Achema 2022

Digitalization accelerates sustainability in the process industry

- Siemens represented in the Green Innovation Zone and the Digital Hub at the ACHEMA trade fair
- Focus on chemical recycling and hydrogen
- Siemens Xcelerator and the entire Siemens portfolio support sustainability management along the production chain

Sustainability is the leading theme of this year's world's flagship trade fair for the process industry, ACHEMA, in Frankfurt. In the Green Innovation Zone and the Digital Hub at the fair, Siemens will show how industrial companies can efficiently combine digitalization and sustainability. "As one of the main CO2 emitters, the process industry is under particular pressure to produce in a climate-friendly way," says Eckard Eberle, CEO Process Automation at Siemens. "Holistic and effective sustainability management can only work if industrial companies consistently focus on digitalization and automation." In more than 20 lectures and best-practice presentations, Siemens will illustrate how companies can use digitalization and automation and make their products, plants, and processes more sustainable.

Comprehensive portfolio for a sustainable process industry

Siemens is taking an integrative approach at Achema this year. The company will be presenting itself in many relevant areas but will not have a large stand of its own. In addition to the Green Innovation Zone (Hall 6) and the Digital Hub, Siemens is part of several joint stands on various industry topics: with the electrical engineering association ZVEI, PROFIBUS and PROFINET International (PI) and with the Fieldcomm Group (all Hall 11).
In the Green Innovation Zone, Siemens is focusing this year on hydrogen and chemical recycling. Chemical recycling plays a decisive role on the way to a true circular economy in the process industry. In essence, the aim is to decompose waste, such as tires, batteries, and plastics, back into the raw materials that were used in their production, such as oil and gas. After reprocessing, the raw materials recycled in this way can in turn be used as feedstock for the chemical industry.

This is also the business idea of Pyrum Innovations. The startup company from the German state of Saarland has developed a novel pyrolysis technology that can be used to convert old tires back into primary raw materials. To be able to scale its technology quickly Pyrum Innovations relies on the entire automation portfolio and industry know-how of Siemens – from the web-based Simatic PCS neo process control system to intelligent measuring devices. Siemens and Pyrum Innovations will present more details in a joint presentation in the Green Innovation Zone at Achema.

**Hydrogen an important element for green process industry**

Low-carbon hydrogen is an important building block for decarbonizing entire industries as well as the energy and transportation sectors. With its hydrogen-enabled portfolio, Siemens serves process OEM, EPC and end customers to build and operate equipment modules or entire plants along the hydrogen value chain – from hydrogen production to conversion, storage, transport and utilization. Siemens will also be demonstrating what is involved in this process in several presentations in the Green Innovation Zone.

The backbone of competitiveness in the process industry is control technology. With the web-based Simatic PCS neo process control system, Siemens is contributing to comprehensive sustainability management at the central point of plant control. The location- and device-independent control capability of PCS neo allows operators to access the control system and control their plants from anywhere in the world. This eliminates the need to travel to individual plant locations for operation or instruction in the control system. In addition, existing plant components that were already running under other systems, such as SIMATIC PCS 7, can be integrated into the control system.
High demand for innovative software
In the Digital Hub in Hall 11, the focus is on digital transformation: potential for the process control community, technologies and use cases with a focus on software and platforms, cloud and infrastructure, and digital consulting. Siemens is also represented here with several topics. Eberle: "Especially in the areas of process optimization, modernization of existing plants or flexibilization of plants and capacities, there is an enormous demand for innovative digital solutions today. However, for the appropriate software to unleash its full power, companies must rely on integrated technology platforms that link all areas of production."

Asset performance management and modular production at the ZVEI joint booth
With the Asset Performance Suite, Siemens will showcase an offering from its new open and digital business platform Siemens Xcelerator. This plant asset management solution supports predictive maintenance of plant components such as pumps or valves, uses artificial intelligence to detect patterns in the operation of these components, and thus enables the highest possible reliability and efficiency for all assets in a plant (ZVEI joint booth, Hall 11).

For many industrial companies, the ability to produce in modules is a decisive step toward remaining competitive in the future. Different plant modules can thus be added to the production process as required and integrated directly into the process control system. This is made possible by the industry standard Module Type Package (MTP) in accordance with NAMUR recommendation NE 148. Siemens will also be showing how companies can use this production standard for themselves at the joint ZVEI booth.
Caption: In the Digital Hub and the Green Innovation Zone at this year’s Achema, Siemens will be demonstrating how industrial companies can efficiently combine digitization and sustainability.

For more information about Siemens at ACHEMA 2022, visit:
https://siemens.com/achema

Contact for journalists
Christoph Krösmann
Phone: +49 (162) 7436402
E-Mail: christoph.kroesmann@siemens.com

Follow us on our social media channels:
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 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 2021, which ended on September 30, 2021, the Siemens Group generated revenue of €62.3 billion and net income of €6.7 billion. As of September 30, 2021, the company had around 303,000 employees worldwide. Further information is available on the Internet at www.siemens.com.