

AUTOMATED GUIDED VEHICLE SYSTEMS (AGV)

FLEXIBLE, SAFE AND RELIABLE ;
SUIT HIGHLY COMPLEX LOGISTICS SYSTEMS
OR SIMPLE A-TO-B TRANSPORT SCENARIOS



A variety of vehicle types and solutions can be used in many different areas

Swisslog's automated guided vehicle (AGV) systems can be used equally efficiently in highly complex logistics systems and in simple A-to-B transport scenarios.

This is made possible by the extremely flexible navigation options and the custom configurable control software. All transport tasks are managed and executed based on an optimized strategy.

Swisslog AGVs can operate as a stand-alone system or, if connected to an ERP, as a fully integrated subsystem of a complete plant.

References

Swisslog customers all around the world have already integrated AGV systems into their operations.

BENEFITS

- **High availability**
Reliable and safe transport processes, on-time and easily calculable
- **Stable operation**
Minimized transport damage and delivery errors
- **Full control**
Traceability of transports and goods
- **Flexible and cost efficient**
Less dependence on personnel and reduced associated costs

Projects implemented with AGV systems:
BAYER | PEOPLE'S BANK OF CHINA | +GF+ | AMAG

RELIABLE TRANSPORTATION BETWEEN DIFFERENT AREAS OR FROM PRODUCTION SITES TO WAREHOUSES

STANDARD AGV



The established system

The Standard AGV system has been one of Swisslog's core technologies since the 70s. The broad knowledge and experience has been transferred over the years.

The Standard AGV is used in an integrated transport system and, normally, as part of the overall intralogistics system. A variety of vehicle types are available to cover the needs of many different industries.

Vehicle types:

- Forklift truck
- Conveyor deck

HYBRID AGV & CARRY PRO



A-to-B transportation

The Hybrid AGV consists of a traditional forklift truck combined with Swisslog's control system HybridBox. When mounted on a truck, the HybridBox transforms the truck into an AGV.

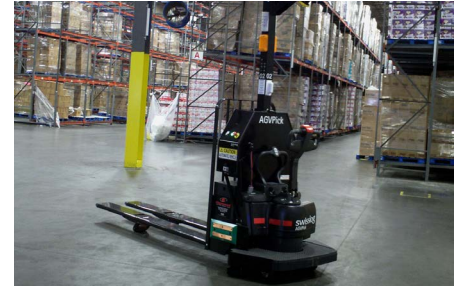
It can be operated automatically but also works in manual mode. The HybridBox fits on most brands of forklift truck on the market.

Guided within a grid-like pattern

Carry Pro AGV systems travel through and underneath stands and conveyors in a grid-like pattern for fully integrated, optimized transportation.

Carry Pro vehicles store and retrieve SKUs to supply pallets to picking robots and palletizers. The AGV holds mobile racks, pallet conveyors, case conveyors, and other custom-designed structures.

AGVPICK



A complete solution

AGVPick has been developed as a picking solution, especially for the retail industry.

The vehicle is based on the standard AGV and involves the integration of a sophisticated guidance system that results in a semi-automated picking solution.

Vehicle type:

- Pallet jack

FACTS

| | STANDARD | HYBRID | CARRY PRO |
|----------------------|---------------|---------------|---------------|
| Speed (m/s) | up to 2.0 | 1.2 | 1.0 |
| Load dimensions (mm) | 1) | 1) | 1) |
| Load weight (kg) | max. 4 000 | 1 500 | 1 000 |
| Navigation 2) | Laser | Laser | optical |
| Communication 3) | WLAN | WLAN | WLAN |
| Safety 1) | Laser bumpers | Laser bumpers | Laser bumpers |

Options: 1) customized, 2) inductive/magnet, 3) auth. server