

Nuremberg, April 13, 2021

### Digital Enterprise Virtual Experience at Hannover Messe 2021

## Siemens drives merging of physical and virtual worlds for a more flexible and sustainable industry

- „Infinite opportunities from infinite data“ is this year's trade fair motto
- Leveraging the full potential of data from merging the virtual and physical worlds
- "Digitalization knows no end"
- Expansion of the portfolio for edge computing in industry

Under the motto "Infinite opportunities from infinite data", Siemens is demonstrating at the "Digital Enterprise Virtual Experience" at Hannover Messe 2021 how the merging of the physical and virtual worlds enables industrial enterprises to act flexibly and sustainably, as they are facing huge challenges: The Covid 19 pandemic has changed markets and requirements almost overnight. Added to this are the growing individualization and the urgent need for more sustainability. This can only be mastered with the help of digitalization and automation. Siemens brings together the data generated in this process in a continuous cycle between the virtual and physical worlds. This enables companies to better understand and use data. Traditional silos between previously separate industrial domains are breaking down and new opportunities for sustainable and flexible production are being created. This enables employees in industrial enterprises to make appropriate decisions based on data or, for example, to react a lot faster to changes such as suddenly increased resource consumption.

"The rapid development of available data in recent years makes one thing clear - digitalization knows no end. Instead, it starts an infinite loop: you collect data, and you learn from it, you take the next step," explains Cedrik Neike, member of the Managing Board of Siemens AG and CEO of Siemens Digital Industries. "In production, this

creates an infinite pool of knowledge that we are far from fully leveraging. And anyone who manufactures in an industrial way can take advantage of this potential. This applies to production sites with a long history just as much as it does to completely new production sites from the very first pixel of planning onwards.”

With the Digital Enterprise portfolio, Siemens supports its customers in exactly this area: With the help of the digital twin and the use of future technologies such as AI, customers can react quickly and flexibly to global challenges and, for example, adapt their products and manufacturing processes to new requirements or to save resources.

Siemens links data from the entire lifecycle of products and production, of information technology (IT) with its data analysis capabilities and operational technology (OT), and of the manufacturing level with the office level. This creates a continuous cycle for optimization. In this industrial Internet of Things, the industrial processes are modular and flexible, thus always enabling optimal adaptation of all lifecycle parameters. This also includes the factory buildings and the workflows of suppliers and logistics partners.

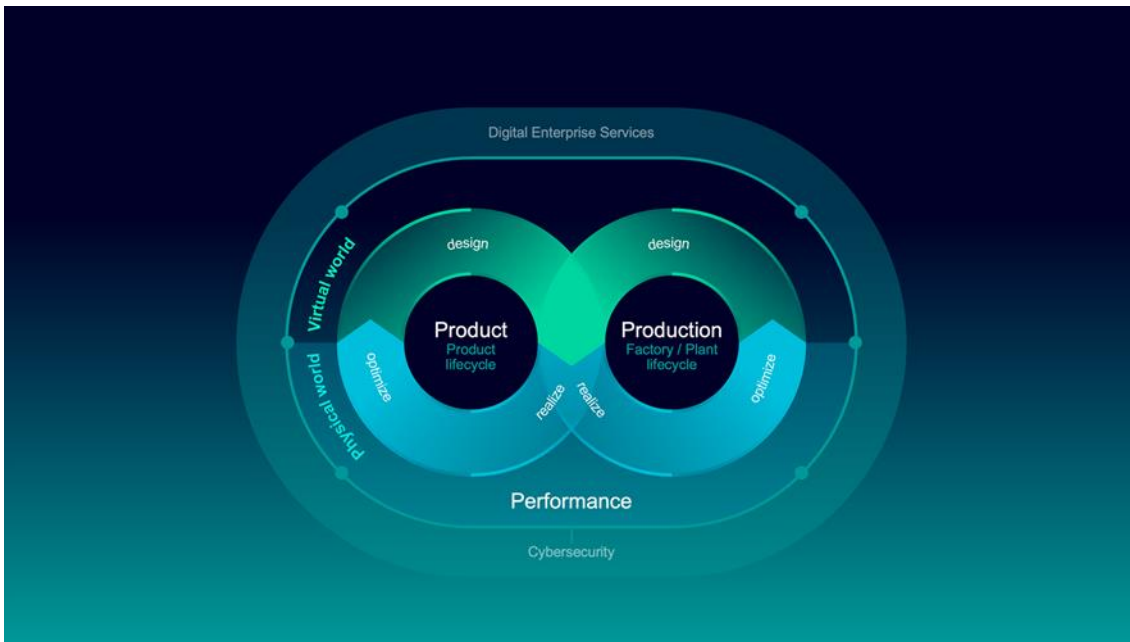
To ensure that data is transmitted quickly and reliably to the right place via high-performance communication networks and that all production areas can thus react immediately to changes, Siemens is continuing to drive forward cutting-edge technologies such as Industrial 5G. The ability to operate such private 5G networks enables companies to tailor them specifically to their performance, reliability, and security requirements. In Germany, companies also benefit from being able to use private 5G frequencies exclusively at their sites. As one of the key Hannover Messe exhibitors, Siemens will set up a prototype industrial 5G campus network in one of the exhibition halls. In the future, the network can be used by exhibitors during ongoing trade fairs and will be available to companies outside of trade fair times for tests and field trials.

