

Bluegrass Machinery, Inc.

Basic Fadal Preventative Maintenance Program

Ballbar Analysis and Calibration

1. Ballbar analysis to show condition of machine before adjustments.
2. Ballbar calibration at end of PM.

Way Lube System Maintenance

1. Check the waylube pump.
2. Clean tank of all contaminants.
3. Inspect lube lines, manifolds, and meters.
4. Visually verify lubrication.
5. Replace or clean oil filter and assure correct waylube is being used.

Electrical System Maintenance

1. Check all electrical connections (wires, connectors, boards, etc.).
2. Check all axis servo circuit amplifiers.
3. Check all voltages and adjust to manufacturer's specifications (power supply, transformer, phases, incoming power).
4. Visually inspect cables, cable terminals, mounting, etc.
5. Check ground integrity. Make recommendations.
6. Check and/or adjust monitor.
7. Check spindle motor winding.

Pneumatic System Maintenance

1. Check air regulator for leaks or faulty seals.
2. Check solenoids and air valves for leakage or malfunction.
3. Drain and clear water trap on air line filter.
4. Drain, clean, and refill lubrication.
5. Check main pressure.
6. Make recommendations for air lines and filters.

Spindle System Maintenance

1. Check SETP (gain, ramp, orientation, etc.).
2. Check spindle belts. Make recommendations.
3. Check spindle bearings preload. Inspect for noise and heat.
4. Check and clean the spindle chiller system (where applicable) for correct operation.
5. Check drawbar and tool In/Out springs. Make recommendations.
6. Check spindle and assure proper tram and squareness.

Machine Alignment Checks

1. Check machine level.
2. Check axis travel.
3. Check backlash setting.
4. Remove gibs, clean surfaces, and reinstall gibs to manufacturer's specifications.
5. Install new wipers on all ways.
6. Inspect and adjust all straps.

Automatic Tool Changer (ATC) Maintenance

1. Remove covers and clean all chips and other contaminants.
2. Check ATC alignments.
3. Check slide and turret operation.
4. Check operation of turret motor.
5. Check overall operation.
6. Inspect tool retention rings for proper tension.

Miscellaneous

1. Clean and check all fans for proper operation.
2. Check all fluid levels and fill if necessary. Make recommendations.
3. Check pallet changer where applicable.
4. Verify and adjust rigid tapping if needed.
5. Check drawbar assembly for leakage.