WEASEL®

Automated Guided Vehicle for Flexible, Internal Transport of Goods.

ssi-schaefer.com

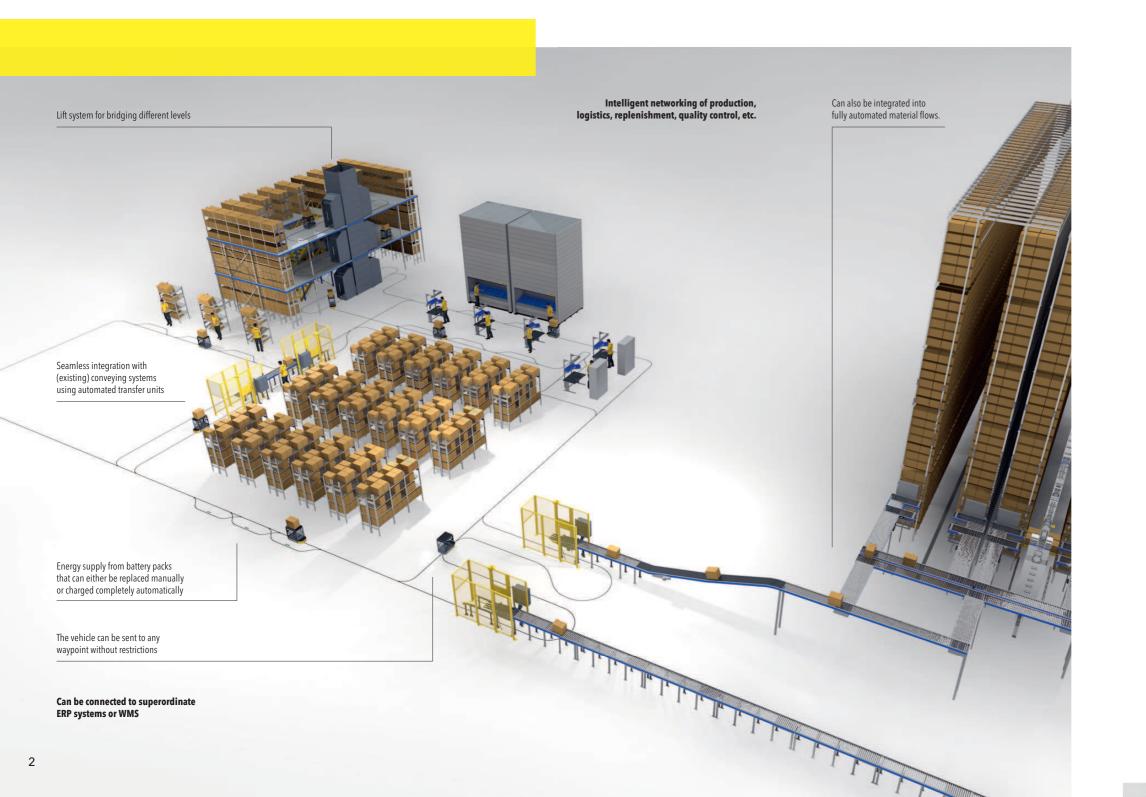




WEASEL® AUTOMATED GUIDED VEHICLE

SSI SCHAEFER developed the WEASEL automated guided vehicle with a passion for innovation. The result is a flexible and versatile transport system that follows an optical guiding line, meaning it does not require costly installation.

The WEASEL masters almost all transport tasks up to 35 kg and ensures an optimal material flow. Your goods will reach their destination safely and barrier-free, all with low purchasing and operating costs as well as a rapid return on invest (ROI).



