

Quarterly Extruder Performance Checklist

To ensure your extruder is primed for peak performance, we suggest checking 10 extruder components as part of a healthy maintenance plan. Each one of these items is recommended for quarterly maintenance unless otherwise noted.

CONTROL PANEL

- Clean and inspect inside of the control panel. Look for burned wiring and signs of component overheating.
- Make sure all terminal connections are tight.
- Check that receptacles are grounded.
- Test and monitor operating conditions. Check amp draw of three-phase motor input.
- Check and calibrate all temperature and pressure controllers.
- Check all ground connections and verify continuity (yearly).
- Check and verify drive potentiometer speed, as equipped (yearly).

FEEDSCREW AND BARREL

- Clean and inspect pressure gauge transducer.
- Measure and record feedscrew flight and barrel diameters (yearly).
- Conduct Liquid Penetrate Non-Destructive Test (NDT) for cracks on feedscrew and barrel (yearly).
- Clean and inspect feedscrew and barrel (as needed).

BOLTED CONNECTIONS

- Check all bolt and mounting hardware throughout the entire system for tightness and damage.
- Reference component torque requirements in your maintenance manual.

ELECTRICAL CONNECTIONS

- Inspect all conduits for wiring and damage.
- Inspect electrical leads for cuts, fraying abrasions or other damage.

Feed Section and Hopper

- Inspect feed section and hopper for excess wear and damage.
- Clean and inspect feed section cooling passage.
- Check feedscrew bushing for excess play and wear (as needed).

BARREL HEATERS

- Measure and record heater amperage and resistance.
- Clean and inspect barrel heater fins.
- Check all thermocouple and heater terminal connections.
- Measure and record blower fan motor temperatures.

WATER COOLING SYSTEM AND ROTARY UNIONS

- Inspect pump seals for leaks.
- Test and calibrate pressure and temperature regulators (yearly).
- Check water flow from plant water supply lines (yearly).
- Clean and inspect heat exchanger (as needed).
- Check the zinc anode plug for deterioration and corrosion (as needed).

ELECTRIC MOTORS

- Inspect all electrical connections and wiring for tightness and damage.
- Check belts for excess wear and proper tension (deflection).
- Clean and inspect internal component conditions of motor (yearly).
- Test and record the condition of all operating components (as needed).
- Lubricate motor bearings (according to manufacturer instructions).

ELECTRIC MOTORS

- Check oil cleanliness on lube system and oil filter.
- Clean gearcase of sediment, sludge and metal particles.
- Visually inspect gear sets for damage and wear through site glass.
- Check bearing noise and vibration.
- Check thrust shaft run-out and bearing play.
- Check drive coupling for proper alignment (yearly).
- Lubricate drive coupling (as needed).
- Change oil in gear reducer (as needed or every 4,000 hrs.).
- Clean and inspect heat exchanger (as needed).

For a complete checklist that includes daily inspection items, please refer to the maintenance instructions in your extruder's operational and technical manual.

Do you need immediate service help? Contact **+1 844 MY DAVIS**