



A Contour Precision Group Company

Preventive Maintenance Checklist

HS Grinding Systems (HS-155S&R, HS-195, HS-225S)



Customer: _____ Work Order No. _____

Model No. _____ Date _____

(Form –PMG 2013 Rev. 05/13)



1. Check Spindle Drive & Brake.

Check Speed Range: _____
 Under Speed Trip Setting Speed in RPM _____
 Brake Function: _____ Brake Time: _____

2. Check Spindle.

Radial Run-out _____ Squareness in Y Plane _____
 Axial End Play _____ Squareness in Z Plane _____

3. Check Spindle Balance & Replace Drive Belts.

Check Pulley Screws & Alignment _____
 Belt Tension: _____
 Measure Balance with Strobe, Z plane: _____ .16mm/sec. max allowable
 Measure Balance with Strobe, Y plane: _____ .16mm/sec. max allowable

4. Is Wheel Guarding in Place? Y N

5. Check Air Purge System & Pressure.

Main Air Gauge Reading: _____ Test: _____
 Rear Spindle Gauge Reading: _____ Machine Low Pressure Alarm: _____
 Front Spindle Gauge Reading: _____ Spindle Low Pressure Alarm: _____
 FRL Unit and Incoming Pressure: _____
 Scale Purge Pressure: _____

6. Inspect Waycovers.

X-Axis = _____
 Y-Axis = _____
 Z-Axis = _____

7. Replace Axes Timing Belts & Inspect Pulleys for Wear or Damage.

Check Pulley Screws & Alignment: _____ Tension: _____
 X-Axis = _____ A-Axis = _____
 Y-Axis = _____ B-Axis = _____
 Z-Axis = _____ C-Axis = _____

8. Inspect Ballscrews and Linear Rail Sets for Wear or Damage.

X-Axis = _____
 Y-Axis = _____
 Z-Axis = _____

9. Inspect Lubrication Lines, Fittings and Delivery System.

10. Check Lubrication Timers for Proper Setting and Record Settings.

Pressure at Lube Unit = _____ Target is 30 psi (lbs./in²) _____
 T0 = _____
 T2 = _____
 T4 = _____

11. Measure Linear Axis Backlash & Record Results.

X axis error = _____ U axis error = _____ Notes: _____
 Y axis error = _____ V axis error = _____ _____
 Z axis error = _____ _____

12. Measure and Adjust Rotary Axis Backlash and Record Results After Adjustment.

A axis error = _____ @ _____ inches from centerline. Notes: _____
 B axis error = _____ @ _____ inches from centerline. _____
 C axis error = _____ @ _____ inches from centerline. _____

13. Inspect Counterweight, Guide Shafts, Chains, Sprockets and Bearings.

14. Check & Record Current Draw Percentage (%) of Axes Drives.

Direction	Positive (+)	Negative (-)	Positive (+)	Negative (-)
X Axis	_____ %	_____ %	V Axis	_____ %
Y Axis	_____ %	_____ %	A Axis	_____ %
Z Axis	_____ %	_____ %	B Axis	_____ %
U Axis	_____ %	_____ %	C Axis	_____ %

15. Check Oil Level and Quality in Rotary Axes.

16. Check Voltage Levels on Line, 24v. Power Supply and Distribution Transformers.

Bus L1, L2 = _____ Bus L1, Ground = _____
 Bus L3, L2 = _____ Bus L2, Ground = _____
 Bus L1, L3 = _____ Bus L3, Ground = _____
 24 V. PS = _____ Dist. trans. per schematic = _____

17. Inspect Wiring for Loose Connections, Damage & Hardening.

18. Check Function of Door Switches and /or Interlocks & Two Handed Control.

19. Check Worklights, Stack Lights & Operator Panel Lamps.

20. Check Door Operation & Clean Rails.



21. Check for Leaking or Damaged Doors & Windows.

22. Check Air Conditioner / Heat Exchanger.

Set temperature: _____ Cabinet operating temperature: _____
Clean filter: _____ Inspect and clean coils if accessible: _____

23. Check Operation of Pressure Relief Hatch & Rear Access Panel.

24. Inspect Exhaust System, Clean or Replace Filters as Needed.

25. Inspect Coolant System, Check Flow Meters, Pressure Switches, Gauges, Hoses & Solenoids.

26. Check for Proper Function of Pushbuttons & Control Knobs.

27. Calibrate Machine & Record Offsets.

X Axis: Old Offset	_____	New Offset	_____	V Axis: Old Offset	_____	New Offset	_____
Y Axis: Old Offset	_____	New Offset	_____	A Axis: Old Offset	_____	New Offset	_____
Z Axis: Old Offset	_____	New Offset	_____	B Axis: Old Offset	_____	New Offset	_____
U Axis: Old Offset	_____	New Offset	_____	C Axis: Old Offset	_____	New Offset	_____

28. Check and Adjust for Proper Operation of Home & Limit Switches.

X O.T. Positive	_____	Negative	_____	V O.T. Positive	_____	Negative	_____
Y O.T. Positive	_____	Negative	_____	A O.T. Positive	_____	Negative	_____
Z O.T. Positive	_____	Negative	_____	B O.T. Positive	_____	Negative	_____
U O.T. Positive	_____	Negative	_____	C O.T. Positive	_____	Negative	_____

Huffman Representative

Customer Representative

Comments: _____

Attach additional notes or comments if needed.