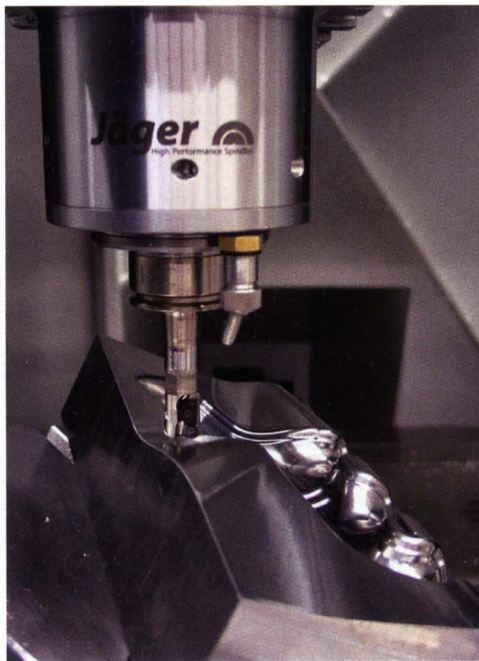


# Products & Services

## Cylindrical High-Frequency Spindles Extend Efficiency and Application Range for Various Types of Machining Centres

The specialist in high-frequency spindles Alfred Jäger GmbH offers machine builders spindles that can achieve very high levels of rotational accuracy owing to such innovative technology as hybrid ball bearings, a special bearing arrangement for extreme rigidity, and electronic fine balancing. The new F100-H635.01 S11CW2V and Z100-H642.03 S11 W2 high-frequency cylindrical spindles from Jäger are examples of machine components that manufacturers have incorporated into their equipment for mould engraving, drilling, milling, and grinding in order to increase the machines' range of applications and economic efficiency.

Jäger spindles are designed for reliability, optimum torque, and high performance density, ensuring that ultramodern processing centres provide the chipping cost-effectiveness



and product quality users demand. The company's mechanical engineers produce customized high-frequency spindles with features and perform-

ance characteristics suited for specific applications.

The 35,000-rpm F100-H635.01 S11CW2V and 42,000-rpm Z100-H642.03 S11 W2 spindles may be equipped with rotary transmission lead-through. As with all of its cylindrical spindles larger than 80 mm in external diameter, the company can supply them with optional vector position regulation and sensors for compensating growth in spindle length and rise in the temperature of bearings. Depending on the customer's wishes and the application, each spindle is available in a casing tube that is clamped in the separate spindle carrier, or with a spindle flange for direct incorporation into the machine.

Tool-clamping systems available are automatic HSK, ISO alternating, and Jäger's own WK system.

**Alfred Jäger GmbH**

Ober-Mörlen, Germany

► For more information, circle #23