goods, reduced reaching depth and an optimal overview of the entire tray

12" touch panel

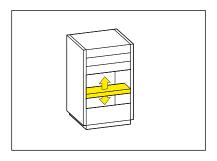


Large, well-organised touchscreen interface for Weight check of the trays during storage in order easier operation, optimised for use with WAMAS to prevent overloading of the trays and the structure LogiMat

LogiWeight



LogiWork



the operator in order to ensure an ergonomic retrieval height

The LogiMat® comes in a wide selection of standard model widths and depths.



	Usable dimensions Tray (mm)	A Width (mm) Including panelling	B Depth (mm) Including panelling
	1.825 x 625	2.370	2.712
	1.825 x 815	2.370	3.092
	2.025 x 625	2.570	2.712
	2.025 x 815	2.570	3.092
	2.425 x 625	2.970	2.712
	2.425 x 815	2.970	3.092
	2.825 x 625	3.370	2.712
	2.825 x 815	3.370	3.092
	3.025 x 625	3.570	2.712
	3.025 x 815	3.570	3.092
	3.225 x 625	3.770	2.712
	3.225 x 815	3.770	3.092
	3.625 x 625	4.170	2.712
	3.625 x 815	4.170	3.092
	4.025 x 625	4.570	2.712
	4.025 x 815	4.570	3.092

2,450 mm

Maximum height:

up to 23,850 mm in 100 mm increments

C Height of operating opening:

1,950 mm (depending on levelling)

Tray load:

up to 650 kg

Machine load:

up to 60 tons in standard design (higher load capacity possible upon request)

RAL 5014	RAL 9010	RAL 7024	RAL 7035
pigeon blue	pure white	graphite gray	light gray

Other colours available upon request. Please note that colour deviations arise due to monitor and printer settings.

No limits to the installation possibilities

The LogiMat can be adapted to any situation, whether separate storage and retrieval sides, two-sided storage or retrieval on the floor above, or rising from a basement to extend over two floors, projecting through a ceiling or recessed into the floor.



The operating opening of the vertical lift modules is located on the "main level" of the warehouse, while the vertical lift modules themselves were installed extending from the basement floor to just below the hall ceiling.

Intelligent exterior installation thanks to panelling

Even greater efficiency thanks to

conveying systems

The LogiMat vertical lift module can be attached to the outer facade of a warehouse, if necessary. Such an installation can minimise the construction costs for expansion of the warehouse because only the cut-out for the operating opening of the LogiMat needs to be taken into consideration in the existing building wall. In addition, this type of vertical lift module installation allows for independent planning of the system height.

tage: Higher productivity, reliable technologies and flexible

applications (container and cardboard box conveying sys-

tems) and all components from a single source.



Because of the surrounding vehicle infrastructure, the LogiMat was construct- $\operatorname{\sf ed}$ against the outer facade of the warehouse and outfitted with paneling.



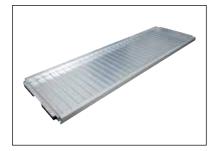
8 LogiMats are used for the picking and storage of the articles. The SSI Autocruiser handles the integration with the other storage areas.

Optimal use of warehouse space

SSI Schaefer offers almost unlimited choice in the selection of sorting accessories. The standard trays can be supplemented with items from the comprehensive plastic box selection, entirely according to your needs.

Here are a few examples of tray layouts. Other options can be found in our container catalogue, and we would also be happy to work out possible layouts with you during a personal consultation.

Tray design with frame and base



A brilliant organiser for every warehouse: **Rack boxes**



Trays height-adjustable in 25 mm increments



Cleverly organised with the classic top seller **EUROFIX (EF)**



Exclusively from SSI Schaefer: The LMB container series, with indivi-

dually configurable separating walls



LMB containers are **optimised** for partitioning at the **tray depth of 800 mm** and can additionally be sectioned off with separating walls.

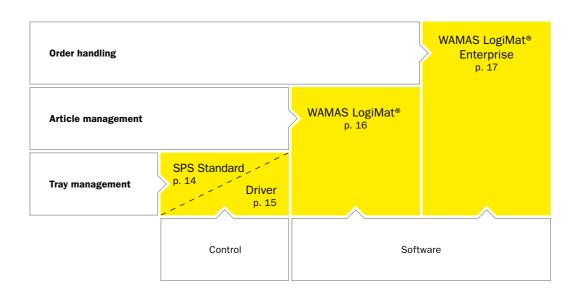


From simple applications to complex warehouse management: Anything is possible!

The LogiMat is equipped with a standard control (PLC). One control option and two software packages are available for individual configuration of the vertical lift. In this way, every project is based on a straightforward and reliable solution that can be individually customised to the requirements of your logistical business processes by means of simple extensions. Operation is easy with a self-explanatory touch panel user interface.

