SIEMENS

Background information

Bad Neustadt/Saale, July 25, 2017

EMO Hannover 2017, Hall 25, Booth D60 Machine tool portfolio for drives and converters extended to enhance productivity and quality

- Siemens supplements motor spectrum focus on large machine tools
- New sizes for Simotics S-1FT7 and Simotics M-1FE2
- Sinamics converters featuring motor modules with improved overload capability
- New Sinamics drive functions enhance surface quality and productivity

In the field of direct drive motors, Siemens has developed a number of improvements to its segment motors for large machine tools. The innovations provide improved accuracy and dynamic response, as well as higher torque levels of over a million Newton meters (Nm) for diameters of up to eight meters. The Simotics M-1FE2 is available in the new size of 180. The built-in spindle motor with higher torque levels and an exceptionally high cutting performance rotates at up to 4,200 revolutions per minute (rpm). In the size 180 Simotics M-1FE2, which is designed primarily for machining large workpieces, permanent magnets ensure an exceptionally high torque density. With its internal diameter of 200 millimeters and high performance, this motor is ideally suited for use in turning and milling centers and for particularly demanding applications.

Siemens has extended its portfolio specifically for feed axes to include the Simotics S-1FT7 in size 132 with the option of either self-cooling or external cooling. The benefits of the size 132 S-1FT7 compared to the predecessor models include compact dimensions, higher torque and reduced power consumption. The Simotics direct drive motors are used predominantly in large machine tools for rotating spindles and in large indexing tables, which place stringent demands on the torque level where extreme machining accuracy is called for.

Wittelsbacherplatz 2 80333 Munich Germany The Sinamics drives portfolio has been extended to include four new motor modules in booksize format. Their improved overload capacity makes them exceptionally robust, and their compact dimensions mean optimized use of space in the control cabinet. At 24, 45 and 60 amperes, the motor modules operate with 200 percent overload, and at 24 amperes additionally with 300 percent overload. New drive functions to compensate for cogging torque and periodical torque ripple ensure even better surface finish quality when machining workpieces. Another addition to the Sinamics portfolio is the "increased stall torque" drive function, which allows asynchronous spindle motors to brake up to 55 percent more quickly. This offers benefits such as reduced downtimes for tool changeover, and so helps boost productivity.

This background information and press pictures are available at www.siemens.com/press/emo2017

For further information on Siemens at the EMO Hannover 2017, please see www.siemens.com/emo and

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