Compact 5 axis table-top machines for milling metal, zirconium dioxide, acrylics and wax

_Schütz Dental introduces_ the new Tizian Cut 5 smart milling machine which measures just 50 cm wide. It can master almost every milling task, almost any undercut with almost any material—even final non-precious metals.

Five simultaneous axes with an angle of up to thirty degrees make for a huge range of indications. With its separately available and retrofitted water cooling system, this machine becomes a milling machine for glass ceramics.

The automatic tool changer can take up to 16 milling and grinding tools. Adding to the basis machine Tizian Cut 5 smart, the model Tizian Cut 5 smart plus is available with a fully automated, 8-fold blank changer. Both machines can be fitted with a tool administrating module. With the help of this module, the user will always know when a tool needs replacing. All Tizian machines are license-free and import open STL data. This creates the core of a complete digital chain of work, which already begins for Schütz Dental from the first digital TMJ measurement.

The CAM family Tizian Cut 5 has been extended with the “smart” and now the new “smart plus” models (Fig. 1). In both simultaneous five-axis machines, the newest innovations in hardware and software ensure more precision, diversity, speed and comfort than ever before. Particularly impressive is how such a compact machine can be used for dry-machining of non-precious metals (Fig. 2). Due to the sinter-less process, precise fitting and high quality of materials, this machine produces bridges of up to 14 units and is also suitable for implant-supported objects with a passive fit. Production of frameworks is precise and time saving with the advanced construction software Tizian Creativ RT: Following a virtual design, the Tizian machine mills a framework in a modelling acrylics or wax. Thanks to an axis angle of up to 30 degrees, undercuts can be seamlessly produced.

Inside the Tizian Cut 5 smart plus machine, there is an additional automatic 8-fold blank changer (Fig. 3). Together with the previously integrated tool changing device, this gives you the opportunity for continuous operation. Both CNC versions can be upgraded with a water cooling system and a collecting tank. This means that lithium disilicate as well as zirconia reinforced glass ceramics can be milled using the wet-machining feature. This quick working, compact all-rounder and its “made in Germany” quality makes this machine truly stand out. Take the example of a three-unit metal bridge, milled in just 50 minutes.