AT A GLANCE: WEASEL

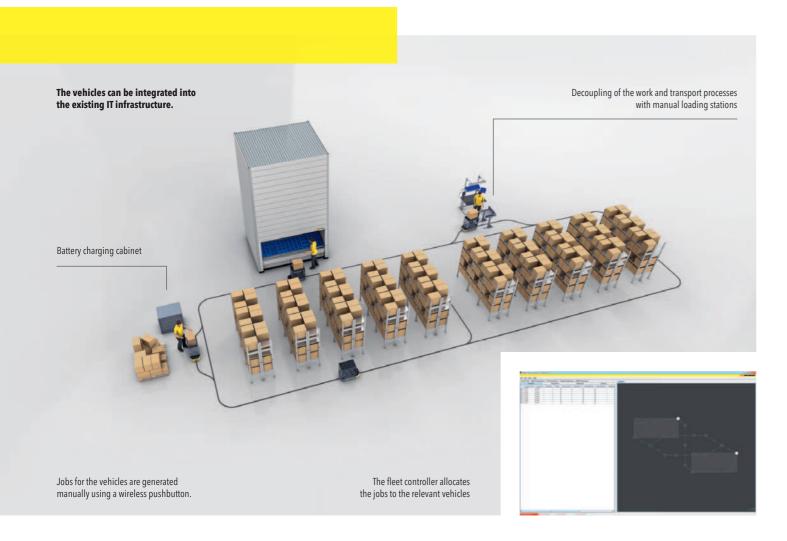
- Gentle and safe transport of bins, cartons, and hanging goods
- Barrier-free and low space requirement
- Different designs for optimal ergonomics
- Easy to integrate into existing systems and infrastructures
- Scalable by connecting multiple forklift vehicles as a fleet solution
- Flexible in terms of system adaptation and expansion
- Simple sequencing of conveyed materials
- No expensive sensors and complex control systems
- Low investment and operating costs



This innovative fleet solution has been awarded prizes including the "International Forklift of the Year" (IFOY) award in the Intralogistics Solution category.

UNLIMITED POSSIBILITIES

As varied as the transport tasks in production and logistics themselves.



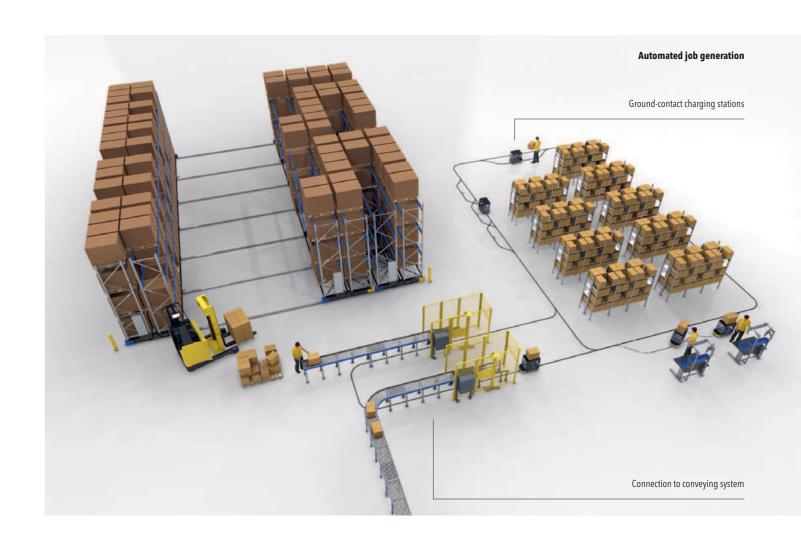
Entry-level solution for automated goods transport in production and operations

The WEASEL automated guided vehicle can provide immense added value for your company, even for simple transport tasks. It provides a new way of optimizing travel times and transport routes even for small load carriers.

AT A GLANCE:

- Efficient internal transport
- Several destinations can be specified
- Employee walking distances are reduced; practical redistribution of resources
- Extremely simple control
- Flexible adaptation to growing needs

Manual loading and unloading and connection to (existing) conveying systems.



Can be intelligently combined

The WEASEL can be connected to existing conveying systems using automated transfer units. This allows the system to bridge gaps, for example between picking stations and existing conveying systems. This modular approach protects existing investments and offers the option of a cost-optimized goods-to-person principle.

AT A GLANCE:

- Controlled with or without material flow system
- Connection to (existing) conveying system
- Integration of existing solutions
- Automated charging management



Connection to material flow systems and linking of multiple operating levels

Even highly complex projects can be realized with the WEASEL. The system can be optimally integrated into different levels of the supply chain and makes a crucial contribution to the added value of intralogistics.

AT A GLANCE:

- Connection to existing material flow systems
- Use of the entire fleet of vehicles on different levels
- Allows sequencing of goods
- Automated charging management

THE WEASEL SUPPORTS THE MATERIAL FLOW FLEXIBLY AND INDIVIDUALLY ACCORDING TO THE CUSTOMER'S NEEDS

Hermes Fulfilment GmbH

Hermes Fulfilment GmbH is orienting its site toward new challenges with the WEASEL. This will create flexible and barrier-free links between different areas.



