Universal Machine Tool CNC Features Multitasking Capability, Improved Operability

An array of new functions for the **Sinumerik 840D sl CNC** from the Drive Technologies division of **Siemens** helps improve productivity in complex machine applications. The newly integrated complete machining functionality makes for simpler, more economical machining operations in a single work step on multitasking machines such as mill/turn and turn/mill centres, and operator panel OP 019 lets users initiate functions via the touch screen even when wearing work gloves.

The universal control covers a wide range of metalworking operations, such as turning, drilling, milling, grinding, laser machining, nibbling and punching, as well as being useful in multitasking machines. Whatever the scale of application, the Sinumerik 840D sl maximizes productivity while ensuring optimum surface quality in tool and mould making. Its integrated machining functionality is simple to configure for various machine kinematics and permits a wide variety of technologies to be used in production without any laborious reclamping of workpieces.

The Sinumerik Operate user interface provides an integrated turning functionality for milling and an integrated milling functionality for turning, supplemented by new measurement cycles featuring animated elements. Its uniform look and feel supports smooth, harmonious operation across all technologies and many programming methods. The interface has a tool management system and multitasking programme simulation.

The OP 019 operator panel, extended to include the new Power Control Unit PCU 50.5, allows high-speed key actuation at a 19-in., IP66-rated glass front. Wide LEDs let the operator see every key actuation from any angle. The new OP 019 can provide three or four channels showing up to 13 axes.

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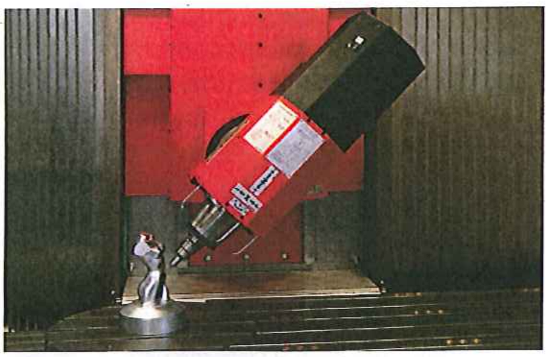
Good Dynamics in 3D and Five-Side Processing Is Promise of Space-Saving Machining Centre

The **matec-30 HVE travelling-column machining centre** was designed by the manufacturer **Matec Maschinenbau GmbH** for restrained-space operation. Its cladding can be removed completely. Thus, this machine can be transported economically in a normal-sized truck or container. The matec-30 HVE can perform demanding tasks in 3D and five-side machining with very good dynamics.

A fixed pickup tool magazine with 30 tool pockets is integrated on the right-hand side of the machine. The work area is equipped with a 635-mm-wide fixed table and an integrated rotary table with direct drive. The 630-mm-diameter- rotary table offers a maximum swing diameter of 940 mm. It rotates at speeds to 80 rpm as standard, with much faster rotation optionally available. The table load capacity is 1,200 kg.

The machine's working area in the x-axis is 1,300 mm with the swivelling head in a vertical orientation and 1,500 mm with the head horizontal. The y- and z-axes offer 600 and a long 800 mm, respectively. The separation of the b- and c-axes ensures very stable chipping conditions and, as a consequence, optimal contour constancy and workpiece surface quality. The 13-kW spindle delivers a top standard speed of 10,000 rpm and a torque of 83 Nm.



The machine is capable of drilling 40 mm into steel and of milling steel at a removal rate of 330 cm³/min with rapids of 30 m/min.

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