



INTRALOGISTICS | AUTOMATED GOODS TRANSPORT



360° **HEAD START**

The new OL1200S

360° Added Value. Economical from every angle.



More autonomous, quicker, and smarter – with the new OL1200S, Grenzebach presents the next generation of automated guided vehicles for long goods carriers and large payloads of up to 1,200 kg (2,645 lbs). It has one clear purpose: to accelerate automated goods transportation and simplify complex processes.

Omnidirectionally drivable and equipped with smart sensors, the OL1200S can transport large components in the smallest of spaces. Its high degree of flexibility significantly increases performance compared to conventional tugger trains while also ensuring sustainable streamlining of necessary peripherals.

This saves space, reduces costs, and increases uptime of the overall system which maximizes efficiency and profitability, especially with large components and long goods carriers.

YOUR BENEFITS AT A GLANCE



Maximum performance with space savings of up to 75%.

The OL1200S can maneuver freely in any direction, thus allowing it to master the cross-docking of long goods carriers and flexibly adapt to new constellations in production thanks to the automated detection of goods carriers and elimination of static peripherals such as stations.



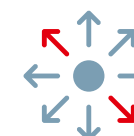
Low TCO, high performance.

Extremely efficient, economical, and flexible. The OL1200S is an integral component of Grenzebach systems for automated goods transportation. Exceptionally robust, highly maneuverable, and quick are the reasons behind the high performance of the OL1200S in parts transportation. This efficiency also helps reduce the number of vehicles required in the fleet.



New standards in safety and sensor technology.

Equipped with both Lidar and 360° vision systems, the OL1200S is setting new standards in the area of smart solutions for personnel and transportation safety. The AGV can thus detect obstacles above ground and prevent transportation damage. In addition, the vehicle can autonomously pick up inaccurately placed goods carriers within a variance range of up to 250 mm (9.8 inches) with ease.



Flexible in the face of changing tasks.

With smart sensors and SLAM navigation, the OL1200S reduces static peripheral requirements to a minimum. It does not require permanently installed stations for the pickup and delivery of goods carriers, thus creating ideal conditions for highly flexible production environments. High variance and short response times help keep pace with changing production requirements.



Smart transfer of goods carriers – a league of its own.

Whether it's transportation, lateral delivery of long goods carriers, or automated pickup of inaccurately placed goods carriers – the OL1200S eliminates classic disruptions in the flow of goods in no time. Its autonomous load carrier detection makes stations redundant and the switch from manual to automated parts transportation a breeze. The vehicle locates the goods carrier placed in the transfer zone and automatically compensates for a manual positioning errors within a tolerance range of +/- 250 mm (9.8 inches).

