



Intralogistics

Intelligent transport systems need the USi®

When two innovation leaders enter into a cooperation, the result is intelligent technology of tomorrow: Mayser equips ultramodern automated guided vehicles from AGILOX with its unique ultrasonic sensor technology to create a unique selling proposition.

The challenge

Preventing automated guided vehicles from colliding with people and objects requires ultramodern, certified sensor technologies. A challenging task for the IGV AGILOX was to protect the blind zone from the fork arms in the phase immediately prior to entering the pallet. AGILOX Services had searched the market in vain for sensor technologies that are small enough to fit in the small installation space and to reliably protect this area according to ISO 13849-1, Category 3 PL d.

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The combined product properties of the USi® make it a unique development in the field of ultrasonic sensors and allow its use in entirely new applications. We are pleased that AGILOX Services recognised the potential of the USi for its innovative IGV concept.

Matthias Sollmann,
Product Manager Mayser Safety Technology



AGILOX

The company

AGILOX Services GmbH with headquarters in Vorchdorf, Austria, specialises in the development and construction of automated guided vehicles. The Intelligent Guided Vehicle (IGV) AGILOX belongs to a new generation of plug & play transport systems that has achieved international success with new concepts for spatial navigation and swarm intelligence. Established in 2009, AGILOX has 35 employees.



The solution

The Austrian sales partner Urmet Dialog pointed AGILOX Services toward the USi ultrasonic sensors from Mayser. A product demonstration quickly showed that Mayser offered the only sensor on the market that would fit in the small installation space of the IGV's fork arms while meeting the requirements for ISO-compliant protection of the zone. AGILOX Services was impressed with the very small, feely positionable transducers of the USi®, which can be positioned apart from the electronic system for a high degree of versatility.

Convinced by the technology, AGILOX Services decided to use the USi ultrasonic sensor from Mayser. The USi is ideal for non-touch monitoring of three-dimensional spaces and therefore for the requirements of the IGV. The sensor reliably detects objects made of diverse materials and is insensitive to contamination, extraneous sound, air flows and moisture.

Since the areas of application for the IGV Agilox also include work areas where people move about, the USi® Safety with a special dual channel system for personnel safety was added later. AGILOX Services therefore received a technology that was even more innovative and more complex than the original requirement.

The result

USi® and USi® Safety ensure that the Intelligent Guided Vehicle from AGILOX Services can operate without interruptions, which allows maximum efficiency. The IGV AGILOX is the only automated transport system on the market that is fully protected according to ISO 13849-1 Category 3 PL d – a unique selling proposition with long-term benefits for AGILOX Services. A continuation of the cooperation with Mayser for further optimisation of the sensors and improvement of the vehicles is planned.



The use of USi® Safety in very small installation spaces has allowed us to make the AGILOX altogether more safe, while keeping everything very smart. We look forward to further improving the product in cooperation, so that it will also be able to meet the new requirements.

Josef Baumann-Rott,
Co-founder AGILOX Services GmbH

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