

Bar turning in times of digitalization

Patrick Neuenschwander R&D Software & Hardware Manager

Today, the tendency towards digitalization in industry brings about fundamental changes of the frame conditions of machine tools and this is true in metal cutting with chip removal.

In this context, Tornos has already prepared its machines for digitalization by equipping them with TISIS and its Connectivity Pack – this has been available since 2013 with the SwissNano. Since 2013, TISIS has been playing a leading part in the digitalization plan of the Tornos Group. In the meantime, more than 1000 TISIS licenses have been delivered to the market.

TISIS allows our customers to obtain an all-in-one solution with intuitive design that focuses on the users. It provides detailed information on the state of each machine, the production status and the exact end time of production. TISIS enables its users to know the exact time when it is necessary to reload bars into the machine – this information is even provided remotely via a Smartphone and our TISIS Net service.

With SwissDeco, we have now reached the next level. It features a completely new interface that interacts with the operator. Furthermore, the new vertical console allows for a quick start of the machine. The software has been completely redesigned: the current TISIS user quickly gets the idea of it and, in addition to the proven functions of TISIS - it is now possible

to manage the whole machine system including the peripheral devices by means of TISIS and its intuitive, user-friendly and innovative interface. Many functions have been added. For instance, the possibility to directly observe the execution sequence of the program and to know the progress of all the ongoing machining operations.

Our great innovation is the new TISIS system Optimove. This patented system optimizes the cycle times of the machine. The movements take place just in time, non-essential operating elements were omitted and the system enables the machine to optimize the cycle times while minimizing mechanical wear and energy consumption in the process - all this is achieved without any operator intervention.

This system has been designed for fully utilizing the performance and potential of the SwissDeco machine. Using this system, the high-performance machine can be programmed and managed easily and effortlessly. Thanks to the intuitivity of the system, operators can be trained in a very short time period.

You are welcome to discover the SwissDeco and our new TISIS version on our site in Moutier or during an exhibition. You will be surprised by the functionalities of this software and its ease of use.