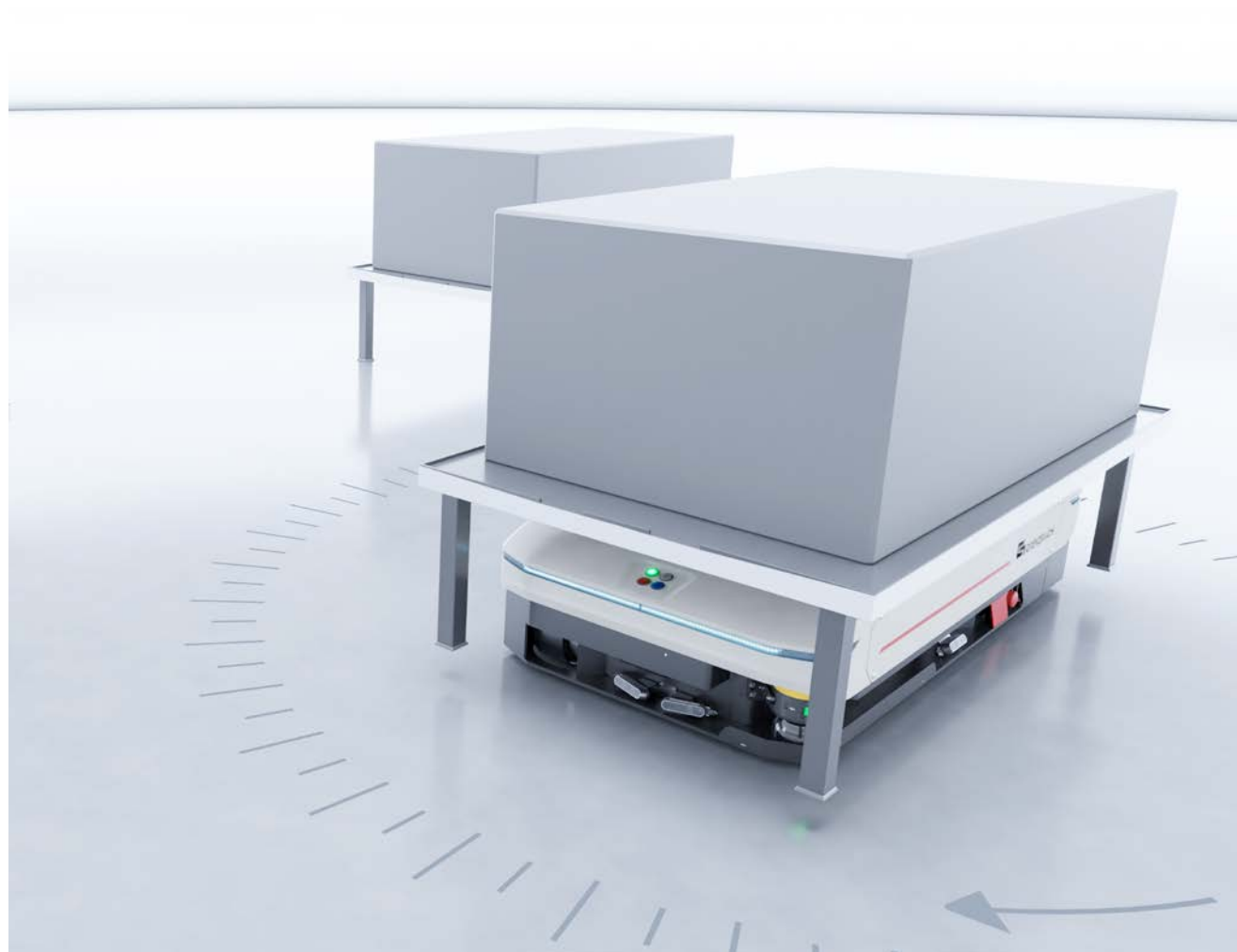


Maximum process and planning certainty.

The use of standardized hardware and software modules reduces risks associated with planning and processes, and ensures that our customers continue to participate in the further development of our systems. A seamless integration of the vehicle into existing infrastructures is possible at all times via the VDA 5050 interface.

360° Progress.

For smarter automated goods transportation.



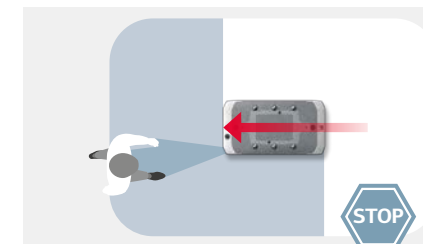
Its omnidirectional drivability means the OL1200S can move freely, and thanks to a large number of innovative detailed solutions, fulfils a clear purpose: it simplifies hitherto complex processes, such as the handling of long goods carriers, in goods transportation and makes them more efficient and economical.

To this end, the new OL1200S from Grenzebach is equipped with numerous technical features, making it an ideal solution for automated goods transportation.



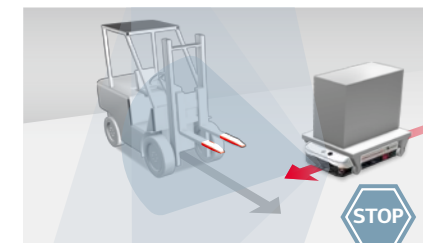
AUTONOMOUS LOAD CARRIER DETECTION

The OL1200S detects the position of inaccurately placed load carriers within a variance range of ± 250 mm (9.8 inches). The autonomous load carrier detection enables the vehicle to pick up the loads automatically without a problem.



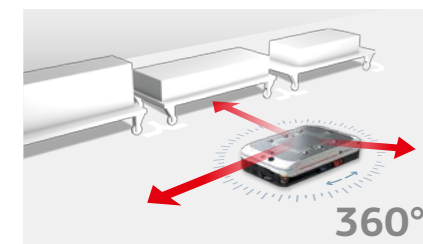
360° PEOPLE SAFETY

Equipped with blue light and two Lidar laser scanners, the OL1200S combines efficiency and productivity with maximum personnel safety.



