

Driverless freedom

Autonomous Navigation System for transport systems



Automotive Solutions

Answers for industry.

SIEMENS

Solving transport problems efficiently: Autonomous Navigation System

Growing demands for maximum efficiency, along with high quality supply and ever greater flexibility present many different challenges for industrial logistics – and yet these can be met so easily: with our innovative navigation system for driverless indoor transport systems.



Wide variety of applications

The Autonomous Navigation System can be deployed on a wide range of indoor transport vehicles such as forklift trucks or ground conveyors. Thanks to innovative route programming, it can easily be adapted to each application: One manual teach-in drive is all it takes! This is an advantage that pays off particularly when the transport routes have to be changed at short notice or temporarily.

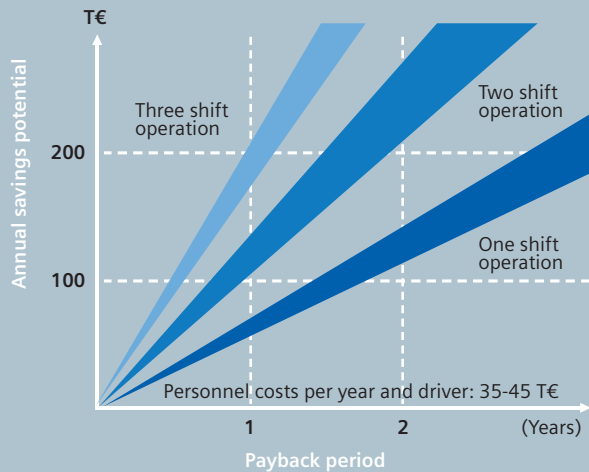
Absolutely reliable in operation

Forklift trucks or ground conveyors that are equipped with this innovative navigation system operate completely autonomously. The corresponding load carriers can be detected and picked up automatically. An integrated obstacle recognition system for the whole vehicle, including load, insures absolute reliability of operation.

Efficient installation

In comparison with conventional AGV systems that require elaborate installations, no special structural measures are necessary for our system. The travel route is determined by means of 3D laser navigation using existing natural landmarks in the ceiling area.

Conclusion: The Autonomous Navigation System not only performs a huge variety of transport tasks particularly efficiently and reliably, but at the same time offers the correspondingly high level of flexibility for optimum, future-proof planning of logistics.



Depending on the frequency of use and personnel costs, ANS will pay for itself in a relatively short time and offers great potential for continued savings.



Technical information

Optimum travel and loading functionality

- Driverless navigation in indoors areas
- Modular, unlimited routes
- Flexible motion guidance due to unlimited number of start or stop points and routes
- Automatic picking up and setting down of loads at defined positions
- Optimum recognition of obstacles in direction of travel over complete vehicle contour including load

Minimum tolerances

- Precision of travel: +/- 60 mm
- Precision of positioning
 - +/- 30 mm (forklift)
 - +/- 5 mm (ground conveyer)

Simplest operation

- Route programming by means of teach-in
- Multilingual operation via touch panel

The advantages of our Autonomous Navigation System

- Based on standard hardware components conforming to industry standard
- Raises the efficiency of logistics areas by means of reduced operating costs, while maintaining or improving performance and offering maximum flexibility at the same time
- Permits autonomous transport vehicles; no location markings such as laser reflectors, magnets or induction loops are necessary
- Can be put into service quickly and easily, thereby saving money
- Insures reliable transport, optimum availability and high levels of safety
- Pays for itself through low maintenance costs

More information?

You can obtain further details on our extensive portfolio for the automotive industry at:

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