

Planer Bed Rollers Height Check – Preventative Maintenance SOP

1.0 Maintenance Objective & Frequency

The objective of this procedure is to verify and adjust the height of the infeed and outfeed bed rollers relative to the cutterhead plane. Correct roller height ensures uniform material support, eliminates snipe, and prevents feed roller slippage. This PM is to be performed every 200 operating hours or quarterly, whichever comes first.

2.0 Lockout/Tagout (LOTO) & Safety

- Electrical Isolation: Disconnect main power at the disconnect switch and apply a personal lock and tag.
- Mechanical Isolation: Ensure the cutterhead has come to a complete stop and the feed drive is disengaged.
- Mandatory PPE: Safety glasses, cut-resistant gloves, and hearing protection.

3.0 Required Tools, Parts & Lubricants

- Precision straightedge (at least 36 inches long, ground to ± 0.001 inch)
- Feeler gauge set (0.001 to 0.030 inch range)
- Dial indicator with magnetic base (0.001 inch resolution)
- Combination wrench set (metric and imperial, as per OEM specs)
- Torque wrench (range 10–50 Nm)
- Clean lint-free rags and isopropyl alcohol
- White lithium grease or OEM-recommended lubricant for roller bearings

4.0 Step-by-Step Maintenance Procedure

1. Perform LOTO as per Section 2.0. Verify zero energy state by attempting to start the cutterhead and feed drive.
2. Remove the chip hood and any access panels covering the infeed and outfeed roller assemblies. Clean all exposed surfaces with isopropyl alcohol and a lint-free rag.
3. Place the precision straightedge across the cutterhead knives (or across the cutterhead body if knives are removed) and the outfeed roller. Ensure the straightedge contacts both surfaces without rocking.
4. Using the feeler gauge, measure the gap between the straightedge and the outfeed roller at both ends of the roller. Record the measurements. The acceptable gap is typically 0.005 to 0.010 inch (refer to OEM manual for exact spec).
5. Repeat Step 4 for the infeed roller. The infeed roller is usually set 0.010 to 0.020 inch higher than the cutterhead plane to prevent snipe.
6. If any measurement is outside the acceptable range, loosen the locking nuts on the roller eccentric bushings or adjustment screws (as per OEM design). Rotate the eccentric to raise or lower the roller. Tighten locking nuts to the OEM torque specification (typically 25–35 Nm).

7. Re-check the roller height with the straightedge and feeler gauge. Repeat adjustment until the gap is within spec at both ends of the roller.
8. Mount the dial indicator on the machine frame with the plunger contacting the roller surface. Zero the indicator. Manually rotate the roller through one full revolution. The total indicated runout (TIR) must not exceed 0.003 inch. If TIR exceeds spec, inspect the roller bearings and replace if necessary.
9. Apply a thin coat of white lithium grease to the roller bearing grease fittings (if equipped). Wipe away any excess.
10. Reinstall the chip hood and access panels. Torque all fasteners to OEM specifications.

5.0 Verification & Return to Service

1. Remove LOTO devices. Restore main power and perform a safety check of all guards and emergency stops.
2. Run the planer through a test cycle with a scrap piece of wood of uniform thickness (e.g., 2x4). Feed the board through and inspect the finished surface for snipe, chatter marks, or uneven thickness.
3. Measure the thickness of the test piece at both ends and the middle using a caliper. Variation should be within ± 0.005 inch of the target thickness.
4. If the test piece passes inspection, sign off on the PM work order in ServiceGrid. Record the measured roller heights and any adjustments made in the maintenance log.
5. If the test piece fails, re-check roller heights and repeat the adjustment procedure. If the issue persists, escalate to a senior maintenance technician or OEM service representative.

Regulatory Disclaimer: This document is a generic maintenance template provided for educational and informational purposes only. It does not constitute professional engineering or reliability advice. The end-user assumes all liability for validating all step sequences, torque specs, and LOTO protocols against specific machinery OEM manuals before deployment to a live production floor.