PLEHMANN

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Swiss Rotary Table Technology

NEWSLETTER

Ideal team players: CNC rotary table and loading table



The machine produces, a robot changes the workpieces – not one after the other but simultaneously

Change workpieces – by hand or automated – while the machine is operating. This is how productivity works! The basis: a machine with a loading table, and if it is to be particularly efficient: equipped with a 4th or 4th/5th CNC axis from pL LEHMANN.

For products that are produced continuously, pL LEHMANN, renowned manufacturer of CNC rotary tables, recommends the use of machining centers with a loading table – ideally supplemented with appropriate additional axes from its own portfolio. This is because such a machine offers the advantage that the one side – equipped with one or more components – is located in the working area, while the second side is set up outside the machine. The loading table then rotates 180 degrees in just a



A view of actual practice: In this Brother Speedio R650X2 milling/drilling center equipped with a loading table, both table halves are equipped with a two-axis CNC rotary table from pL LEHMANN.

few seconds, so that machining can be carried out almost continuously.

Thanks to their compact design, CNC rotary tables from pL LEHMANN are ideally suited to be placed on such a loading table. There, they give even small, vertical 3-axis machines fouror five-axis capabilities. Numerous arrangements are possible. For example, one half of the loading table can be equipped for 5-axis machining, while the other is used for 3-axis machining of the rear side of the workpiece. In this way, the component is machined completely in one cycle. Even double quasi non-stop 5-axis machining is possible – depending on the CNC control, even simultaneously.

According to pL LEHMANN, the additional investment in a machine with loading table and complementary CNC rotary tables is definitely worthwhile due to the high, optimally utilized spindle times. The machining specialists from the Swiss town of Bärau put it in a nutshell: invest 30% more, produce 50% more and profit 100% more.

CNC rotary tables with Swiss quality

Founded in 1960 strictly as a contract manufacturer, pL LEHMANN has been developing and producing CNC rotary tables for over 40 years. With innovations and Swiss quality, the family-owned company in the Swiss town of Bärau (Emmental) succeeded in opening up new opportunities for its customers and developing lean machining solutions characterized by high productivity through use of additional NC axes. One of the highlights of the company's history is the powerful and flexible Series 500 - developed in 2009 - which is ideal for the most demanding tasks thanks to its modular design. With the backlash-free, preloaded PGD gear unit - developed in 2014 - pL LEHMANN reached another milestone. In 2017, the company introduced, among other things, the new pL iBox generation, making their rotary tables ready for Industry 4.0 and digital production. This was followed in 2019 by introduction of the Series 900 DD (Direct Drive) rotary tables with speeds of up to 5,450 rpm. As an additional new product, the AM-LOCK system, a special zero-point clamping system for 3-D printing, including preprocessing and postprocessing, was presented in 2019. As a highlight at EMO 2021, the product range will be expanded - with a compact indoor automation system for unmanned production and the new MT series for measurement applications on the shop floor.



There are also horizontal machining centers with a loading table, like this Kitamura HX400. Here, an additional pL LEHMANN rotary table ensures that complicated components can be machined in five axes – in extremely economical 24/7 operation thanks to the loading table and robotic automation.

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