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Nuremberg, March 4, 2020

**Hannover Messe 2020, Hall 9**

## Siemens Automotive Showroom and Test Center

- The Siemens Automotive Showroom and Test Center in Nuremberg was opened in 2014. Its aim is to develop, test and present new manufacturing options and methods before they are implemented on customer sites. This allows Siemens customers such as AGV manufacturers to see their products interact live.
- For example, the solution portfolio for overhead conveyor technology in the factory is also presented, while at the same time new and further developments as well as customer-specific adaptations are tested prior to implementation. One circuit was set up here for a heavy-duty electric conveyor with carrier for car body transport (car bodies up to 3.5 tons and up to 4 axes for lifting, swiveling and turning), and one circuit for a lightweight electric conveyor (transport system for medium-weight transport goods such as doors, cockpit, engines/gears and logistics up to 1.5 tons payload and 1-2 axes for lifting and turning) with carrier for the transport of doors or cockpits, for example.
- In addition, the Test Center is also used to develop Siemens carrier controllers and to test them under real conditions.
- In 2017, the showroom was expanded to include AGVs (Automated Guided Vehicles). The aim is to support the implementation, further development and testing of the Simove solution, an AGV system platform which comprises Siemens automation and drive technology plus a software package. Simove offers users applications for maintenance as well as fleet management software, where AGVs from different manufacturers can be integrated. Machine builders can use the software library to access preconfigured and tested function blocks. Furthermore, the Simove software is based on the Simatic TIA Portal, which

enables efficient engineering.

- In 2018, an RTLS (Real Time Locating System) application was also installed in the Test Center, which can be used to track objects such as forklifts, tugging trains, tools or boxes. In addition, information on the objects can be visualized using an RTLS transponder with E Ink display. At the start of 2020, a software solution was added to the RTLS installation, which maps the digital performance twin. This enables the user to visualize the material, to analyze material flow in the factory, to perform searches based on job information that can be created automatically in the system, and to automate and optimize manual processes in production and logistics using virtually defined areas known as geofences.
- At the end of 2019, the industrial communication environment was extended from iWLAN to create the first industrial 5G application with private 5G standalone network in a real industrial environment. The 3.7 – 3.8 GHz frequency band (which is reserved for industry in Germany) is used here for local, private networks. This project was implemented together with Qualcomm Technologies. In the Automotive Test Center, various technologies can now be tested in a standalone 5G network under real conditions and solutions can be developed for future applications in industrial environments.