Coolant driven high speed spindles
axial and radial version
HIGH SPEED SPINDLE
BENZ JET

TECHNOLOGY

All versions of BENZ Jet use the same HPC-spindle technology, which is provided by Colibri spindles.

The High Pressure Coolant model uses the machine’s own high pressure coolant supply to drive the tool. Ideal for machines with high pressure capability for better machining results, longer tool life and increased efficiency. Technology that can help cut machining time up to 70%.

The HSM Jet Spindle is quickly prepared for operation using a standard tool holder with a collet chuck. Cutting tools are clamped with an ER11 spring collet.

APPLICATIONS

+ The HPC Jet Spindle is ideal for finishing and semi-finishing applications using small diameter cutting tools; milling, drilling, chamfering, grinding and more.  
+ Plug & Play convenience - no wires or pre-installation enabling stress-free machining without the need for operator intervention.  
+ Real-time wireless RPM monitoring, shown on an external display

TECHNICAL DATA

Recommended Operating Conditions | HPC Jet Spindle
---|---
Coolant pressure [bar]** | 15 - 70
Min. coolant flow rate [L/min] | 16.00
Rotational spindle speed [rpm]** | 18000 - 46000
Optimum cutting tool Ø [mm] Drilling | 0.5 - 3.0
Optimum cutting tool Ø [mm] Milling | 1.0 - 4.0
Max output power [kW] | 1.5

Available machine interfaces: HSK / SK / CAT / BT / Capto

* coolant pressure is measured from the spindle inlet  
** rotational spindle speed is based on coolant pressure flow rate and may vary up to 7%

BENZ JET - RADIAL DESIGN (90°) ANGLE HEAD

BENZ is presenting the coolant driven HPC-spindle in combination with a 90° angle head configuration, providing all the advantages of high speed machining and the increased flexibility of an angle head:

+ Greater accessibility in hard to reach places  
+ Added capabilities for three-axis machines  
+ The Jet Spindle’s high rigidity and low run-out

In addition, an angle head configuration significantly cuts production time by enabling both horizontal and angular milling and drilling with no need to reposition the work piece.

OPTIONS:

**BENZ Jet Angle Head without torque arm**
  + Quick installation  
  + Accuracy depending on taper  
  + No Stop-block required

**BENZ Jet Angle Head with standard torque arm**
  + maximum accuracy  
  + Stop-block required

BENZ JET - AXIAL DESIGN

The compact design is engineered to perfectly fit the ATC or tool machine, and as with any other standard tool, is automatically clamped onto the CNC machine’s original spindle.

BENZ PRODUCT RANGE

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<td>Radial design with torque arm</td>
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other versions or accessories on request