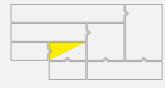
Your benefits:

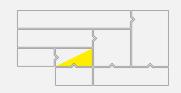
- ▶ Streamlined warehouse processes (picking and material flow)
- ▶ Elimination of unnecessary work steps
- ▶ Simple integration into existing processes
- Minimising errors
- Scalability
- ▶ Intuitive user interface with touch panel



STANDARD CONTROL

DRIVER CONTROL





Integrated standard control

Control the LogiMat® with your own software

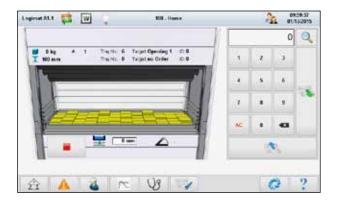
The LogiMat vertical lift module from SSI Schaefer is equipped by default with a programmable logic controller (PLC) that represents the first step in computer-aided warehouse management. This is operated with a graphical user interface.

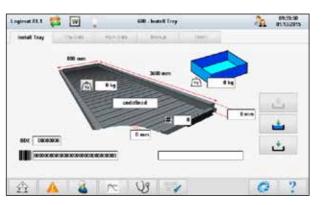
The standard PLC controls all drives via frequency control, monitors the stored articles and ensures reliable operation with up to four operating openings per vertical lift module. The standard PLC also enables numerous core functions without additional software, for example:

- Requesting and returning trays
- Fixed storage
- ► Intelligent height measurement (IHO) with automatic compression function
- Shaft monitoring
- ► Safety light curtain
- ▶ Capacity utilisation display
- Logging and diagnosis
- User management

- Would you like to control the LogiMat vertical lift module with your own ERP system?
- Would you like to use your own user interface with the LogiMat?
- Do you have your own inhouse software developers?





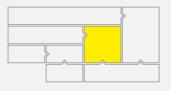


Visual depiction of the system status. The functions are intuitively indicated using language-independent icons.

Then the **Driver control option** is just right for you! With this control option, the **trays of the LogiMat can be controlled with customer-developed software**.

- ▶ The Driver option is an interface based on the TCP/IP protocol.
- ▶ The precise specification can be obtained from our local specialists.

WAMAS LOGIMAT WAMAS LOGIMAT ENTERPRISE



WAMAS® LogiMat

The software solution for article management with one or more LogiMats

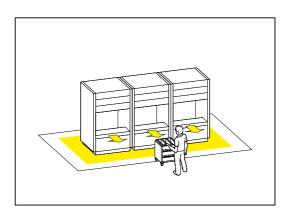


- Should articles be stored and retrieved based on the scanning of barcodes?
- Would you like to minimise possible sources of picking errors?
- Would you prefer not to develop or adapt your own software?

Then you will find that WAMAS LogiMat is the ideal standard software for one or more LogiMats. WAMAS LogiMat is based upon the warehouse management software WAMAS® from SSI Schaefer that is used widely around the world. The application offers a simple and convenient way to get started in the world of professional warehouse management systems.

WAMAS LogiMat includes extensive core functionality:

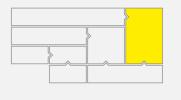
- User management
- ▶ Article management
- Article images
- Location management (drag & drop container and tray management)
- ▶ Integration of barcode scanners and label printers
- ▶ Lot management
- Best before date
- ► Storage strategies (including FIFO, LIFO)
- Counting function
- Statistics and reports
- ▶ Pick by light
- Put by light



WAMAS LogiMat can be extended with the following plug-ins:

- Advanced security: Controlled access to individual trays and articles through the assignment of user rights and user groups
- ▶ Tray weight control: Visual monitoring of the tray load
- ► Velocity management: Varying elevator speeds adapted to the stored articles

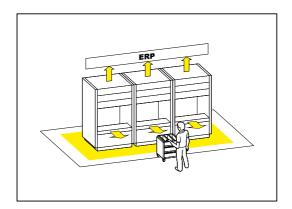
Note: Specific functions require corresponding hardware. Our experts will be happy to advise you!



WAMAS® LogiMat Enterprise

The software solution for integration of one or more LogiMats into an ERP system

- Would you like to integrate your LogiMats into your existing ERP system?
- Should your LogiMat processes be highly automated?
- Do you want to process complete orders on the LogiMat?



WAMAS LogiMat Enterprise can be extended with the following plug-ins:

- Advanced security: Controlled access to individual trays and articles through the assignment of user rights and user groups
- ▶ Tray weight control: Visual monitoring of the tray load
- ▶ Velocity management: Varying elevator speeds adapted to the stored articles
- LogiLight control: Automatic lighting of the active operating opening
- ▶ Opening priorities: On systems with multiple operating openings, the openings can be prioritised in the order processing

Note: Specific functions require corresponding hardware. Our experts will be happy to advise you!

