HENAN LVLON INDUSTRIAL · 9-10TPH SAWDUST PELLET PRODUCTION LINE

9-10TPH Sawdust Pellet Production Line Complete Product Guide & Manual

Version: V1.0 | Date: 2026-08-18

9–10 t/h | 6–7 Pellet Mills Parallel | Tonne Bag Packing | Industrial Scale

HeNan Lvlon Industrial Co., Ltd.

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

What This Line Is

This is a 9-10TPH sawdust pellet production line — a large-scale commercial and industrial plant designed to turn sawdust, wood chips, logs and wood-processing waste into clean-energy biomass pellets. Single-line capacity hits 9–10 t/h, converting forestry and mill waste into fuel while cutting carbon emissions. Six to seven MZLH508 ring die pellet mills run in parallel — 1.5 t/h each — making this one of the largest industrial pellet configurations in the range.

Why It Gets Specified

Five reasons. High capacity: 9–10 t/h on one line, built for large-plant continuous production. Feed flexibility: handles freshly felled, green, semi-dry and kiln-dried wood. Smart protection: the pellet mills carry VFD feeders, overload protection, external discharge and pressurized lubrication for long, steady runs. Good product quality: the high-efficiency counterflow cooler takes hot, soft pellets from 80–90℃ down to ambient, hardening them and lifting wear resistance. Efficient packing: a tonne-bag system with high accuracy and fast sealing keeps moisture and dust out.

How the 9-10TPH Sawdust Pellet Production Line Works

Flow: crushing → rotary screening → drying → ring die pressing → counterflow cooling → tonne-bag packing. Four stages:

1. **Screening**
   Crushed material passes the rotary drum screen to remove oversized pieces, impurities and fines.
2. **Pelleting**
   Clean sawdust feeds into the parallel ring die mills; rollers and dies press it into pellets under high pressure.

3 **Cooling**

Hot, soft pellets enter the counterflow cooler; air flow drops temperature and moisture, hardening the pellets.

4 **Tonne-bag packing**

Cooled pellets move to the automatic packer for tonne-bag filling and sealing — ready for storage and shipping.

> Two things to remember: with 6–7 mills in parallel, an even material split is the whole line's efficiency story; soft, hot pellets at 80–90℃ must cool to ambient before packing or hardness and wear resistance won't meet spec.

Equipment Configuration

1. MZLH508 ring die wood pellet mill ×6–7 units

Model	Capacity/unit	Main motor	Feeder screw	Die ID	Die speed	Rollers	Roller temp	Pellet size
MZLH508	1.5 t/h (multiple units for 9–10 t/h total)	90 kW	2.2 kW	508 mm	150 rpm	Ø190mm ×2	≤85℃	6/8/10 mm

2. SKLN4 counter flow pellet cooler

Model	Capacity	Volume	Main power	Air-lock	Cooling time
SKLN4	10 t/h	4 m^3	1.5 kW	1.1 kW	≥6–10 min

3. WPPM-1000 sawdust pellets tonne-bag packing machine

Model	Packing rate	Bag size	Accuracy
WPPM-1000	20–50 bags/h	500–1000 kg/bag	≥99.9%

> The crusher, rotary screen and dryer in the process flow are not detailed with model specs on the source page — confirm with the factory at selection.

Where It Gets Used

Feedstock: large furniture plants, sawmill waste recovery, forestry wood-processing waste. Downstream: industrial biomass boilers, large biomass power plants, district heating, and pet/animal bedding or feed carriers.

Installation and Commissioning

1. **Shop layout** — arrange the machines per the flow (crush → screen → dry → pellet×6–7 → cool → tonne-bag pack); confirm multi-mill split piping and section conveyors.

2. **Positioning** — set and fix each machine per the drawing; level and isolate all pellet mill bases individually.
3. **Electrical and power** — wire each motor and confirm phase sequence; check oil level in all mills' gear transmissions.
4. **Linked no-load run** — run the whole line empty; watch multi-mill operation, material split, vibration and noise.
5. **Load run** — feed screened and dried sawdust evenly to all mills; check forming rate, cooling and tonne-bag packing; ramp to rated capacity.

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

> ⚠️ During operation, stay clear of all feed and discharge openings; stop and lock out before clearing or servicing.

> ⚠️ The pellet mills run hot — never touch them in operation; stop immediately on abnormal vibration, noise or overheating.

> Remove large metal and stones from the sawdust feed. Have the manufacturer's technician on site for the first load run.

Running and Maintenance

The 6–7 MZLH508 mills are the core asset: the dies and rollers are the main wear items — check die-hole wear and roller clearance, and replace or flip at the wear limit. The VFD feeders, overload protection, external discharge and pressurized lubrication get scheduled checks. In a multi-mill setup, any single-mill fault must be isolatable for fast repair without stopping the rest. An even material split is the lifeblood of multi-mill operation — unbalanced distribution means some mills idle while others overload.

Roller temperature should stay ≤85℃. The SKLN4 cooler (10 t/h) handles the whole line — make sure pellets leave at ambient. The WPPM-1000 tonne-bag packer: weighing accuracy (≥99.9%). Section capacities: cool 10 t/h rated, pellet total 9–10 t/h — the mills are the bottleneck. Daily round: motor temperatures, multi-mill sync, dust extraction.