



SICK
Sensor Intelligence.

PRESS RELEASE

Industry: Handling and warehousing systems

Exact positioning of storage and retrieval systems thanks to accurate laser distance measurement from SICK

Waldkirch/Koblenz, Tour Stop No 30 2010 - When used in the highly dynamic PSI Technics positioning control circuits, laser distance measurement systems from SICK rapidly provide accurate data for position feedback.

Challenge: Automated Handling

PSI Technics is a leader in high-performance positioning systems and offers highly dynamic PSS (Positioning Solution Systems) which are not only used in new systems but can also be retrofitted to intralogistical systems, e.g. storage and retrieval systems. In order that the PSS, a positioning control circuit with optimized travel profiles and flexible speed and acceleration selection, can bring its dynamic capabilities to bear fully, and thus achieve increases in performance of 15 % and more, a very fast and precise distance measurement system for position feedback was required, whose mechanics and automation technology were to be easy to integrate. SICK, as a provider of probably one of the largest distance measurement portfolios was able, after analyzing the task and the secondary conditions together with PSI Technics, to provide a solution which met the high demands PSI Technics had on a distance measurement system.

Customer Solution: Laser position detection in milliseconds enables increases in intralogistics performance



PSI Technics relies on a laser distance measurement system (DME5000) from SICK for its highly dynamic PSS Positioning Solution System which enables storage and retrieval systems to travel to the destination in the optimum time, independent of load and speed without crawling speed. The laser distance measurement system was able to deliver current values within milliseconds for PSS position feedback at a high level of accuracy and reproducibility. The combination of the PSS and DME5000 optimizes the performance of the storage and retrieval system and all the intralogistical processes within the system. As a distance sensor, the laser distance measurement system is an ideal component for the PSS because it can be integrated into the positioning system and the relevant system easily and flexibly.

Benefit:

- **Laser distance measurement supports highly dynamic positioning technology**
- **Suitable for new systems and retrofitting thanks to its system independence**
- **Simple integration and commissioning**

With the laser distance measurement system from SICK, PSI Technics was able to integrate a reliable solution with a safe return on investment which has been proven many times in the intralogistics branch into its own PSS and was thus able to economically implement a new positioning technology. Fast and precise laser measurement supports the highly dynamic capabilities of the PSS concept, which in return opens up several interesting avenues of intralogistical operating reserves. Its many optional integration interfaces make the laser distance measurement system the ideal sensor for a positioning system. The PSS can be integrated into new systems from any manufacturer and into any conceivable drive and control architectures. Especially when retrofitting systems, quickly exchanging or mounting system components for the first time presents a challenge. The mounting systems on the laser distance measurement system enable quick installation and reliable alignment.