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Press

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Siemens proves: Digital Data Chain saves time and costs

- Pilot project with Bayer at the Dormagen site
- Reliable product identification with ID link and quick access to digital product information
- Automatic provisioning through an Information Exchange Platform
- Siemens presents Digital Data Chain at Hannover Messe

Making product data for plant components available digitally and at all times – that is the basic idea of the so-called Digital Data Chain (DDC). Siemens is a pioneer in mapping the entire digital data chain as the company has now supplied Bayer's Crop Science Division with several SITRANS P320 pressure transmitters with standardized ID links for unique object identification. In this way, the associated instance-specific, digital documentation according to VDI standard 2770 could be transferred directly to the ERP system used by Bayer. "With the digital data chain, plant operators save a lot of time and money," says Axel Lorenz, CEO Process Automation at Siemens. "Currently, plant maintenance personnel spend most of their working time searching for relevant information. In the future, components at the field level can be identified quickly and reliably via mobile devices. At the same time, all information about the component is immediately available digitally – for example for operation or maintenance."

Manufacturer information on plant components crucial for operation

Various technical goods, plant components and equipment are used in process plants. For their correct planning, installation, commissioning, operation, cleaning,

Werner-von-Siemens-Straße 1 80333 Munich Germany maintenance and servicing over the entire life cycle, information is required that is contained in the manufacturer's specifications. This information can now be read out in the cloud in a standardized manner via a digital data chain and made available regardless of location. Behind the Digital Data Chain is the Digital Data Chain Consortium (DDCC), a cross-industry association of more than 50 companies in the process industry founded in 2021. The aim is to create standards and platforms for the exchange of information among each other. In the future, all physical plant objects will be identifiable as an instance via a digital nameplate – for a lifetime and across all stages of the product life cycle.

Transfer all information to the ERP system via scan

Three technologies underlie the data consistency of the digital data chain: the automatic identification of plant components (according to IEC 61406-1), digital manufacturer information (according to VDI guideline 2770) for standardized data provision and a cloud-based information platform (IEP – Information Exchange Platform). The minimum requirements for a globally unique identification of physical objects are specified in the international standard IEC 61406-1. Based on this standard, Siemens is delivering more and more devices with such an ID link, which enables access to a cloud-based backend via which the product information is provided. "The digital data chain makes it possible for manufacturer specifications of components to be transferred directly to the recipient's ERP during the scan in goods receipt," says Lorenz.

In addition to the SITRANS P320 pressure transmitter, Siemens has made further products DDC-compliant, such as the DQ 16 digital output module of the SIMATIC S7-1500 controller.



ID link on plant component can be scanned via mobile device

Further details on Siemens' implementation of the Digital Data Chain can be found at: <u>https://siemens.com/digital-data-chain</u>

Siemens will also demonstrate the implementation of the Digital Data Chain at the upcoming Hannover Messe using practical examples. This press release and further information about Siemens at the Hannover Messe can be found at <u>sie.ag/press-hm23</u> and <u>www.siemens.com/hannover-messe</u>.

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to integrate cutting-edge future technologies. Siemens Digital Industries has its global headquarters in Nuremberg, Germany, and has around 72,000 employees internationally.

Siemens AG (Berlin and Munich) is a technology company focused on industry, infrastructure, transport, and healthcare. From more resource-efficient factories, resilient supply chains, and smarter buildings and grids, to cleaner and more comfortable transportation as well as advanced healthcare, the company creates technology with purpose adding real value for customers. By combining the real and the digital worlds, Siemens empowers its customers to transform their industries and markets, helping them to transform the everyday for billions of people. Siemens also owns a majority stake in the publicly listed company Siemens Healthineers, a globally leading medical technology provider shaping the future of healthcare. In addition, Siemens holds a minority stake in Siemens Energy, a global leader in the transmission and generation of electrical power.

In fiscal 2022, which ended on September 30, 2022, the Siemens Group generated revenue of €72.0 billion and net income of €4.4 billion. As of September 30, 2022, the company had around 311,000 employees worldwide. Further information is available on the Internet at www.siemens.com.