To drive forward the expansion of capacity, Hermes Fulfilment GmbH

decided to optimize the distribution center at its Haldensleben site. It specializes in the logistical processing of low-volume items for different clients. The company implements full-service e-commerce solutions around the globe. Its range of services includes the development of online shops, credit management, financial services, and customer care as well as warehousing, distribution, and returns management. To facilitate the flexible linking of different areas, Hermes Fulfilment is implementing a cost-effective transport solution with the WEASEL system at its Haldensleben distribution center.





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FLEXIBLE LINKING OF THE PRODUCTION AREA AND DISTRIBUTION









"A flexible and modular transport solution that we were able to implement quickly. We are delighted."

Henrik Bugiel Managing Director NextLevel Logistik GmbH

NextLevel Logistik®

Bachmann Forming AG

For the automation of its internal transport, Bachmann Forming AG relies on the award-winning solution with WEASEL automated guided vehicles. The project was completed within a mere five weeks - and has already paid for itself after only a few months.



The WEASEL has taken over internal transport between production work stations and the existing conveying system to the distribution area in the

production area of Bachmann Forming AG, a specialist in the development of customized plastic packaging - and with remarkable results. The switch from manual to automated internal transport with the WEASEL, saves the company roughly 7,000 hours per year, amounting to an ROI for the system of well under a year. Manual transfer stations were installed for the production machines. The employees at the work stations place the packed product cartons onto the transfer station in front of them and initiate the pickup order for the WEASEL via a button. The vehicle drives to the work station, takes the carton and transports it to the transfer station on the existing conveying system. The WEASEL then automatically hands the cartons over to the conveying system at the transfer unit.

SCALABILITY AS AN IMPORTANT DECIDING FACTOR

NextLevel Logistik GmbH

SSI SCHAEFER implemented another fleet of WEASEL automated guided vehicles for the fashion logistics service provider NextLevel Logistik® GmbH. They are used in the picking environment of a hanging goods warehouse.

The repeated awarding of the contract emphasizes the high degree of flexibility and cost effectiveness, which makes the concept behind the barrier-free automation solution stand out. NextLevel Logistik® GmbH commissioned a WEASEL fleet from SSI SCHAEFER eighteen months ago at its company headquarters in Eltmann near Schweinfurt, Germany.

In Eltmann, the WEASELs have already proved their worth. "The concept has impressed in all tasks carried out with its reliability, efficiency, and safety, which is why we have extended their application," says NextLevel Managing Director Henrik Bugiel. "The varied options for a flexible design of the transport vehicles and unhindered scalability of the solution were important deciding factors for the system."

In a separate hall, the new WEASEL fleet aids the picking of hanging goods. For this, the structures were fitted with special fixtures for transporting hanging goods.

