

High-Frequency Spindles with an Adapted Tool-Clamping Chuck Support Precision Machining at High Speeds

ETMM 05/09

Text Nr. 546_3037

Through a partnership with Schunk GmbH, the supplier of clamping and gripping technology, Alfred Jäger GmbH, which specializes in high-frequency spindles, can offer the Schunk Tribos-RM polygon chuck adapted to its toolholding WK 16 and WK 19 interfaces. The compatibility of the Tribos polygon clamping technology



for holding shank-type tools with the WK 16 and WK 19 toolholding cones of the Jäger high-frequency spindles creates a high-performance pairing.

These optimally matched components open up application possibilities and provide opportunities for mould manufacturers and companies in other

high-tech industries to increase productivity through high-speed machining at the limit of a processing centre's capability. The radial rigidity and the precise runout of the Tribos-based system enable quick processing times and brilliant surface results.

The high-frequency spindles from Jäger feature aggressive motors, outstanding bearing rigidity, maximum rotational accuracy, vibration-free running, and extreme reliability—exactly the characteristics that are called for in such modern machining processes as high-speed cutting and dry processing. This progressive spindle technology meets its complement in the powerful, rigid, precise, and reliable Tribos-RM, which allows spindle speeds of 80,000 rpm to be achieved.

The chuck's runout accuracy of better than 0.003 mm, supported by a projection length 2.5 times diameter and a balancing 2.5 g up to 25,000 rpm, ensures maximum precision. With its framework-like design, the polygon chuck dampens vibrations



and guarantees long tool service while preserving the machine spindle.

The system is virtually maintenance and wear free. In addition, because the steel of the toolholder is unaffected by heat during tool clamping, precision is not lost. Besides supporting high-level machine performance and maximum speeds, the Tribos-RM can clamp, reliably and precisely, tools with diameters as small as 0.3 mm.

Alfred Jäger GmbH



OBER-MÖRLÉN, GERMANY

www.etmm.info/2009/05/055