

Digitalisation for production halls

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In digitalised factories, an uninterrupted flow of data and information – from the superordinate planning level to individual machines, conveyor systems and transport boxes – is paramount. When moving systems are in use, such as automated guided vehicles (AGV), tigger trains or mobile eKanban racks, the signals have to be sent remotely. The steute business unit "Wireless" has developed a wireless network solution with precisely this scenario in mind. Called "sWave.NET[®]", it transmits data from switches and sensors in the field to the Internet of Things (IoT) and other superordinate IT systems.



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At the Motek 2021, steute will be demonstrating to visitors how wireless communication with

sWave.NET® can provide huge increases in efficiency. One example: wireless sensors developed especially for this task detect boxes occupying slots in mobile Kanban racks. As soon as the predefined minimum quantity is reached, a material request is automatically triggered. Slot occupancy can be visualised on all web-based terminal devices.

This means that stock levels at all assembly points are always transparent, while material availability is guaranteed, production standstills are avoided, and "lean" management of warehouse stock is viable. This saves money, ties up less capital and – crucially – keeps all assembly points supplied with sufficient materials at all times. The steute sWave.NET® solution is already used in the production of electrical devices, the automotive industry, and the manufacturing of medical equipment.

A second example of the gains in efficiency which are achievable using a wireless system on the shop floor is AGV fleets for car manufacturing. The automated vehicles can be switched off and then "woken up" by sWave.NET®, saving energy and therefore also money. Even better, the vehicles do not have to "sleep" at a charging station, but can simply stay wherever they happen to be until they are needed again. Several automotive companies are already using this system in their production halls.

In both examples, sWave.NET® serves as the "backbone" integrating mobile systems and the array of assembly, production and material supply data. The efficiency of the wireless system is further increased by the fact that it is very easy to configure and is continually being expanded – to include new hardware components (sensors, Access Points, Sensor Bridges) and new software elements, such as additional interfaces.

All the latest developments surrounding the sWave.NET® wireless network will be presented by steute at the Motek 2021.

steute at the Motek: Hall 1, Booth 1510