With Industrial Edge, Siemens offers a concept in which customers can flexibly use the advantages of data processing by using edge or cloud computing, depending on the application. Siemens is also expanding its portfolio in edge computing for real-time analysis of data on-site in production and its intelligent use. In addition to the connection of Simatic and Sinumerik controllers to the Siemens Industrial Edge, the offering for the connection of drive technology is also being expanded. Drive

technology is considered an important indicator of machine availability. In addition to impacting variables such as speed and torque, it also provides information for the use of edge computing as to whether the machine is running fault-free and at an optimum level within its parameters, for example in terms of energy consumption. Intelligent analysis technology can thus inform operators at an early stage when, for example, maintenance is due, or energy can be saved.

As part of the Digital Enterprise Virtual Experience at Hannover Messe 2021, Siemens communicates numerous highlights and innovations, including:

- **Siemens joins hands with Swire Coca-Cola to build digital plant benchmarks in beverage industry** <https://sie.ag/3uKeqY0>
- **New motors extend the application range of the Sinamics S210 servo drive system** <https://sie.ag/3mtJRCE>
- **Toyota Industries Corporation and Siemens cooperate on digital transformation for die casting** <https://sie.ag/3dQ9I9w>
- **New Smart Condition Monitoring solution with IIoT sensors for industrial plants** <https://sie.ag/2RkPrMq>
- **Accelerated production setup for Covid-19 vaccine with Siemens automation and digitalization solutions** <https://sie.ag/3mxFyq2>
- **Wi-Fi 6 for industry: Siemens expands its network portfolio** <https://sie.ag/3cWZcc4>
- **Quick and easy simulation of drives with Sinamics DriveSim Basic** <https://sie.ag/2Q141rG>
- **High-efficiency motor series from Siemens now consistently available in efficiency class IE4** <https://sie.ag/2Pk3zEP>



Under the motto "Infinite opportunities from infinite data", Siemens is demonstrating at the "Digital Enterprise Virtual Experience" at Hannover Messe 2021 how the merging of the physical and virtual worlds enables industrial enterprises to act flexibly and sustainably

This press release and a photo are available at <https://sie.ag/3mDYNhE>

For further information regarding the Siemens Digital Enterprise Virtual Experience at Hannover Messe 2021 please see [www.siemens.com/press/hm21](http://www.siemens.com/press/hm21)

### Contact for journalists

Katharina Lamsa

Phone: +49 172 8413539

E-mail: [katharina.lamsa@siemens.com](mailto:katharina.lamsa@siemens.com)

Follow us on **Social Media**

**Twitter:** [www.twitter.com/siemens\\_press](http://www.twitter.com/siemens_press) and <https://twitter.com/siemensindustry>

**Blog:** <https://ingenuity.siemens.com/>

**Siemens Digital Industries (DI)** is an innovation leader in automation and digitalization. Closely collaborating with partners and customers, DI drives the digital transformation in the process and discrete industries. With its Digital Enterprise portfolio, DI provides companies of all sizes with an end-to-end set of products, solutions and services to integrate and digitalize the entire value chain. Optimized for the specific needs of each industry, DI's unique portfolio supports customers to achieve greater productivity and flexibility. DI is constantly adding innovations to its portfolio to integrate cutting-edge future technologies. Siemens Digital Industries has its global headquarters in Nuremberg, Germany, and has around 76,000 employees internationally.

**Siemens AG** (Berlin and Munich) is a global technology powerhouse that has stood for engineering excellence, innovation, quality, reliability and internationality for more than 170 years. Active around the world, the company focuses on intelligent infrastructure for buildings and distributed energy systems and on automation and digitalization in the process and manufacturing industries. Siemens brings together the digital and physical worlds to benefit customers and society. Through Mobility, a leading supplier of intelligent mobility solutions for rail and road transport, Siemens is helping to shape the world market for passenger and freight services. Via its majority stake in the publicly listed company Siemens Healthineers, Siemens is also a world-leading supplier of medical technology and digital health services. In addition, Siemens holds a minority stake in Siemens Energy, a global leader in the transmission and generation of electrical power that has been listed on the stock exchange since September 28, 2020. In fiscal 2020, which ended on September 30, 2020, the Siemens Group generated revenue of €57.1 billion and net income of €4.2 billion. As of September 30, 2020, the company had around 293,000 employees worldwide. Further information is available on the Internet at [www.siemens.com](http://www.siemens.com).