

Briquette Press Troubleshooting: 13 Common Problems & Fixes

Every machine shop or recycling operation that runs a hydraulic briquetting press will eventually face a breakdown. It is not a matter of if, but when. The question is not whether problems will occur, but how quickly you can identify and fix them when they do.

Downtime costs money. A briquetting press that stops unexpectedly means scrap piles up, production slows down, and briquette quality suffers. Some problems are simple to fix, others require more attention. But most faults share common patterns, and knowing what to look for saves hours of frustration.

This guide covers the most frequent problems encountered with hydraulic metal briquetting presses. It walks through each issue, explains what causes it, and provides practical steps to get your machine back up and running.

Resource: <https://www.aupwit.com/briquette-press-troubleshooting/>

Key Troubleshooting Principles

Before diving into specific problems, here are four principles that will save you time and frustration:

- **Start with the simplest checks.** Power, oil level, and emergency stops are the most common causes. Always check these first.
- **Listen to the machine.** Unusual noise or vibration is almost always a warning sign. Do not ignore it.
- **Keep it clean and lubricated.** Regular cleaning and lubrication catch issues before they become failures.
- **Know your normal.** Understand what proper pressure sounds like, what good briquettes look like, and what normal operating temperatures feel like. You cannot spot trouble if you do not know what "right" looks like.

Keep these principles in mind as you work through the sections below.

Quick Reference: 13 Common Problems, Causes, and Fixes

Problem	Top Causes	Quick Fixes
1. Machine won't start	Power off, E-stop engaged, overload tripped	Check power, release E-stop, reset breaker
2. Machine stops suddenly	Blockage, overload, low hydraulic oil	Clear blockage, reduce feed, check oil level
3. Cylinder crawling / jerky movement	Air trapped in cylinder or system	Run multiple work cycles to purge air
4. Gate misaligned / not returning	Debris under gate	Remove debris, check gate movement
5. Low or no pressure	Low oil, pump failure, leaks, relief valve stuck	Add oil, repair pump, fix leaks, clean relief valve
6. Oil overheating	Low oil, dirty oil, system overload, cooler failed	Add oil, change oil, reduce load, repair cooler
7. Cylinder problems	Worn seals, air in cylinder, piston stuck	Replace seals, bleed air, disassemble and clean
8. Milky or cloudy oil	Water in hydraulic oil	Drain and replace with new oil
9. Hydraulic pipeline vibration	Loose pipe clamp bolts	Tighten pipe clamps
10. Uneven feeding	Hopper empty, bridging, feeder malfunction	Refill hopper, break bridging, repair feeder
11. Briquettes crumbling	Low pressure, short dwell time, wrong moisture	Increase pressure, increase dwell time, adjust moisture
12. Excessive noise	Loose parts, bad bearings, misalignment, pump cavitation	Tighten bolts, replace bearings, realign parts, check oil level
13. Breaker tripping	Overload, short circuit	Reduce load, inspect wiring

Machine Won't Start or Stops Suddenly

A machine that refuses to start or shuts down mid-cycle is one of the most common and frustrating problems. The good news is that the cause is usually straightforward.

Possible Causes

- Power supply issues: no power reaching the machine, loose cord, or faulty outlet
- Emergency stop button engaged
- Overload protection triggered: circuit breaker tripped or overload relay activated
- Safety interlocks open: guards or covers not properly closed
- Control system malfunction: PLC, control panel, or wiring issue
- Motor failure: damaged or burnt-out motor
- Gate misalignment: the door or gate is not in its proper position due to debris underneath

Troubleshooting Steps

Start with the simplest checks first. Verify that the power cord is securely connected and the outlet is working. Make sure the control switch is on and the emergency stop button is released. Check that all safety guards are properly closed.

If these steps do not solve the problem, check the fuse inside the equipment. A blown fuse needs replacement. Inspect the control system, including wiring connections and PLC status lights. If the motor is suspect, use a multimeter to check the motor windings for continuity.

If the gate is misaligned or fails to return to its correct position, there may be debris trapped under the gate. Remove the debris and check that the gate moves freely before restarting.

Why Is My Hydraulic System Losing Pressure or Overheating?

Hydraulic issues are among the most common in hydraulic briquetting presses. The system is the heart of the machine, and when it fails, the entire operation stops.

Low or No Hydraulic Pressure

Low pressure is a frequent complaint. Briquettes come out soft, crumbly, or fail to form at all.

Possible causes:

- Low hydraulic oil level: the pump cannot draw enough oil
- Hydraulic pump failure
- Leaking hoses or fittings
- Valve malfunction: blocked or defective hydraulic valve block, often the relief valve core is stuck or the valve port seal is not tight
- Dirty or clogged oil filter
- Motor reversed: zero line and live line connected incorrectly
- Voltage too low: system pressure drops with insufficient voltage

Solutions:

Check the oil level gauge first. If the oil level is low, add sufficient hydraulic oil. Observe the motor's rotation direction; if it is reversed, adjust the zero and live line connections. Inspect the hydraulic valve block. If it is blocked, disassemble, clean, and reinstall. If the valve block is cracked, replace it with a new one. Check hydraulic pipelines and cylinders for oil leaks. Replace leaking pipelines, seals, or cylinder seals as needed. If the voltage is unstable, install a voltage stabilizer.

