

Wood Hammer Mill

Complete Product Guide & Manual

Version: V1.0 | Date: 2026-08-19

FSP Series

Closed Dust-Free System

Adjustable Gap

7 Models

HeNan Lvlon Industrial Co., Ltd.

Website: <https://www.lvlonmachinery.com> | WhatsApp/WeChat/Phone: +8615290836583 | Email: lvlonxu@gmail.com

What This Machine Is

The wood hammer mill (FSP series) is the key machine in a biomass pellet line: it grinds feed over 5 mm into fine, uniform, correctly-moist particles ready for pelleting. Repeating hammer impact, squeeze and cutting, with the bottom screen controlling product size — and the hammer-to-screen gap is adjustable. The series covers seven models, from 2.5 to 22 t/h, at 18.5–110 kW.

Why It Gets Specified

Four reasons. Design: compact, clean-looking, high operating efficiency. Wear resistance: hammers made with a new process that sharply improves impact and abrasion resistance, extending wear-part life. Dust-free: the fully enclosed grinding system keeps dust in. Economy: high wear resistance and easy operation save labor and time with low energy draw.

How the Wood Hammer Mill Works

Three stages:

1

Feed

Material enters the grinding chamber.

2

Repeated impact

High-speed hammers hit, squeeze and cut the material repeatedly, breaking it down fast.

3

Screen discharge

Ground material exits through the bottom screen; particle size is set by the screen and the hammer-to-screen gap.

Two things to remember: product size is set by both the screen aperture and the hammer-to-screen gap — adjust the gap yourself for different fineness; the enclosed system depends on its seals — bad seals mean dust out.

Specifications

Full spec for all seven FSP models:

Model	Capacity(t/h)	Rotor dia. (mm)	Chamber width(mm)	Hammers	Rotor speed(r/min)	Power(kw)
FSP56*36	2.5–5	560	360	20	2980	18.5/22
FSP56*40	4–7	560	400	24	2980	30/37
FSP60*30	2–5.5	600	300	24	2980	18.5/22
FSP60*45	5–9	600	450	44	2980	45/55
FSP60*60	6–10	600	600	48	2980	75/90
FSP60*75	8–13	600	750	60	2980	90/110
FSP112*40	12–22	1120	400	40	1440	90/110

Capacity varies with feed type, moisture and screen spec — reference ranges shown.

Where It Gets Used

Four duty classes. Biomass pellet and fuel lines: pre-grinding before pelleting wood pellets and straw pellets. Hardwood and softwood crushing. Grain milling. Waste paper shredding and recycling.

Installation and Commissioning

1. **Foundation and frame** — set the base per the drawing, level the machine, fix down and isolate.
2. **Rotor and hammers** — verify hammer mounting direction and torque (replace in symmetric sets); confirm rotor balance marks.
3. **Screen** — fit the aperture for the target size; check tension and sealing.
4. **Electrical** — wire the motor and confirm phase sequence; check belt tension (belt-drive units) and all guards.
5. **No-load run** — jog, then run continuously; watch rotor smoothness, noise and whole-machine vibration.
6. **Load run** — start with a little feed, check product size and current, adjust the hammer-to-screen gap, then ramp to rated capacity.

⚠ Lift by the designated points only — never by motors; keep personnel clear of the lift zone.

⚠ During operation, stay clear of the feed and discharge openings; stop and lock out before clearing, hammer or screen changes.

⚠ Stop immediately on abnormal vibration, noise or motor overheating; never run a damaged machine.

Feed evenly and continuously — keep metal and large hard objects out of the feed. Have the manufacturer's technician on site for the first load run.

Running and Maintenance

The hammers are the core wear item: the new-process heads resist impact and abrasion well, but wear is inevitable — inspect on schedule and replace at the wear limit, in symmetric sets to keep the rotor balanced. The screen is the second wear item: check for damage and tension, and change it for a different particle size. Adjust the hammer-to-screen gap periodically for the target fineness.

The enclosed grinding system depends on its seals — bad seals mean dust out and the environmental story weakens. Rotor bearings get scheduled lubrication; belt-drive units need tension checks. Daily round: motor current, noise and whole-machine vibration — rotor imbalance and uneven hammer wear show up in vibration first.