Siemens integrates cutting-edge technologies for more environmentally efficient and flexible production

- Digital Enterprise portfolio aimed at meeting increasing requirements for greater productivity and flexibility as well as environmental efficiency
- New platform innovations ensure integration and flexibility across all stages of the value chain
- Growing ecosystem for Industrial Edge and Cloud enables scalability from the shop floor to the Cloud

Through innovations and the integration of cutting-edge technologies into the Digital Enterprise portfolio, Siemens helps companies from all sectors to achieve a more flexible and environmentally efficient production. “The Digital Enterprise portfolio is already well established globally in all industries for the implementation of Industrie 4.0. Many applications demonstrate the tangible benefits of these solutions for our customers,” explains Klaus Helmrich, Member of the Managing Board of Siemens AG and CEO of Digital Industries, at SPS. “Now we are taking the next step: with numerous innovations and cutting-edge technologies, we are taking the Digital Enterprise portfolio and therefore Industrie 4.0 to a new level.”

At SPS, Siemens is showcasing numerous innovations and sector-specific applications that illustrate how these requirements can be met using new products, solutions and services from the Digital Enterprise portfolio. For example, a more precise and powerful digital twin helps to significantly reduce CO₂ emissions in product development through the comprehensive simulation of real production. The analysis of production processes highlights potential savings for resources such as water and power. And last but not least, the use of innovative production methods – for example Additive Manufacturing – can save materials and prevent waste. With
this portfolio, Siemens is paving the way for modular, highly flexible and above all environmentally efficient production flows.

Increasing requirements for greater flexibility and productivity cannot be met through conventional automation solutions alone. An integrated, scalable system is required from production to the Cloud. The technical prerequisites for this are already available in the form of end-to-end solutions across the entire value chain, which create an even more seamless connection between the virtual and the real world – for all discrete industry and process industries. This is achieved using platform innovations such as Sinumerik One, the first digital-native CNC system, the innovative web-based process control system Simatic PCS neo, the newly developed visualization platform Simatic WinCC Unified and the Xcelerator portfolio, which combines the entire spectrum of industry software, services and MindSphere with an extended Mendix platform for the development of low-code apps.

The trend toward flexible and modular production concepts also creates challenges for wireless communication: more devices, greater reliability and lower latency. The communicative networking of production and logistics elements is the key; from networked automation through to more flexible production. Industrial 5G is the basis for this as it offers ultra-reliable broadband transmission and ultra-low latency for networks with a large number of devices.

Another element for the next step in implementing digital transformation is the growing ecosystem for Industrial Edge and Cloud. This enables data integration from data analysis on the shop floor through the automation system to the Cloud. To this end, Siemens offers new Edge apps for machine tools. In addition, Siemens has acquired Edge technology from US company Pixeom, strengthening its portfolio for easy app management and central device updates even on distributed infrastructures.

Digitalization is increasingly changing the face of industry: the more powerful connection of the virtual and the real world leads from the conventional showroom to the digital design and sales room, from the foreman’s office on site to the simulation room in the factory and from linked automation to the flexible shop floor.
Siemens AG

Press release

This press release and further information on Siemens at the SPS 2019, please see www.siemens.com/press/sps2019

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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. The company is active around the globe, focusing on the areas of power generation and distribution, intelligent infrastructure for buildings and distributed energy systems, and automation and digitalization in the process and manufacturing industries. Through the separately managed company Siemens Mobility, a leading supplier of smart mobility solutions for rail and road transport, Siemens is shaping the world market for passenger and freight services. Due to its majority stakes in the publicly listed companies Siemens Healthineers AG and Siemens Gamesa Renewable Energy, Siemens is also a world-leading supplier of medical technology and digital healthcare services as well as environmentally friendly solutions for onshore and offshore wind power generation. In fiscal 2019, which ended on September 30, 2019, Siemens generated revenue of €86.8 billion and net income of €5.6 billion. At the end of September 2019, the company had around 385,000 employees worldwide. Further information is available on the Internet at www.siemens.com.