FACTS & FIGURES

A small vehicle with great strengths

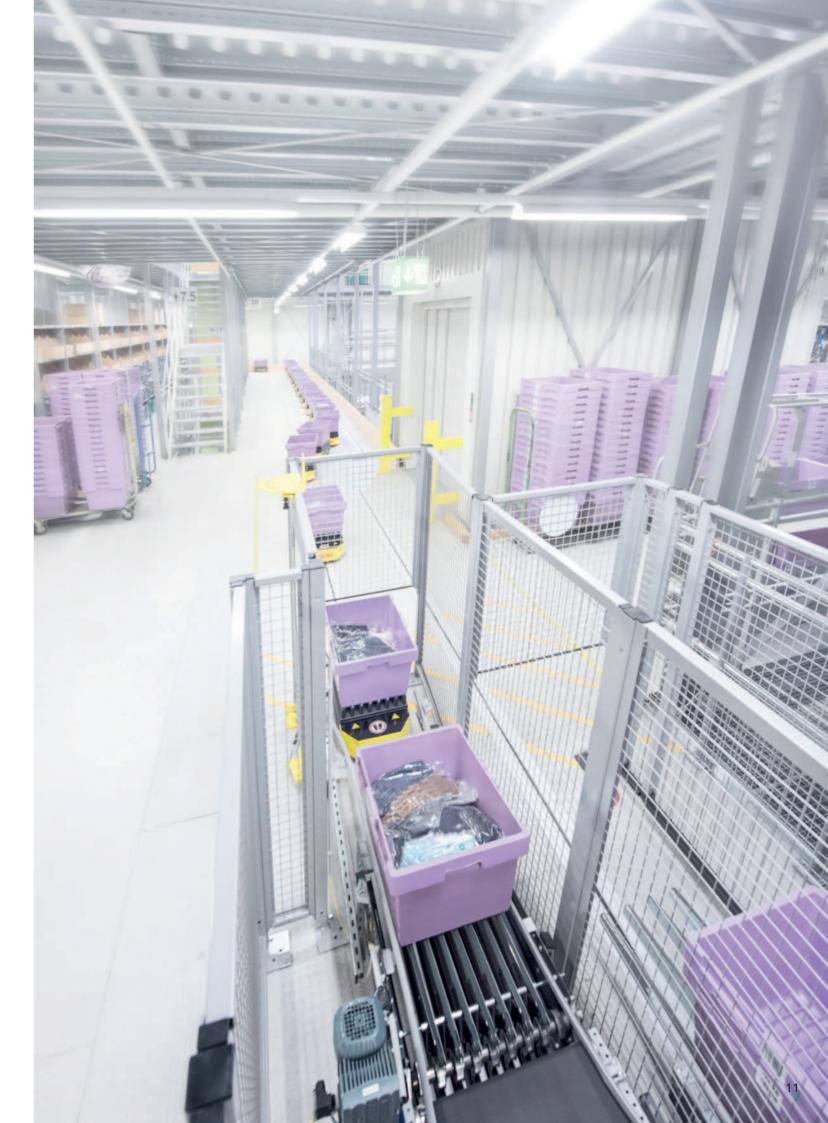
Despite its small dimensions, the WEASEL transports goods and loading aids of various sizes in all temperature ranges between 2 °C and 50 °C. Its compact design allows the WEASEL

to be used in inaccessible areas. The use of this autonomous transport system not only speeds up cycle times, but also improves the cost effectiveness of warehouse processes.

| Key system figures | | |
|--|--|--|
| Transport weight | up to 35 kg | |
| Vehicle dimensions | up to 810 mm x 420 mm x 180 mm (l x w x h) excl. structure | |
| Acceleration/braking | up to 2 m/s ² | |
| Turning radius | min. 600 mm | |
| Traveling speed | up to 1 m/s | |
| Data transfer between the fleet controller and WEASEL occurs via WLAN (5 Ghz). | | |
| | | |
| Environment | | |
| Incline climbing ability | loaded: 10 % empty: 20 % | |
| Ambient temperature range | 2 - 50 °C, non-condensing | |
| | | |
| Energy supply | | |
| Manual via charging cabinet or automatic via ground-contact charging stations | | |
| Power supply | battery 24 V | |
| Charging time | 8 hours | |
| Operating time | up to 16 hours | |
| | | |
| Lift | | |
| Lift speed | up to 3 m/s | |
| Number of entries/exits per lift | up to 10 | |
| Height of the lift | up to 13.4 m | |

The structures vary in height and facilitate ergonomic loading and unloading

| Hanging goods structure | High structure | Low structure |
|------------------------------|--------------------------|--------------------------|
| upper edge 1,250 mm | upper edge 750 mm | upper edge 250 mm |
| | | |
| Goods dimensions (I x w x h) | | |
| up to 600 x 400 x 1,250 mm | up to 600 x 400 x 510 mm | up to 600 x 400 x 510 mm |



SIX REASONS WHY YOU SHOULD CHOOSE SSI SCHAEFER

Security:

As a financially independent family business we are committed to long-term solutions - you can trust that we will be there for you tomorrow and in the years to come.

• Efficiency:

Our solutions are scalable and grow with your needs. Investing in a solution by SSI SCHAEFER you are therefore investing in the future.

Quality:

As a specialist for automation systems, we provide single source solutions of our own production. This guarantees that you will receive perfectly matched high-quality solutions.

Reliability:

Thanks to our world-wide Customer Service & Support network, we are able to ensure flawless operation of your system sustainably.

Know-how:

Our solutions are always up to date with the latest technological standard and can be smoothly integrated into the extisting (IT) landscape.

Internationality:

As a globally acting company we are locally available to our customers all over the world and speak their language.





