SIEMENS

Press

Nuremberg, July 19, 2021

EMO Milano, Hall 7|Booth E06 and virtual Siemens Machine Tool Days 2021

Siemens supports the machine tool industry in utilizing the full potential of data for flexible and sustainable action

- "Digitalization in Machine Tool Manufacturing Infinite opportunities from infinite data" is this year's Siemens trade show motto
- Utilizing the full potential of data for higher productivity
- New Sinumerik One MCP for more user-friendliness, efficiency, and flexibility
- Siemens Industrial Edge extensions for machine tools

Under the motto "Digitalization in Machine Tool Manufacturing - Infinite opportunities from infinite data", Siemens will be demonstrating at EMO Milano and at the virtual Siemens Machine Tool Days 2021, which will be held at the same time, how the full potential of data can be used for higher productivity. This is because combining the real world with the digital world enables manufacturers and users of machine tools to act flexibly and sustainably.

The challenges are huge: The Covid 19 pandemic has significantly accelerated the pace of change in markets and associated demands. Added to this are growing individualization and the urgent need for more sustainability. This can be mastered with the help of digitalization and automation. Siemens brings together the huge volumes of data generated in this process in a continuous cycle between the real and digital worlds. This enables employees in industrial companies to make appropriate decisions based on data and respond more quickly to trends and changes.

Press Release

Sinumerik One is core element of highlight case with two technologies

At EMO Milano and the Siemens Machine Tool Days, Siemens will demonstrate how to react quickly to trends with the CNC Sinumerik One, which was launched on the market as a digital native in 2019. The focus of the trade fair appearance and the virtual event is a production unit that shows two machines controlled with Sinumerik One, a 5-axis milling center and a robot-based additive manufacturing machine. With these two machines, for example, gears of large gearboxes can be repaired instead of replacing them. Such large gearboxes are used in areas such as wind energy, where they are subject to natural wear due to the enormous frictional forces and therefore must be replaced at certain time intervals. At EMO Milano and the Siemens Machine Tool Days, Siemens will demonstrate how the gears are initially milled flat in the milling center. A robot is then used to rebuild the teeth in an additive manufacturing process. The final precision grinding takes place at the end again on the 5-axis milling center. The repair instead of new production not only saves material resources, but also about 60 percent of energy. Sinumerik One, the first Digital Native CNC, represents the core element for the digital transformation of the machine tool world. Thanks to the digital twin via Create MyVirtual Machine, both machines could be developed, tested, and functionally approved in parallel long before the real machine was put into operation. Machine builders thus get to a better machine faster and machine users faster to the right workpiece.

With the Digital Enterprise portfolio, Siemens supports companies exactly where the current challenges lie: With the help of digital twins, such as Sinumerik One, and the use of future technologies such as artificial intelligence or industrial edge computing, machine builders and users can collect, analyze, understand the data generated and thus use in a meaningful way. This allows them to react quickly and flexibly to challenges, adapt their products and manufacturing processes to new requirements and save resources.

Greater flexibility and innovative technology for machine operation

As part of the EMO Milano and Siemens Machine Tool Days 2021, Sinumerik One offers new functions and technology updates that further increase performance, flexibility, and modularity. Visitors to EMO Milano as well as to the virtual Siemens Machine Tool Days will have the opportunity to see the new Sinumerik One Machine Control Panels (MCP) in action. With the new Sinumerik One MCPs, Siemens is launching an intuitive machine operation that offers CNC users more comfort, efficiency, and flexibility. The new ergonomic metal design in Blackline plus design can be integrated into existing operating concepts and fits 19-inch to 24-inch panels. It can thus be configured individually for customer-specific requirements. New functionalities also make operation easier. The so-called Powerride combines the override switch with the NC start button for easy and efficient setup. With the integrated LED scale in the Powerride, ACTUAL values can now be visualized. With the Powerride, the feed is automatically reset after the end of the set, which makes operation effective and easy. In addition, the Powerride provides haptic feedback through short vibration as soon as a defined limit value is exceeded. This increases the perception of these values and supports the blind operation of the panel. The QWERTY keyboard is provided as standard for the MCPs for the 22-inch and 24-inch variants, so users of these variants no longer need an additional keyboard. An integrated RGB LED lighting in the QWERTY keyboard enables customizable color concepts for easy work. The Sinumerik One MCP can be used in harsh industrial environments due to its robustness. Its front complies with protection class IP65.

Siemens Industrial Edge – Extensions for machine tools

With Industrial Edge, Siemens offers a concept in which both machine builders and users can flexibly use the advantages of data processing using edge or cloud computing as required. Siemens is also expanding its portfolio in the field of edge computing for machine tools for the real-time analysis of data on site in production and its intelligent use. As part of the EMO Milano and the Siemens Machine Tool Days 2021, the scalability of the edge hardware will be possible with the new hardware variants IPC 127E and IPC 427E. Siemens will also launch further new applications for various applications.



Caption: Sinumerik One, the first Digital Native CNC, represents the core element for the digital transformation of the machine tool world.



Caption: With the new Sinumerik One MCPs, Siemens is launching an intuitive machine operation that offers CNC users more user-friendliness, efficiency, and flexibility.

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

Further information on Siemens at EMO Milan and the Siemens Machine Tool Days 2021 please see <u>www.siemens.com/emo</u>

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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 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, 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 \in 55.3 billion and net income of \in 4.2 billion. As of September 30, 2020, the company had around 293,000 employees worldwide. Further information is available on the Internet at <u>www.siemens.com</u>.