

Siemens Machine Tool Days 2020

Sinumerik One Dynamics - new powerful technology packages for motion control and workpiece quality

- **Sinumerik One Dynamics - three technology packages to increase the efficiency of CNC users when programming in the shopfloor and executing CAM-generated CNC programs**
- **Top Surface and Top Speed Plus for excellent motion control and perfect workpiece surfaces**

With the software version NCU-SW 6.14, Siemens is launching three powerful technology packages exclusively for the CNC Sinumerik One. The Sinumerik One Dynamics packages are available in three different packages: One Dynamics Operate, One Dynamics 3-axis milling and One Dynamics 5-axis milling. The software functions contained in the technology packages support users from machine-oriented programming in the jobshop to high-performance machining of CAD-CAM-programmed workpieces with high surface quality.

The One Dynamics Operate package supports the user in efficient programming in the shopfloor with the proven Sinumerik machining cycles and a high-quality CNC simulation for the machining technologies milling and turning. In addition, the user is given a wide range of options for accessing his NC programs and workpiece documentation. He has the option of paperless manufacturing and can, for example, visualize his 3D CAD data in the shopfloor environment within a very short time. For the execution of CAM-generated CNC programs for free-form surface machining, One Dynamics 3- and 5-axis milling packages offer the CNC functions Top Surface and Top Speed Plus for excellent motion control and perfect workpiece surfaces.

With Top Surface, the geometric data from the CAM system are checked and optimized during processing on the CNC using an intelligent algorithm. This ensures a high surface quality when milling complex free-form surfaces. This is particularly advantageous for geometrically complex mold components that place special demands on surface quality, mold accuracy and production efficiency, for example in tool and mold making, aircraft construction or medical technology. The Top Speed Plus ensures with new filter technology that increased dynamics are made possible without activating mechanical vibrations of the machine and that the contour accuracy is reliably maintained. Depending on the specific application, this can reduce machining times by up to 30 percent. As a result, unit costs for milling with CAM-generated CNC programs can be reduced and production efficiency increased.

With few exceptions, the functions of Sinumerik One Dynamics do not require any commissioning effort on the part of the machine builder. Once activated, they are available to the operator for immediate use on the machine. Since they are software functions of the CNC control, no intervention in the machine or machine mechanics is required. For users who have particularly challenging requirements in terms of machining quality and speed, the machine builder can add further optional CNC functions of Sinumerik that go beyond the Sinumerik One Dynamics packages. These additional functions must then be activated and parameterized by the machine builder for the operator's individual machine and adapted to the machine statics and dynamics.



This press release and a press picture are available at <https://sie.ag/3nJ2cfe>

For further information regarding Siemens Machine Tool Days 2020, please see www.siemens.com/press/smt2020

Take part in the Siemens Machine Tool Days 2020 and register at www.siemens.com/smt2020

For further information regarding Sinumerik One, please see www.siemens.com/sinumerik-one

Contact for journalists

Katharina Lamsa

Phone: +49 172 8413539

E-mail: katharina.lamsa@siemens.com

Follow us on Social Media

Twitter: [www.twitter.com/siemens_press](https://twitter.com/siemens_press) and [www.twitter.com/SiemensIndustry](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 2019, which ended on September 30, 2019, the Siemens Group generated revenue of €58.5 billion and net income of €5.6 billion. As of September 30, 2019, the company had around 295,000 employees worldwide on the basis of continuing operations. Further information is available on the Internet at www.siemens.com