COLIBRI
SPINDLES

JET SPINDLE PRODUCT REPORT

INTERNAL USE

Material	Industry

INTERNAL	DETAILS
Reported by	
Colibri Partner	
Customer	
Date	

MACHINE	DETAILS
Brand & Model	
Controller	
Tool Holder Shank	
Collet Size & Type	

#1 PREREQUISITES

√ High pressure coolant available Min 15 BAR with 10 L/Min flow rate
√ Small diameter cutting tools used Max Ø 4mm, Shank Max Ø 6mm

#2 LIMITATIONS

√ Finishing and semi-finishing operations
√ Drilling, engraving, chamfering, slot, profile and shoulder milling

#3 CHECKLIST

1. Ensure minimum tool holder overhang.
2. Check Z-axis limitations.
3. Ensure water-based emulsion or cutting oil, viscosity up to 20 [Cp].
4. Minimum coolant filtration level: 100 microns.
5. With emulsion coolant, use an anti-foaming additive suitable for emulsion to prevent foaming.

#4 FIRST RUN

√ Review recommended Cutting conditions table for Jet unit.
√ Insert 10% rule target conditions - Ae, Ap, Feed into the program.
√ Start with 30% of F (Table Feed) , review Speed Display values.
√ Increase till you reach 100% target values.
√ Complete the attached form and send it over for technical assistance.

#5 COMPLETE FORM

The form on the back of this page can be filled in using Adobe Acrobat, as follows:
1. Download this PDF file and open it in Adobe Acrobat.
2. Insert images in the area marketed IMAGES.
3. Cells marked "Scroll to Select" use the arrows on the right to scroll and click on selection.
4. Fill in all parameters for the Original Machine Spindles.
5. Leave open HSM Jet Spindle and Comments for our Technical Support Team.
6. Go to File > Save As.. or use CRTL + SHIFT + S and save the form on your device.
7. Email the saved form to your Jet Spindle Account Manager.
8. Our Technical Support Team will review the details and test data and reply with Options.

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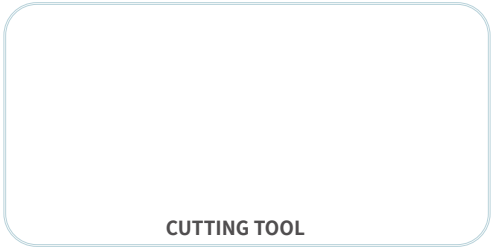
INTERNAL USE

Material	Industry

CUTTING TOOL & SPINDLE	
IMPROVEMENTS	
PART & PROCESS	


JET SPINDLE


CUTTING TOOL


WORK PIECE

CHALLENGE

.....

SOLUTION

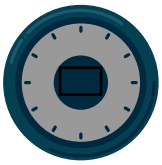
.....

CONDITION	DETAILS
Part	
Application	
Operation - Semi / Finish	
Target	Select
Material	
Hardness (HRC/HB)	
Machine type	
Coolant pressure [bar]	

DATA	JET SPINDLE	COMPETITOR
Spindle Type		
Spindle RPM - n (Idle) [rev/min] *		
Speed Drop - [%]		
Cutting Tool Diameter - D [mm]		
Tool Holder Shank Diameter [mm]		
No. of Teeth - Z		
Tool Overhang [mm] *		
Depth of Cut - Ap [mm] *+		
Total D.O.C. - Hole [mm]		
Cutting Width - Ae [mm] *+		
Cutting speed: Vc [m/min]		
Run-out [microns]		
Feed per Tooth - Fz [mm/tooth]+		
Feed per Revolution - F [mm/rev] *		
Table feed Vf [mm/min]		
Parts Machined [number of pcs]		
Qm = (Ap x Ae x Vf)/1000 cm3/min		

RESULTS	JET SPINDLE	COMPETITOR
Cutting Time [min/process]		
Tool life [number of parts]		
Surface Finish	Select	Select
Cycle Time Improvement (%)		

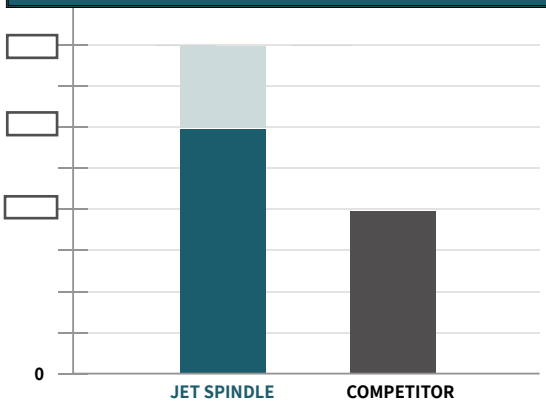
Cutting Time/Part (mins)

HSM Jet Spindle	Machine Spindle
	

Cost Savings per Part

Positive Results:
Productivity savings of [ ] %
Cost per-part savings [ ] %

Number of parts per tool (units)



* Required parameter. All parameters are important but these parameters are required.
+ Please review to Cutting Condition Tables within the Jet Spindles Sales Guide.

SAVE