

Mill Spindle Inspection Report

Technician		Cell#	
Serial Number		Date	
Model			
Why is the Spindle being replaced?			
1a. What is the symptom?	Noise Exceeds 140 °F Seized Other		
1b. When does the symptom occur?	spindle running intermittently		
2. Is the spindle physically damaged?	yes no		
3. Other - Describe the issue:			
Mandatory Troubleshooting			
<i>Lubrication</i>			
4. Are there leaks around the sight glass?			yes no
5. Did you see 1 to 3 drops of oil during the oil pump cycle?			yes no
6. Is the lube line for the spindle loose or not fully seated in the fitting? If yes, the following must be answered for a replacement spindle.			yes no
6a. Was the lube line hanging freely inside the head, not fully seated in the fitting, or has any part been damaged?			yes no
6b. If you answered yes to 6a pictures and video must be submitted . If the line was loose a good video of you pulling on the line must be submitted. If damaged good pictures or video must be submitted.			Done n/a
6c. Have you taken good picture or video of where you found the oil in the spindle head and the condition of the oil?			Done n/a
6d. Is the cut on the end of the lube line straight? It must be straight for a proper seal with the fitting.			yes no
<i>Spindle Condition</i>			
<i>Inline Spindles</i>			
7. Has the spindle motor alignment been verified?			yes no
8. Has the NCE gap been reset with the correct shim?			yes no Shim dimension Value: Axial Alignment Value: Radial Alignment Value:
<i>Belted Spindles</i>			
9. Is the drive sprocket/belt in good condition?			yes no
10. Is the encoder sprocket/belt in good condition?			yes no
11. Has the belt tension been verified?			yes no
<i>Inline & Belted Spindles</i>			
12. Look through the alarm history is there any Z-Axis servo Errors alarms generated?			yes no
13. Has a vibration test been performed? If no, run a test and attach to service notification.			yes no
14. Has a motor only vibrations test been performed? If no, run a test and attach to service notification.			yes no
15. Has the spindle been balanced? If no, balance the spindle.			yes no
16. Is the TSC union or coolant collector making noise?			yes no
17. Is the spindle taper in good condition?			yes no
18. Is the spindle fan working?			yes no
19. Is the spindle fan vibrating?			yes no
20. On machines equipped with TSC. Did you performed a Vibration analysis with the TSC Union/Adapter removed?			yes no
21. Has the spindle to toolchanger alignment been verified?			yes no
<i>HSK Spindle Only</i>			
22. Has the push out been verified?			yes no
23. Has the grippers been greased? If yes, what grease is being used?			yes no value:
<i>Drawbar Condition</i>			
24. Has the drawbar clamp force been checked? If yes, what is the force value?			yes no value:
25. If the spindle is belted with a carbide drawbar has the face runout been verified? If yes, what is the value?			yes no value:
26. If the spindle is belted what is the drawbar shaft runout?			value:
27. Are the ball bearings and drawbar cup in good condition?			yes no
<i>Tool Holders Condition</i>			
28. Are the pull studs in good condition?			yes no
29. Have the pull studs been torqued to spec?			yes no
30. Are the correct pull studs and tool holders being used?			yes no
31. Have the tool holders been balanced? If no, balance them.			yes no

Spindle Deflection Test

32. Has the Spindle Deflection Test been performed using T-0140? If yes, please what is the push, pull, and lost motion values? NOTE: Please only perform this if steps 1-30 have been performed and verified, and the machine is continuing to have surface finish issues. Total deflections should not exceed 0.0025 for 40 taper and 0.003 for 50 taper. **Do not add lost motion to total deflection.**

yes no
Push Deflection:
Pull Deflection:
Lost Motion:

Notes/ Observations:

Attach this report, an error report, and any relevant documentation to a service notification in the Haas Service App.