Sinumerik One – Digital Native CNC comes with new technology functions and comprehensive service offering

- Sinumerik One is setting new standards in terms of productivity thanks to a new hardware platform and innovative technology functions
- Digital service offering supports machine users and machine manufacturers with the creation of a digital twin and with virtual commissioning
- Sinumerik One on show at EMO with more than 20 pilot customers

With the latest CNC generation, Sinumerik One, Siemens is presenting the essential component for the digital transformation of machine tools at EMO 2019. As a "digital native", the controller features versatile software for the creation of corresponding digital twins. Sinumerik One is setting new benchmarks in terms of productivity with its new hardware platform. A wide range of innovative technology functions help to improve processing speed, contour accuracy and processing quality.

To increase the processing speed, the Top Speed function is available, which supports machine operation at the physical limits of the machine. In mold construction, Top Speed ensures a high degree of contour accuracy at high speeds and works hand in hand with the proven Top Surface technology function. If DYNPREC (Dynamic Precision) is activated via the High Speed Setting Cycle, even delicate parts are manufactured with maximum precision. The Intelligent Load Control (ILC) function helps to increase the dynamics of the machine. ILC takes into account the current weight of the workpiece when accelerating the machine axes and adjusts them as soon as the machine is no longer loaded to the maximum workpiece weight. Thanks to Intelligent Dynamic Control (IDC), the dynamic and control parameters for the machine axes can be balanced across the axes. When this function is set, the parameters are optimized in the working area of the machine, making the machine not just more
dynamic, but also more precise. The proven CNC Sinumerik 840-D sl will also support new technology functions such as IDC and ILC, improving the processing speed, precision and accuracy of machine tools.

In addition to Sinumerik One, Siemens is also presenting the associated digital services at EMO 2019, which support machine users and machine manufacturers in the creation of a digital twin and with virtual machine commissioning. With the digital twin, unproductive activities such as running in new NC programs can be moved to the virtual world. NX Virtual Machine Tool Services support machine manufacturers and machine operators in the creation of the digital twin. From engineering and implementation through to training and support services, Siemens covers the entire lifecycle of the digital twin for the machine tool. Sinumerik One Virtual Commissioning Services offer machine tool manufacturers support when moving commissioning tasks to the virtual world. Thanks to the triad of consulting, training and implementation, machine manufacturers benefit from faster, risk-free commissioning and efficient optimization of the engineering.

The engineering basis for Sinumerik One is the TIA Portal. In this highly efficient engineering framework with modern programming languages and seamless data flow, PLC, Safety and even HMI can be configured. As the basis for all automation tasks, engineering in the TIA Portal reduces development time and therefore time-to-market.

Visitors to EMO will be able to see Sinumerik One and its digital twin live in action. Over 20 pilot customers are presenting machine tools with Sinumerik One – either as a digital twin or as a real machine.
Digital Native CNC Sinumerik One is setting new benchmarks in terms of productivity with its digital twins, the new hardware platform and innovative technology functions.

This press release and a press picture are available at www.sie.ag/2k09hMv

For further information regarding Sinumerik One, please see https://sie.ag/2MB7aKY

For further information regarding Siemens at the EMO 2019, please see www.siemens.com/press/emo2019 and www.siemens.com/emo

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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 electrification, automation and digitalization. One of the largest producers of energy-efficient, resource-saving technologies, Siemens is a leading supplier of efficient power generation and power transmission solutions and a pioneer in infrastructure solutions as well as automation, drive and software solutions for industry. With its publicly listed subsidiary Siemens Healthineers AG, the company is also a leading provider of medical imaging equipment – such as computed tomography and magnetic resonance imaging systems – and a leader in laboratory diagnostics as well as clinical IT. In fiscal 2018, which ended on September 30, 2018, Siemens generated revenue of €83.0 billion and net income of €6.1 billion. At the end of September 2018, the company had around 379,000 employees worldwide. Further information is available on the Internet at www.siemens.com.