

PRESS RELEASE

For immediate circulation

New range of products launched

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Today, at the EMO fair in Hanover, Tornos is launching a new line of products, which will revolutionise the turning industry. The MultiSwiss 6x14 machine provides a link between multispindle turning machines and sliding headstock machines. Based on the "fully integrated" concept and featuring innovative front access, this new machine is designed with three types of customer in mind: users of numerical multi-spindle turning machines, users of cam-operated machines, and users of single-spindle turning machines.

A new concept

A radically new concept, the MultiSwiss benefits from completely open front access, allowing the operator unrivalled working conditions since he can virtually "get inside" the machining area to work on it, and since all the peripherals are fully integrated. Swarf evacuation is also exemplary: as all the slides are "vertical", the swarf naturally "falls" directly onto the evacuator. To complete the ergonomics of the working area, the Moutier group's engineers ensured perfect integration of all of the required peripherals right from the design stage. The MultiSwiss includes, as standard, a paper filter system combined with a superfine filter located in the oil tray. In addition to the filter and the bar feeder, the machine's casing is designed to house the cooling device, the chip conveyor and the oil mist extraction device.

The fact that all the peripherals are fully integrated means that its footprint is reduced and the MultiSwiss can quickly find its place in the heart of any workshop. The machine takes up no more space than a single-spindle machine of equivalent capacity, equipped with a bar feeder.

Outstanding performance

With a capacity of 14 mm, the machine can house up to 15 tools in main operation and 3 in secondary operation, on an independent station which can be interpolated. The MultiSwiss is flexible, accurate, ergonomic and reliable, giving a quick return on investment. When creating this tour de force, the Tornos group engineers started with a blank page so they could design a new machine equipped with innovative technology at the best price. Each module was tested before being fitted on the machine. The new barrel locking system designed to replace the conventional Hirth gear was tested over 40 million cycles before it was awarded its validation certificate and a number of machines were sent to customers to test over several months. The machine has a thermo-regulated core allowing production to be started up quickly. The use of hydrostatic bearings ensures exceptional damping and allows excellent surface finishes to be achieved. The separation of the guides lends the machine unprecedented rigidity. Results are excellent; once the operating temperature is reached, the precision is in the region of 4-5 microns. To shorten the heating times as much as possible, the MultiSwiss features an oil circulation pump start-up option which means that all the components can be harmonised even before starting work.

Fundamental change

From the start, the MultiSwiss was designed to be a "fully integrated" solution. This meant that the company had to make choices, some of which will require customers to adopt a different approach. The most innovative of these is bar feeding: the machine is fed by an integrated bar feeder using bars 1.5 metres in length. On this subject Mr. Martoccia, Product Manager at Tornos, explains: "We carried out a survey with the main suppliers to find out whether it would be problematic for them to supply materials in this length... they replied that it would pose no problem at all. But loading bars half the length means twice as much scrap and twice as many bar loading operations. We would therefore have to load bars at least twice as quickly and reduce the amount of scrap to

continue to offer the same performance". Mission accomplished! The scrap length has been halved, whereas there has been a fourfold reduction in the bar feeding time!

The machine is on display at the Tornos Stand at EMO Hanover, Hall 17 Stand B04, and the first deliveries are scheduled to start in October of this year.

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