

5-Axis Machine Accuracy Test Procedure Checklist

Technician		Cell#	
Serial Number		Date	
Model			

Applications Part Geometry Checklist			
Workholding			
1. Verify the workholding is secured to the machine table.			
2. Verify the part is being held securely in the workholding.			
Tooling			
3. Verify the tool holder is using the correct pull stud or HSK clamp force is correct.			
4. Verify the pull stud is tightened to the correct specifications.			
5. Verify the correct tooling is being used for the material.			
6. Verify the shortest cutting tool possible is being used.			
7. Verify that the shortest tool holder possible is being used.			
8. Verify the runout of the tool and tool holder are within tolerance.			
Coolant			
9. Verify the coolant ratio is within the coolant manufacturer's suggested range using a refractometer.			
10. Verify the tool is getting enough coolant flow when machining a part.			
11. Verify there is no chip buildup in front of the tool path, especially when pocketing.			
Machining			
12. Verify the rotary axis brakes are applied during 3 axis machining.			
13. Verify manufacturer suggested feeds and speeds are being used for the tool.			
14. Use lighter cuts if the machine is chattering or noisy during a cut.			
15. Take a rough and light finish pass when holding tight tolerances or trying to get a good surface finish.			
16. Verify a dynamic tool path is used to avoid heavy chip loads in sharp corners.			
Thermal Growth Checklist			
17. Is the part error consistent throughout the day? If so continue to Machine Geometry section. If the part error changes throughout the day, continue the Thermal Growth test procedure.		Yes	No
18. Verify the Ball screw and Axis Lubrication systems are functioning correctly.			
19. Verify the Spindle fan and Spindle Lubrication systems are functioning correctly.			
20. Verify the Spindle Chiller is operating correctly.			
21. What is the maximum and minimum shop temperature throughout the day?		Min:	Max:
22. Does a HVAC vent discharge near the machine?		Yes	No
23. Is the machine near a door way?		Yes	No
24. Verify the spindle and axis had adequate warmup time before machining parts.			
Machine Geometry and MRZP test cut			
25. Verify an Error Report and Backup have been attached to the machine history.			
26. Verify the machine passes the inspection report .			
27. Redo test cut. Did part geometry improve?		Yes	No
28. Run customer's part. Did part geometry improve?		Yes	No
Notes/ Observations:			

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