If the pressure gauge reading seems unreliable, the gauge itself may be faulty. Adjust the system pressure to test the gauge, and replace it if necessary.

Hydraulic Oil Overheating

Excessive heat in the hydraulic system reduces oil viscosity, accelerates seal wear, and can cause complete system failure.

Possible causes:

- Low oil level
- Dirty or degraded hydraulic oil
- Restricted oil flow
- System overload: excessive feed rate or pressure
- Cooling system malfunction

Solutions:

Add oil if the level is low. Change the hydraulic oil if it appears dirty or degraded. Replace the oil filter. Reduce feed rate or pressure settings if the machine is overloaded. Check and repair the oil cooler if fitted.

Hydraulic Cylinder Problems

Cylinder issues often manifest as slow or jerky movement, failure to extend or retract, or complete loss of function.

Common causes:

- Worn or aged seals: the sealing effect is lost
- Excessive clearance between cylinder and piston due to wear
- Air trapped in the cylinder
- Insufficient oil pump supply
- Piston stuck against cylinder head: pressure oil cannot enter

Solutions:

Replace worn seals with new ones that match the equipment specifications. If the piston or sealing ring is worn, replace them and maintain a reasonable clearance. Bleed air from the cylinder or check the oil pump. If the piston is stuck, the cylinder may need disassembly, cleaning, and lubricant replacement. Check the effective working area of the piston; it may be too small to generate sufficient thrust.

Hydraulic Cylinder Crawling

If the master cylinder or door cylinder operates with a jerky, sticking, or creeping motion during compression or door movement, air is likely trapped in the hydraulic system.

Possible cause:

- Air trapped in the cylinder or hydraulic lines

Solution: Run multiple complete work cycles to purge trapped air from the hydraulic system. The cylinder should operate smoothly after the air is expelled.

Milky or Discolored Hydraulic Oil

If the hydraulic oil appears milky white or cloudy, water has entered the system. Contaminated oil loses its lubricating properties, accelerates wear, and can damage the pump and valves.

Possible cause:

- Water in the hydraulic oil

Solution: Drain the contaminated oil completely and replace it with new hydraulic oil. Identify and seal the entry point to prevent recurrence.

Hydraulic System Leaks

Leaks are not just messy; they indicate a problem.

Common leak points:

- Hydraulic hoses and fittings
- Seals: piston seals, cylinder seals, and dust seals
- Reservoir

Solutions:

Regularly inspect all hydraulic lines and connections. Replace damaged hoses, fittings, and seals promptly. Ensure proper torque on fittings during installation.

Why Is My Briquette Press Not Feeding Material Properly?

Feeding issues disrupt the entire briquetting process. Material that does not flow properly cannot be compressed into consistent briquettes.

Uneven or Inconsistent Feeding

Possible causes:

- Hopper empty or low on material
- Bridging or arching: material sticks together in the hopper
- Feeder malfunction: auger or screw conveyor not operating properly
- Material property variations: moisture content, particle size, or density changes
- Incorrect feeder speed

Solutions:

Refill the hopper. Break up any bridging or arching manually; consider installing a hopper agitation system such as a vibratory motor or air cannon. Inspect the feeder and repair or adjust as needed. Adjust material properties through pre-processing: drying, screening, or magnetic separation. Adjust feeder speed to match the machine's requirements.

Material Clogging or Jamming

Blockages stop production and can damage equipment.

Possible causes:

- Excessive moisture in the material
- Foreign objects or debris in the feed stream
- Feeder design inadequate for the material type
- Build-up on feeder components

Solutions:

Dry the material to the recommended moisture content. Install screens or magnetic separators to remove debris. Modify feeder design if necessary. Clean feeder components regularly to prevent build-up. Always stop the machine and disconnect power before clearing blockages.

Why Is My Briquette Press Making Excessive Noise or Vibration?

Unusual sounds or shaking during operation are warning signs.

Hydraulic Pipeline Vibration

If hydraulic pipelines vibrate excessively and produce noise during operation, the pipe clamps may have loosened.

Possible causes:

- Loose pipe clamp bolts
- Pipelines not securely fastened

Solution:

Tighten the pipe clamp bolts. Check all pipe clamps and mounting brackets for looseness and secure them properly.

Oil Pump Noise

If the oil pump is unusually noisy, the issue may be related to oil supply or internal pump damage.

Possible causes:

- Oil pump is running empty: low oil level or suction pipe blocked
- Clogged oil filter
- Suction pipe or pump inlet blocked
- Plunger broken
- Bearing broken

Solutions:

Check and refill hydraulic oil to the proper level. Clean or replace the oil filter. Clean the suction pipe and pump inlet. Replace broken plungers or bearings.

