



### **SICK Ends Stop-Start Frustration of Driverless Forklifts**

SICK has developed the Safe AGV Forklift, an innovative, PLd/SIL2-certified safety solution that enables a driverless forklift to continue to operate productively in an automated factory or logistics environment, even when the forks are in the load carrying position.

The SICK Safe AGV Forklift solves a common stop-start frustration that slows operation and leads to wear and tear of Automated Guided Vehicles (AGVs) fitting with a forklift: When the protective laser scanning fields are infringed because the forks are down, the AGV must be brought to a safe stop.

Designed specifically for AGV forklifts with a drive wheel, the SICK Safe AGV Forklift integrates two SICK laser scanners providing protective fields in front and behind the vehicle, with a SICK Flexi Soft controller and a SICK encoder to monitor the speed of the vehicle.

Easily incorporated into a new AGV Forklift design or retrofitted onto existing vehicles, the SICK AGV Forklift is a functional safety system designed to meet both current EN1525 and forthcoming ISO 3691-4 safety standards.

Says Seb Strutt, SICK UK's Senior Product Manager for Machinery Safety: "When the SICK Safety Laser Scanner protective field is obscured by the forks carrying a load, or during loading and unloading, the AGV can continue to proceed at a safe speed of 0.3m/sec, without requiring personnel supervision.

"In addition, the SICK scanners operate a warning detection field as well as a protective stop field, so that the AGV slows when objects are sensed at a distance, reducing the wear and downtime associated with constant start/stop operation."

The SICK AGV Forklift solution comprises a SICK S3000 remote laser scanner for forward scanning and S300 Mini Remote laser scanner for rear scanning, a SICK DFS60S Pro safety encoder and a Flexi Soft CPU controller with associated modules and function blocks, including a SICK Drive Monitor.

The SICK S3000 laser scanner has a maximum distance measuring range of 49m, a warning field range also of 49m, and a stop protective field of 7m, and can be programmed for up to 64 different fields. The SICK S300 laser scanner has a maximum distance measuring range of 30m, a warning field range of 8m and a stop protective field of 3m. The S300 can be programmed for up to 3 fields.

The SICK DFS60S Pro safety encoder is a blind hollow shaft incremental encoder, for 60mm drive shafts, certified for PLd/SIL2 safety installations. The package is completed by a SICK Flexi Soft pcu controller, with function blocks that can be selected to meet different AGV models and requirements.

For more information on the SICK range of products, please contact Andrea Hornby on 01727 831121 or email [andrea.hornby@sick.co.uk](mailto:andrea.hornby@sick.co.uk).

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