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FLEET MANAGEMENT / NAVIGATION



OCEANEERING®

Strategic partnership for the Smart Factory of the Future

The agnostic Kinexon AMR & AGV Fleet Manager is used in combination with the Continental Autonomous Mobile Robots (AMR) is used at several Continental production sites in Europe and the Far East. The communication between the AMR and the control system is carried out using the industrial standard VDA 5050. On this basis, the internal transport of semi-finished goods from the warehouse to production, the transfer between production steps, the supply of machine replenishment, and the disposal of production to the finished goods warehouse are automated.

In the fleet manager, processes can be quickly and independently implemented, adjusted, and monitored directly by the operational management. The fully dynamic process serves more than 100 different load transfer stations and has led to an optimized and efficient production chain. This is achieved through order generation in various subsystems, such as the SAP EWM in connection with the Operating System (OS), the IoT platform of the Fleet Manager.

The automatic transport order generation is particularly efficient through the Geofence Entry Events in combination with the Real-Time Location System (RTLS) based on UWB sensor technology. In addition, the fleet manager operates in conjunction with the OS to ensure the interaction of the AMRs with manual forklifts and to avoid collisions with, for example, lowered fork tines. Since 2019, the factories have been operating continuously in a three-shift operation, 24/7, with the Fleet Manager. With more than 350,000 successfully completed orders and the use of two types of AMRs, they have proven to be extremely efficient. Thanks to the reliable Fleet Manager, which ensures an availability of over 99.98%, distances have been covered safely and reliably that are far greater than a circumnavigation of the world.

Here, the Continental AMR maneuvers a pallet through the warehouse aisles.



X-Tags - one of the smallest industry-specific UWB sensors. Its size and versatility allow for tracking even large quantities of objects.



info Picture:

Picture: Continental / Kinexon

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