WAMAS LogiMat Enterprise is the ideal solution for advanced requirements.

Using the functionality of WAMAS LogiMat as a basis, WAMAS LogiMat Enterprise offers the additional capability to flexibly integrate the application into an ERP system via an interface.

Your advantage: Article inventories and orders are automatically synchronised between the ERP system and the WAMAS LogiMat Enterprise software.

WAMAS LogiMat Enterprise includes the functionality of the WAMAS LogiMat software edition. The following additional functions are also possible:

- Order handling
- Storage, picking and inventory orders
- ▶ Flexible interfaces allow simple integration with ERP systems or higher level warehouse management systems
- ▶ Parallel picking at multiple vertical lift modules
- Order prioritisation

SERVICE REFERENCES

Service & Maintenance LogiMat®

If you choose SSI Schaefer, you can also rely on our strengths in the service area that have made us a market leader: a service spectrum unique throughout the industry and the certainty that all services and site visits will be carried out by our own specialised SSI Schaefer service technicians.

Thanks to its robust design and high-quality components, the vertical lift LogiMat from SSI Schaefer is extremely low-maintenance. With customer-specific service and maintenance models as well as innovative spare parts concepts, our service team ensures the optimal availability of your system, maximum operational reliability and complete customer satisfaction.







Our services:

- ▶ Troubleshooting
- ▶ Maintenance
- Supervision
- ▶ Rack inspection / safety inspections
- ▶ Spare parts management
- ▶ Modernisation / repair / retrofits
- Documentation
- ▶ Training / certification

Integrated standard systems (ISS)

SSI Schaefer offers a range of products designed for mutual compatibility that can also be customised and expanded precisely to your requirements. The LogiMat vertical lift module is no exception and can be used as a stand-alone solution as well as integrated into (partially) automated material flows. You can further optimise your internal processes by integrating the vertical lift module with other warehouse areas, conveying systems or ergonomic assembly workstations.

Bucher Schörling AG

Manufacturer of municipal vehicles









- Storage lifts Shelving technology for small parts
- Storage platforms and shelving mezzanines

Bucher Schörling AG optimized its warehouse and picking processes with a new, highly coordinated intralogistics solution. Five modern vertical lift modules and one static rack now ensure an exceptional level of compression in the new warehouse as well as fast, structured processes.

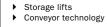
Creativ Company A/S

Hobby and creative products









Creativ Company is a leading provider of hobby and creative materials. When the company was looking to establish a new, comprehensive logistics system, it chose a solution from SSI Schaefer. The core of the system consists of 8 Logi-Mats, which are used for picking and storage. The SSI Autocruiser conveying system transports a total of 300 - 450 units per hour over a 300 m long path.

Integrated standard systems (ISS)

Ingrid L. Blecha Ges.m.b.H

Aluminum products



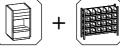


Ingrid L. Blecha Ges. m.b.H sells aluminum products to customers around the world. To avoid interfering with its vehicle infrastructure, the company installed its LogiMat on the outer facade of the warehouse instead of inside the building. A fire protection shell was also affixed to the steel skeleton of the vertical lift module.

atzert:weber-Gruppe

Automotive





Storage lifts Shelving technology

The atzert:weber group operates four car dealerships and Auto Sofort Service GmbH in Hesse, Germany. One locator warehouse on two levels together with the LogiMat vertical lift module ensure efficient processes. Shelf racks, crossbar racks and mobile racks as well as drawers serve for storage of the parts. With direct integration with the systems, Logi-Mat performs multiple functions: it serves as a connecting link between the levels with one operating opening on each floor and also as a buffer for the pre-picked orders that wait in the LogiMat until they are retrieved.

era-contact GmbH

Manufacturer of electric train couplings, contacts, etc.



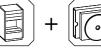


Four new LogiMat vertical lift modules not only save space, they provide redundancy for the interfaces and significantly improve the reliability and efficiency of the picking processes. The vertical lift modules are connected to the higher level ERP system of the customer via warehouse management software. In addition to parallel synchronisation of the inventories, this also allows for a reliable inventory of the stored components at any time.

KNF Flodos AG

Membrane pumps expert







▶ Storage lifts

KNF Flodos encompasses 16 companies and 5 production sites around the world. In order to meet the demands of their global operations, the company decided on an international collaboration with SSI Schaefer. To meet the goal of optimising all processes across all countries, there was only one implementation partner worth considering that also operates globally but still offers a fixed local contact person and can deliver everything from a single source. LogiMats have already been installed on two continents. The operating opening of the vertical lift modules is located on the "main level" of the warehouse, while the vertical lift modules themselves were installed extending from the basement floor to just below the hall ceiling. The orders are generated via SAP and entered into the LogiMat management software via barcodes. Thanks to customisation of the software, the customer can carry out picking processes worldwide without the need to take part volumes into account.

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