Fully-automatic lubrication of tool clamping systems

Machine tools achieve their full capability when they are serviced regularly. HSK clamping sets, for example, should be serviced after approximately 75 hours of operation or 20,000 tool changes in order to ensure process reliability. However, such tasks are commonly delayed until the performance deteriorates or a complete failure serves as a reminder of the forgotten lubrication.

Röhm, from Sontheim a.d. Brenz, has developed a special product, Lubritool, for these processes. Lubritool performs the lubrication of tool clamping systems in milling machines and machining centres within 5 seconds – instead of the usual 5 minutes. After being prompted by the machine controller, the maintenance tool is swapped in automatically directly from the tool magazine and provides the HSK clamping set with the ideal amount of lubrication. The result is to reliably have the right lubricant measured out exactly at just the right time. After the process, which takes just seconds, the patent-pending solution moves back into the tool magazine where it remains until the next lubrication cycle.

Presented as an innovation at EMO 2017, the design of the current product variation has now been improved even more. For example, the user now has more working space in the machine because of the 20% shorter construction length. Already in considerable demand, the compact variant met with tremendous interest once again at the AMB 2018. The amortisation time for the tool is usually less than six months, and the machine availability increases by an average of 10 hours annually. Digital
documentation ensures that the warranty is maintained. For example, both costly and
time-consuming maintenance work as well as machine downtime can be avoided,
and the topic of lubricating the clamping set literally becomes a thing of the past. The
"Röhm – Lubritool lubrication device" video on YouTube shows the operation of this
highly efficient solution in a practical way.

Fig. 1: Maintenance in 5 seconds instead of 5 minutes: Lubrication of tool clamping
systems in processing machines is taken over fully automatically by the innovative
Lubritool solution (Picture: Röhm)