PRESS RELEASE

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# **BIG KAISER announces fastest air turbine spindle at 120,000rpm**

**Improves finish quality, extends tool life and reduces wear on OEM spindles**

Ruemlang, Switzerland – August 31, 2015 – BIG KAISER, a leader in premium high-precision tooling systems and solutions for the aerospace, automotive, energy, medical and watch-making industries, introduces the RBX12, a high-speed air turbine spindle that achieves a market-leading rotational speed of 120,000 rpm.

The new air turbine spindle enables existing machines to be cost-effectively upgraded and high-speed micro-machining to be done in a normal machining centre, without the need to purchase an expensive new high-speed machine.

Operating at such high speeds helps to improve machining accuracy, enhance surface finish and significantly lengthen tool life, as well as reducing wear on the cutting tool.,

High-speed operation also means that processing time can be reduced. In various trials, BIG KAISER was able to reduce the machining time by more than 300% because of higher rotation speed.

Due to its ceramic ball bearing type, the runout accuracy of the RBX12 is excellent, which enables ultra-thin wall cutting. This is ensured by a runout measuring system that can detect spindle movement during high-speed rotation.

The air turbine ensures that Z-axis thermal expansion is minimized. Frequently, cutters can get extended slightly due to thermal expansion when the machine spindle runs at high rotation speed – the RBX12 solves this problem due to its air turbine drive, ensuring high accuracy for micro-machining.

“For micro-machining applications, the new RBX12 means that companies can get the most out of their existing equipment, achieving high levels of precision and speed,” says Peter Elmer, CEO of BIG KAISER.

The RBX12 fits into a standard machine with centre spindle with BBT30/40 or HSK-E32 and HSK-A63. It has a body diameter of 32 mm, and therefore is ideal for industries requiring high precision, such as medical and other microtechnology applications. For ease of use, automatic tool change is possible.

The RBX12 is available now.

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About BIG KAISER Precision Tooling AG

Founded in 1948, BIG KAISER designs, manufactures and markets premium high-precision tooling systems and solutions for the automotive, mil/aero, energy, and microtechnology industries such as medical, electronics and watch-making. The global company has facilities in Switzerland, Germany and the USA. The product portfolio is 100% made in Switzerland and Japan and comprises more than 20,000 precision tools, which adhere to the highest quality standards. A trendsetter in precision, performance, innovation and service, BIG KAISER is proud of its in-house production of digital displays and direct electronic measuring systems for digital precision boring heads to ensure absolute setting accuracy and eliminate operating errors. BIG KAISER is part of the family owned BIG Daishowa Group with 900 employees worldwide.

Further information is available at [www.bigkaiser.com](http://www.bigkaiser.com)

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