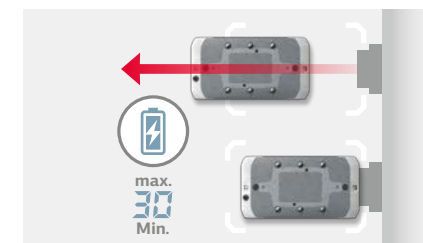
360° TRAVEL AREA MONITORING

A 360° 3D vision system detects disruptive factors with a minimum size of approximately 50 mm (2 inches). This prevents transportation damage caused by collisions with obstacles in the operating area, such as protruding components, partially open roller doors, or forklift tines.



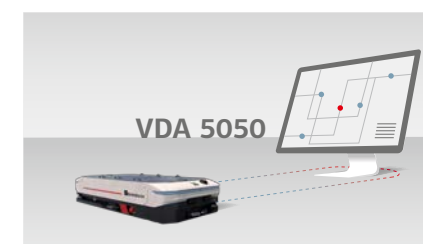
360° MOBILITY

The OL1200S is omnidirectional; it can move freely in any direction and rotate on its axis while stationary. Narrow pathways, 90° curves, turning maneuvers, and cross-docking of goods carriers are tasks easily accomplished by this vehicle.



24/7 OPERATION

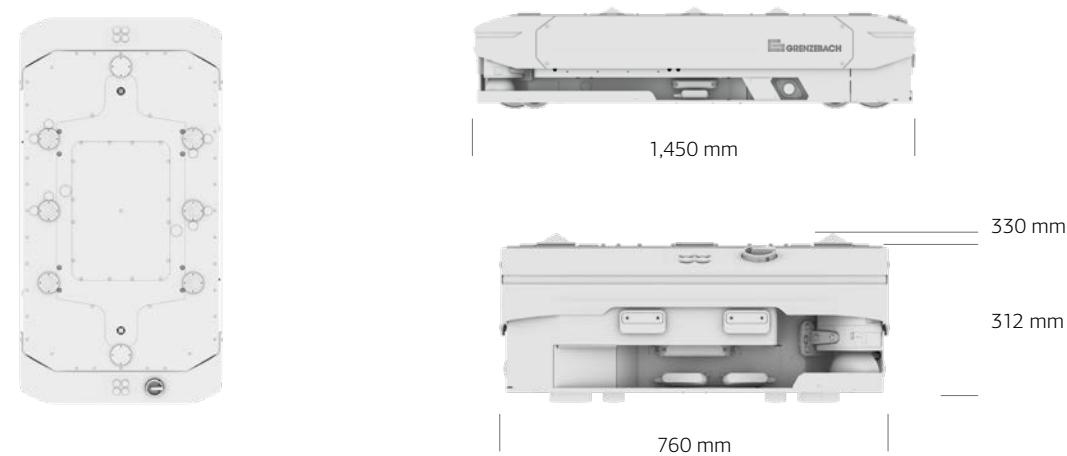
Lithium power, 48 V DC, up to 80 amperes charging current. With top speeds of up to 6 km/h (3,7 mph), the OL1200S is designed for maximum uptime in demanding industrial environments that operate around the clock.



VDA 5050-COMPATIBLE

Maximum freedom for plant planning: The OL1200S can be combined with automated guided vehicles from other manufacturers under a single software control center, such as the Grenzebach Fleet Manager, via the VDA 5050 interface.

Technical Data | OL1200S



Length	1,450 mm (57.08 in)
Width	760 mm (29.92 in)
Height (lifting plate down)	330 mm (13 in) tip pickup mandrel, 312 mm (12.28 in) contact surface
Lifting height	Approx. 140 mm (5.51 in), electrical
Payload	1,200 kg (2,645 lbs) asymmetric , up to 1,500 kg (3,306 lbs) symmetric
Speed (unloaded)	Up to 1.66 m/s or 6 km/h (3.7 mph)
Speed (loaded)	Up to 1.66 m/s or 6 km/h (3.7 mph)
Ascents	Up to 5% over max. 10 m (33 ft) length
Turning radius	Pivot in stationary location or ≥1 m (3.3 ft)
Navigation	Contour navigation (safety scanner detects surrounding and compares with internal map)
Drive mode	Forward and reverse, omnidirectional
Positioning accuracy	± 15 mm (0.6 in)
Safety	2 certified safety laser scanners (diagonally located at corners) Galvanic isolation as per DIN EN 1175 (VDE0117)
Operating voltage	48 V DC
Battery	Lithium iron phosphate
Battery charging system	Fixed contact, up to 80 A charge rate
Charging time	15 - 80 % SOC approx. 30 min.
Operating time	24 hours, 7 days
Total weight	approx. 580 kg (1,279 lbs)
IP certification	IP54
Temperature range	+10 to + 40 °C (0°C - 40°C on request)
Humidity	max. 80 % non condensing
Sound pressure level	< 69 dB (A)
Options:	
Autonomous Load Carrier Detection	✓
Travel Area Monitoring	✓
Blue Light	✓
Soundmodule	✓

A modular system with lots of possibilities. The Grenzebach solution for automated goods transport.

