

Building Template Crusher

Complete Product Guide & Manual

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Nails & Rebar OK

Permanent Magnet Iron Removal

Electric / Diesel Drive

4th-Generation Build

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What This Machine Is

The building template crusher is HeNan Lvlon Industrial's fourth-generation formwork crusher, developed from a wood-container crusher built to a German customer's specification. The design reworks feed-system stability, the pre-breaking mechanism, hydraulic damping and the cutter-head structure, so it crushes waste timber carrying rebar up to $\Phi 10$ mm, nails and steel sheet up to $\delta 3$ mm — with no hand-picking. The machine is yellow-black, large, mobile or stationary, with a diesel power pack, feed hopper and a discharge magnetic-separation belt.

Why Nailed and Rebar-Laden Feed Goes Straight In

Used formwork and wood containers are all about the metal inside. This crusher handles nailed waste, small rebar and thin steel sheet directly, which removes the manual stripping cost — that's the real difference between it and an ordinary wood grinder. Formwork and steel go into the chamber together, and the high-speed cutter head shears and smashes the lot.

The discharge end finishes the job: a strong permanent-magnet separator pulls nails, rebar and other magnetic metal out of the mix, leaving clean wood chips and blocks. The magnet runs on zero power, separates clean, and protects the equipment downstream from tramp iron.

How the Building Template Crusher Works

Four stages:

1

Feed and pre-break

Material enters through the feed system and gets pre-broken by the pre-breaking mechanism.

2

Shear and smash

The high-speed cutter head shears and smashes the formwork together with the metal inside it.

3

Magnet separation

The mixed discharge passes the permanent-magnet separator; nails and rebar are pulled out.

4

Clean discharge

Clean wood chips and blocks exit, ready for the next process step.

Two things to remember: the hydraulic damping system is what keeps feeding stable — check its travel and seals; clean the magnet regularly, a loaded magnet face stops pulling iron.

Specifications

General data

Item	Parameter / Spec
Generation	4th-generation formwork crusher
Drive	Electric motor / diesel engine (optional)
Crushable metal	Rebar $\leq \Phi 10\text{mm}$, nails, steel sheet $\leq 3\text{mm}$
Separation	Permanent magnet separator (no power draw)
Damping	Hydraulic damping telescopic system

Model range

Model	Main Power(kW)	Feed Opening(mm)	Weight(t)	Output(t/h)
LLDS1000	45+4+3	1000×200	3.5	3–5
LLDSQ1300	55+5.5+4	1300×300	4.5	5–8
LLDSZ1300	74+5.5+4	1300×300	7.5	5–12
LLDSQ1500	110+7.5+5.5	1500×400	9	8–16
LLDSZ1500	132+7.5+5.5	1500×400	11.8	10–20

Main power figures are multi-motor totals (main + auxiliaries) per model. Output varies with feed type and moisture — reference ranges shown.

Where It Gets Used

Construction-site formwork disposal, wood packing crate and container recycling, waste pallet processing, forest-yard waste, and biomass pellet or paper-mill feedstock prep. An operating reference is already in the field at a Ma'anshan customer site.

Installation and Commissioning

1. **Foundation and frame** — pour the foundation per the drawing, lift the machine into place, level it, grout and torque the anchor bolts symmetrically.
2. **Feed alignment** — align the feed hopper with the crusher; check the pre-breaking mechanism and the hydraulic damping telescopic system.
3. **Drive and electrical** — align the motor and belt-pulley drive and set belt tension; on diesel versions complete the power connection per the manual.
4. **Magnet check** — confirm the discharge magnet-belt position and pick-up effect.
5. **No-load run** — jog, then run continuously; watch cutter-head rotation, feed conveying, hydraulic action, vibration and noise.
6. **Load run** — start with a little waste formwork, watch crushing and iron removal, then ramp to rated load.

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

⚠ During operation, stay clear of the feed and discharge openings and the cutter rotation plane; stop and lock out before clearing jams or servicing.

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

Feed evenly and continuously — don't force oversized pieces in. Have the manufacturer's technician on site for the first load run.

Running and Maintenance

The cutter head carries the wear — every day chewing nails and rebar is hard on it, more so than a plain wood grinder, so inspect the edges and disc condition on schedule and replace at the wear limit. The permanent-magnet separator is free to run but not free of care: clean the collected iron regularly, or the pick-up drops and iron rides past into the product. The hydraulic damping telescopic system is the machine's signature piece — check its travel and seals.

On the drive side: belt tension and motor bearings for electric units; follow the engine maintenance schedule on diesel units. The daily round: cutter bearing temperature, whole-machine vibration, and the magnet belt.