SIEMENS

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Early identification and economic assessment of process anomalies with AI-based app

Siemens has announced its AI Anomaly Assistant Industrial App, which uses artificial intelligence (AI) to detect anomalies in the process industry and assess their business relevance. This gives companies new opportunities for the economical optimization of their processes. The app analyzes process events that affect parameters such as productivity, availability, and quality, and alerts the plant operator to any anomalies. These events and anomalies are no longer simply identified, but also scrutinized for their business relevance—an assessment which was previously only possible based on previous experience.

To enable the AI to detect and evaluate business-relevant anomalies, the machine-learning algorithms are trained on the basis of process data and then concentrated to determine which anomalies have an impact on the economic efficiency of the plant. The plant operator themself then defines the further focus of the AI using the app dashboard, where anomalies can be selected, evaluated and commented. This evaluation phase is accompanied by several feedback loops, so that the plant operator ends up with well-trained, focused AI that is able to evaluate anomalies, based on the process data, for their business relevance. The AI Anomaly Assistant app is installed either as a cloud application or within the user's own infrastructure, for example on a Simatic Box PC or a virtual machine. The cloud-based solution is particularly advantageous during the training and evaluation phase, since it supports efficient collaboration between data analysts and plant operators. In addition, it also allows the results of anomaly detection to be combined with other services, such as predictive asset management, as part of the Asset Performance Suite (APS).

Siemens AG

Artificial intelligence gives companies new opportunities to optimize their processes economically.

Siemens presents the AI Anomaly Assistant App, which uses artificial intelligence (AI) to detect anomalies in the process industry and assess their business relevance. A dashboard helps users classify and evaluate events.

This press release and a press picture are available at: https://sie.ag/3wzyqNK

You can find more information on this topic here: www.siemens.com/industry-suites

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You can find more information on Siemens@Achema Pulse here:

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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 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, 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 2020, which ended on September 30, 2020, the Siemens Group generated revenue of €55.3 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.