Siemens presents the first Edge applications for machine tools

As part of Siemens Industrial Edge, Siemens is launching applications for Sinumerik Edge, the machine-level platform specially designed for the machine tool industry, at AMB 2018 in Stuttgart. This is the first opportunity to see the Edge application Optimize MyMachining / Trochoidal for use in trochoidal milling.

Optimize MyMachining / Trochoidal provides users with updates for the existing NC program, optimized machining processes, and sustainability for retrofit applications using dynamic machine data and corresponding data inputs. This leads to reduced tool wear, improved machine lifetimes, and thus to lower overall inventory costs which in turn increases machine availability, leading to significant productivity gains. High-performance Sinumerik Edge technology makes all this possible. Computation is based on individual, optimal machine and axes-based dynamic data.

A control-based interface allows

the machine to be programmed directly using Sinumerik Edge-based computational power. This prevents any adverse effects on the machine's machining performance which optimizes the process. Optimize MyMachining / Trochoidal is particularly suitable for use with older machines as it reduces the mechanical wear in the machine considerably.

A prototype of another Edge application for condition monitoring is also being shown. Users can quickly find the correct tool and identify real problems, whether current or imminent (for example causes of friction), and improve or correct machine operation by

adjusting the settings. The use of this Sinumerik Edge application also significantly increases machine tool availability and thus productivity.

With Siemens Industrial Edge, Siemens is offering users the chance to close the gap between classic, local data processing and cloud-based data processing to suit individual requirements. Edge computing allows large volumes of data to be processed locally almost in real time and without any feedback. There is also an additional reduction in memory and transfer costs as large volumes of data are preprocessed and only the relevant data is finally transferred to a cloud or factory-level IT infrastructure. Siemens Industrial Edge supports cloud transfer protocols for MindSphere, Siemens' own open, cloud-based IoT operating system. In the future, it will also support Message Queuing Telemetry Transport (MQTT), making data transfer safe and effective. ■

First combined rolling mill in Africa

Prometal Aciérie, Cameroon, Africa, has awarded SMS group the order to supply a new hot rolling mill for rebars, sections and wire rod. The new rolling mill will be designed for the production of straight rebars, angles,

channels, flats, squares, beams and wire rod coils, enabling Prometal to expand its product portfolio, covering as much as possible of the product mix for long steel products. With this investment, long steel producer Prometal Aciérie, based in Douala, Cameroon, is going to install the first combined rolling mill in the African region.

The rolling mill will be designed for a maximum overall capacity of approx. 300,000 tons per year. Starting with 130 millimeter square billets, which will be heated up in a 60 ton-per-hour modern pushertype

furnace, the mill will be able to produce rebars from 8 to 32 millimeters, sections such as 100-millimeter-high beams and channels, and smooth rounds in coil from 5.5 to 12 millimeters.

The state-of-the art HSD® (High Speed Delivery) System allows reaching the full production capacity for the complete size range, increasing the material yield. The high speed finishing block will produce quality wire rod coils at minimized operational costs. Moreover, the rolling mill will be controlled by a Level 2 automation system provided by SMS group. ■