AUTOMATED GUIDED VEHICLES



OL1200S
With omnidirectional drive and extensive technology package. Particularly suitable for long load carries or when space is tight.



L1200S
Trusted classic with conventional drive for load carries with a rather square footprint.

SOFTWARE

The Grenzebach Fleet Manager coordinates all vehicle movements. Together with a powerful Warehouse Control System or your product control software, it ensures optimal goods transport. In addition, we offer integration into Grenzebach's IIoT platform, SERICY. Your advantage: you control, monitor and optimize all your processes on just one platform.

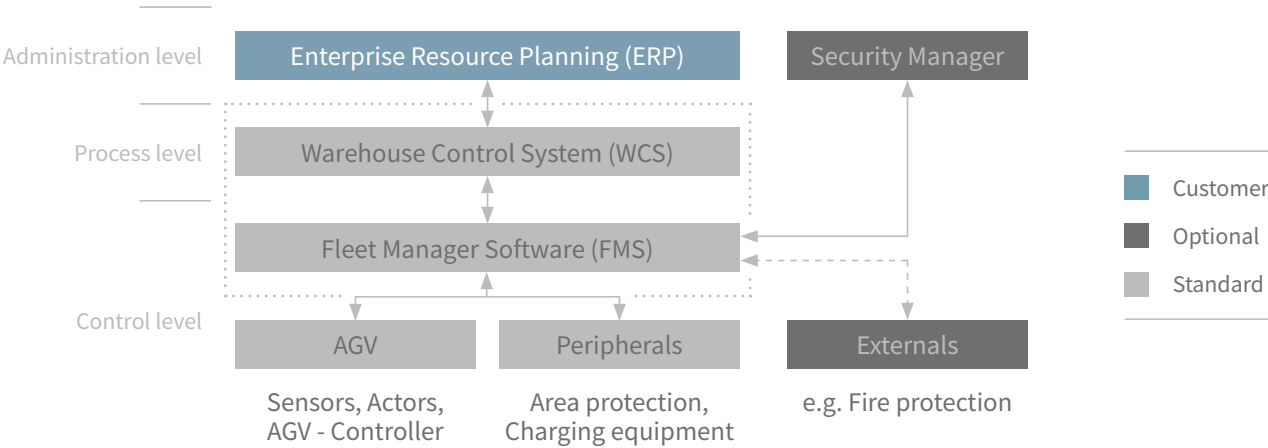
GOODS CARRIERS

Trolleys and tables for your requirements as standard models or manufactured to customer specifications. Your suppliers' goods carriers can also be adapted to Grenzebach vehicles.

PERIPHERALS

The overall solution includes, for example, the appropriate charging technology and transfer stations.

SOFTWARE ECOSYSTEM



INTRALOGISTICS SOLUTIONS

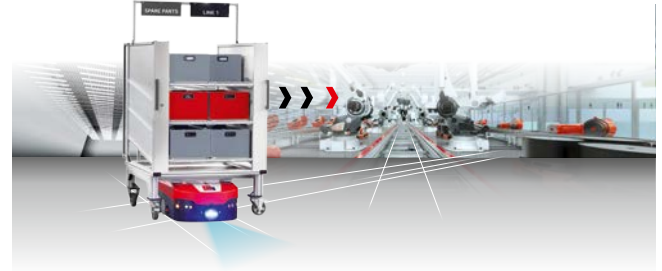
GOODS TO PERSON SOLUTIONS



Optimized warehousing – flexible, intelligent, ergonomic

With AGV-based Goods-to-Person solutions from Grenzebach, you optimize processes in and the footprint of your warehouse. The holistic solutions make a decisive contribution to productivity. Accurate and efficient order picking of components for production or shipping to other production sites is just one example.

AUTOMATED GOODS TRANSPORT SOLUTIONS



Reliability and flexibility for complex production environments

Grenzebach automation solutions for automated goods transport bring technical intelligence to your processes. With automated guided vehicles, the right components reach their destination at the right time. For optimum material flow in your production.

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