General Noise and Vibration

Possible causes:

- Loose components: bolts, screws, or fasteners
- Bearing failure: worn or damaged bearings
- Misalignment of moving parts
- Material not suitable for the machine
- Foundation issues: machine not properly mounted

Solutions:

Inspect and tighten all bolts, screws, and fasteners. Check bearings for wear, play, and proper lubrication; replace damaged bearings. Check alignment of moving parts and use shims to correct misalignment. Verify that the material is suitable for the machine. Ensure the machine is properly mounted on a stable foundation.

Why Are My Briquettes Crumbling or Deformed?

Poor briquette quality is often the first sign that something is wrong. Briquettes that are soft, crumbly, cracked, or deformed indicate issues in the compression process.

Briquettes Are Crumbling or Weak

Possible causes:

- Insufficient hydraulic pressure
- Pressure-holding time too short
- Material moisture content outside the recommended range (typically 8-12% for metals)
- Worn or damaged dies

Solutions:

Check and adjust hydraulic pressure to the recommended level for the material. Increase the dwell time if the machine allows. Test material moisture and adjust drying if needed. Inspect dies for wear or damage and rotate or replace them.

Briquettes Are Deformed or Uneven

Possible causes:

- Uneven material distribution in the die
- Die damage or uneven wear
- Pressure imbalance
- Inconsistent material feed

Solutions:

Improve material distribution by adjusting the feeding system or adding a distribution plate. Replace damaged or worn dies. Adjust pressure settings for even application. Stabilize the material feed rate.

Why Does My Briquette Press Keep Tripping the Breaker?

Electrical faults can be intermittent and difficult to trace, but they follow predictable patterns.

Frequent Circuit Breaker Tripping

Possible causes:

- Overload: machine drawing too much current
- Short circuit
- Faulty wiring
- Undersized breaker

Solutions:

Reduce the load if the machine is overloaded. Inspect wiring for shorts or damage. Consult a qualified electrician if the issue persists. Upgrade the breaker if it is undersized for the machine's requirements.

Inconsistent Motor Speed or Performance

Possible causes:

- Voltage fluctuations
- Worn motor components
- Faulty motor controller

Solutions:

Check voltage stability, especially under load. Use a voltage stabilizer if needed. Repair or replace worn motor components. Replace a faulty motor controller.

How to Maintain Your Briquette Press to Prevent Breakdowns

The best way to troubleshoot a problem is to prevent it from happening in the first place. Regular maintenance catches issues before they become failures.

Regular Maintenance Tasks

- Lubricate all moving parts regularly
- Clean the machine to remove dust, debris, and material build-up
- Clean the area around the feed hopper and conveyor at the end of each shift to prevent debris build-up
- Inspect all components for wear and tear
- Check hydraulic fluid levels regularly
- Replace filters regularly

- Tighten fasteners regularly, especially pipe clamps and pipeline bolts
- Check and tighten all pipeline bolts and mounting fasteners to prevent loosening from vibration

Maintenance of Critical Components

Only qualified, experienced technicians should adjust pumps, valves, or instruments. If a pressure gauge shows signs of fault, inspect and replace it immediately.

Inspect limit switches regularly and replace them immediately if damaged.

Wear Parts Inspection

The most frequently worn parts in a briquetting machine are the propeller (screw auger), the sleeve (forming die or mold), and seals.

Propeller (Screw Auger): Check for wear, deformation, or bending, especially at the tip and along the threads. Worn propellers lead to poor briquette formation or inconsistent density. If worn, weld and grind the propeller back to specification using wear-resistant electrodes. Correct any deformation to ensure the coaxiality of the propeller's tip.

Sleeve (Forming Die/Mold): Inspect for wear, rust spots, or large pits. If there are small rust spots, repair them promptly. If there is significant wear or large pits, replace the sleeve.

Seals: Check piston seals, cylinder seals, and dust seals regularly. Worn seals cause leaks and pressure loss. Replace them promptly.

Operator Training

Properly trained operators are the first line of defense against equipment failure. Ensure operators understand:

- Safe startup and shutdown procedures
- Emergency stop protocols
- Proper feed rate and pressure settings
- How to recognize early warning signs
- When to stop and call for help

Material Conditioning

Pre-processing material prevents many feeding and quality problems:

- Dry material to the recommended moisture content
- Use magnetic separation to remove metal contaminants

- Screen or sift to remove oversized particles
- Install hopper agitation systems to prevent bridging

Conclusion

A hydraulic briquetting press is a reliable machine, but seals wear out, parts loosen, and components age. Problems are not a matter of if, but when.

Most faults fit into a few predictable categories: power issues, hydraulic system failures, feeding problems, and quality defects. The solutions are usually straightforward once you know where to look. The simple checks, power and oil level, go a long way. From there, work systematically through the possibilities.

Preventive maintenance is your best defense. Replace wear parts like propellers, dies, and seals before they fail. A worn propeller or a damaged seal costs far less than a week of lost production.

Aupwit has been manufacturing hydraulic equipment since 2008, building [briquetting presses for steel, cast iron, aluminum, and copper chips](#). Our machines are built to be reliable, but we also know that maintenance and troubleshooting are part of daily operations. If you are dealing with a persistent issue or considering a new briquetting solution, [reach out](#). We have seen most problems before and we are happy to help.