

Industry Sector Drive Technologies Division

Nuremberg, 28 August 2009

EMO 2009 Preview

New computer numerical control for compact class machine tools

The new Sinumerik 828D numerical control adds a compact class model to the Siemens Drive Technologies range of machine tool controls. The control includes such exacting CNC functions as kinematic transformations and an efficient tool management system. CNC, PLC, operator panel and axis control for six CNC measurement circuits are combined in a robust operator panel control. The system software is precisely tailored to address the needs of complex turning and milling machines for shopfloor applications. The Sinumerik 828D is capable of full graphic, high-level language command or ISO programming, making it appropriate for job shops around the world.

Siemens Drive Technologies has extended its portfolio of controls to include an efficient CNC for compact class machine tools. With this new addition, alongside the Sinumerik 802D sl for standard machine applications and the 840D sl for high-end machining applications, users are now offered the option of the Sinumerik 828D, a new system designed to address the needs of complex turning and milling machines in the job shop segment. Complete with intelligent kinematic transformations, an efficient tool management system and 80-bit precision, the new control benefits from a range of performance features previously reserved exclusively to the premium CNC control segment.

The Sinumerik 828D is suitable for both single part and small batch, as well as large-scale series production. Use of the ShopMill and ShopTurn graphic workstep programming systems helps reduce programming time when producing small batch sizes. For large-scale series production, high-level language programming, in conjunction with programGuide for technology cycle parameterization significantly reduces programming times. In addition, the Sinumerik 828D also supports ISO programming that is customary in Asia and the United States. With these options, Sinumerik 828D is capable of working with every type of CNC programming method used around

the world. This opens the scope to machine manufacturers for global marketing of their products with just a single CNC equipment option.

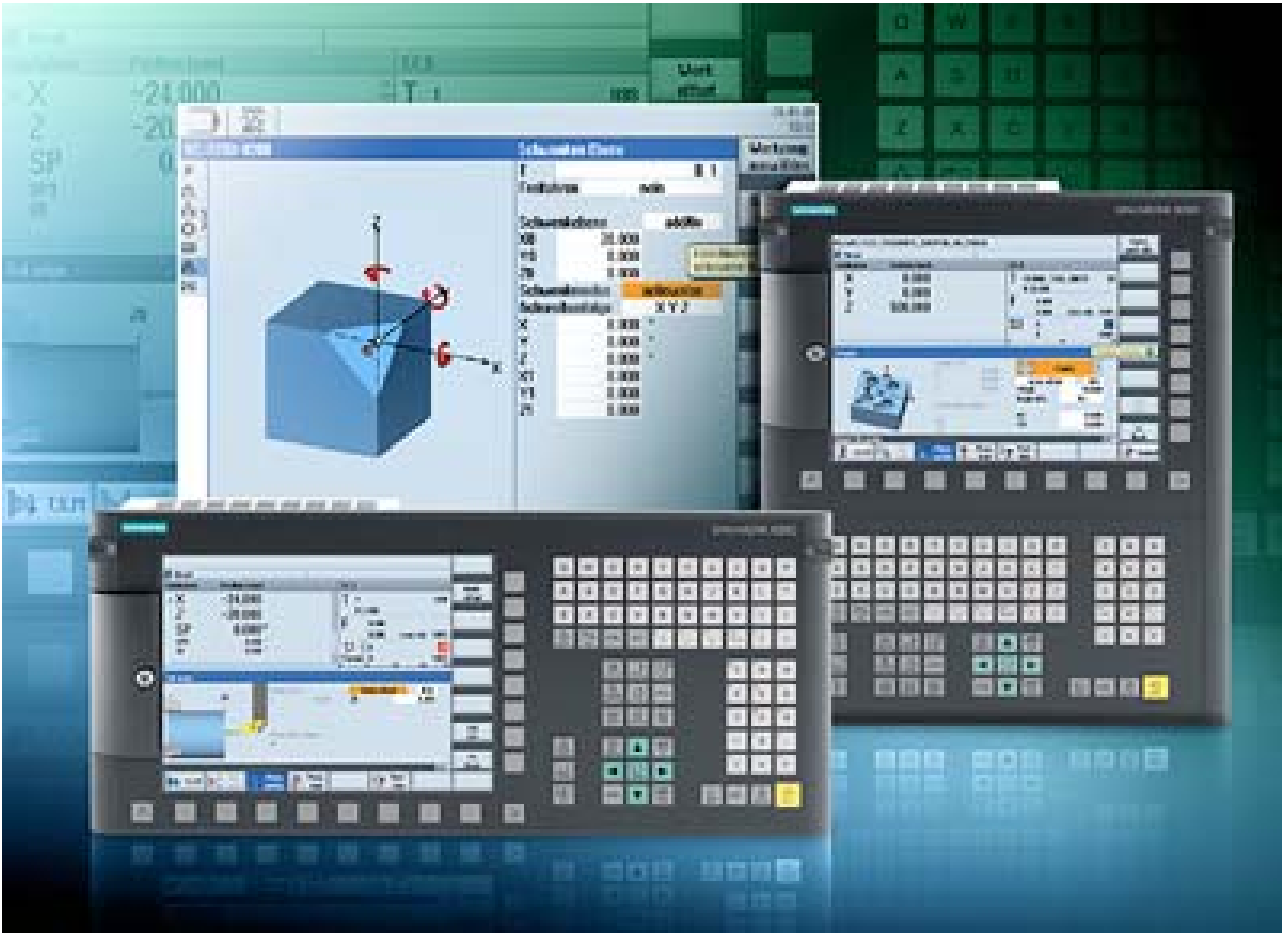
The Sinumerik 828D makes available modern PC and cell phone technology to the compact machine class for the first time. Extensive graphical online help, animations and a new type of input prompting system with moving picture sequences provide the basis for exceptional user convenience. USB, Compact Flash (CF) card and Ethernet ports permit simple high-speed data transfers onto storage media or integration of the control system into corporate networks. With its Easy Message functionality, the Sinumerik 828D offers process monitoring by text messaging (SMS). Depending on the recipient's profile setting, the machine will transmit information about workpiece machining status, report on the tool condition currently in use and even send machine maintenance bulletins. The combination of these functions permits machine downtime to be reduced to a minimum.

