



HYDRO-MECHANICAL SPECIAL CLAMPING SOLUTION FOR THE MACHINING OF INDEXABLE INSERTS

A new hydro-mechanical chuck with changeable clamping jaws ensures high concentricity and excellent repeatability when grinding and resharpening indexable inserts.

König-mtm has gained a name in the industry as a leading manufacturer of special clamping devices for rotationally symmetrical workpieces. The family-managed company based in Wertheim, Germany sells its high precision clamping devices under the Königsdorn® product brand. Not long ago, a well-known manufacturer in the sector of cutting tools contacted us and was looking to optimize their process for grinding indexable inserts.

In the past, inaccuracies occurred during machining on the purely mechanical clamping device of a competitor, which led to a high rejection rate. Due to the high precision requirements, the clamping of the plates had to be improved.

During an on-site appointment with our technical application engineer, the customer's task was discussed in more detail and an effective solution for optimizing the clamping – with the aim of significantly increasing the accuracy of the machining – was researched. In addition to the requirement for high concentricity and repeatability, the clamping device was to be automatically clamped by a pneumatic cylinder on the machine. It was also required that the precision clamping device would be able to be converted on site – by the customer – to various sizes of indexable inserts.

König-mtm has developed a hydro-mechanical chuck to meet the customer's requirements. The pneumatic cylinder of the machine actuates a clamping piston which triggers the



Illustration 1: Clamping chuck in unclamped situation

clamping movement. The indexable inserts are previously loaded by hand and brought into position on a changeable support ring. Through the initiated clamping movement, the clamping jaw is pressed onto the workpiece and thus clamped. The clamping jaws, stops and support rings are designed to be changeable and can thus be converted by the customer to different sizes and applications at any time.

This is just one of many examples of our custom, special solutions. Through continuous development of our products, consistent quality control and individual consultation with our customers, we are pleased to offer customized and economical solutions for every task. We are continuously expanding our expertise - searching and finding solutions for our customers and are open to new developments in the field of clamping technology.

Our application advisors are available for you and will be happy to advise you.



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