The Sinumerik 828D can be configured for milling or turning applications. The milling version is precisely tailored to the requirements of vertical machining centers with additional machine units such as an A-axis for machining cylindrical workpieces or a swivel facility for machining inclined workpiece planes. Using Advanced Surface, the intelligent path guidance system, the Sinumerik 828D can also be used for the production of high-precision molds. The turning version is specifically designed for single-channel inclined-bed lathes. Alongside powered tools for face and outer surface machining, with and without Y-axis, the system also supports a fully functional counter spindle. Because the turning and milling versions are precisely tailored to the relevant machine category, the system software is substantially less complex in comparison with universal systems. System parameters are precisely pre-defined, reducing the work involved in commissioning to a minimum for the machine manufacturer. With Easy Extend, the machine tool builder is also offered a simple way of managing additional components such as indexing tables or bar loaders. Specialized CNC expertise is no longer required for mounting components in the field, representing a considerable saving in terms of servicing expenditure.

The Sinumerik 828D is available with a horizontal and vertical control panel layout. Both control panel versions come in a choice of two CNC performance variants, allowing the Sinumerik 828D to be ideally adjusted to specific mounting requirements and individual machine performance requirements. Its minimal dimensions allow the new Sinumerik to be easily integrated into even the most compact machine designs. Despite the reduced size of the control, the high-resolution 10.4" color TFT display and fully functional QWERTY keyboard make for make it extremely user-friendly. The structural design of the CNC, a unit comprising of a highly tough and wear-resistant die cast

magnesium control panel, CNC keyboard and CNC electronic circuitry, is extremely robust and features only a minimal number of interfaces. The new CNC is maintenance-free with no fans, hard drive or backup battery.

For more detailed information, go to: www.siemens.com/sinumerik



The new Sinumerik 828D is the latest addition to the series of machine tool controls from the Siemens Drive Technologies Division. The new control is designed for compact class machine tools and comes with a range of sophisticated CNC functions and universal CNC programming methods. The new panel-based CNC control is precisely tailored for application in lathes and milling machines. The Sinumerik 828D is available with a horizontal and vertical control panel layout, each of which comes in two CNC performance categories.

The **Siemens Industry Sector** (Erlangen) is the worldwide leading supplier of production, transportation, and building technologies. With integrated hardware and software technologies as well as comprehensive industry-specific solutions,

3 / 4

Siemens AG
Corporate Communications and Government Affairs
Wittelsbacherplatz 2, 80333 Munich
Germany

Informationsnummer: IDT2009.07 2015e fp

Media Relations: Volker M. Banholzer
Telefon: +49 911 895-7946
E-Mail: volker.banholzer@siemens.com
Siemens AG
Industry Sector - Drive Technologies Division
Gleiwitzerstr. 555, 90475 Nuremberg, Germany

Siemens increases the productivity, efficiency and flexibility of its customers in the fields of industry and infrastructure. The Sector includes six Divisions: Building Technologies, Industry Automation, Industry Solutions, Mobility, Drive Technologies and OSRAM: With around 222,000 employees worldwide, Siemens Industry posted a profit of EUR 3.86 billion with revenues totalling EUR 38 billion in fiscal year 2008. www.siemens.com/industry

The **Siemens Drive Technologies Division** (Nuremberg) is the world's leading supplier of products and services for production machinery and machine tools. Drive Technologies offers integrated technologies that cover the entire drive train with electrical and mechanical components. This includes standard products but also encompasses industry-specific control and drive solutions for metal forming, printing and electronic manufacturing as well as solutions for glass, wood and timber, plastics, ceramics, textiles and packaging equipment and crane systems. The services provided by the Division include mechatronics support in addition to online services for web-based fault management and preventive maintenance. With around 39,900 employees worldwide, Siemens Drive Technologies Division posted revenues of EUR 8.9 billion.