

Fiber-to-Pellet Process

1. Raw Material Handling

Receiving Infrastructure

- Concrete Receiving Slab: 65 ft × 120 ft
- Commercial Fabric Building: 75 ft × 225 ft (*purchase/installation pending*)

Material Intake & Preparation

- Raw material fed into receiver bin → hammer mill
 - 400 HP VFD installed on hammer mill
- Feed conveyor enables blending of multiple fiber species

Storage & Conveyance

- All raw materials stored in 14,000 cu ft silo
 - Equipped with unloader/reclaimer screw
- Bucket elevator height increased for improved flow
- Horizontal transfer via 80-ft drag conveyor
- Discharged into indoor surge bin

Intermediate Storage

- 4-ton wood meal receiver surge bin (indoor)

2. Pellet Mill Feed System

- Pellet mill surge bin draws wood meal from the larger surge bin
- Ensures continuous supply to conditioning system

Conditioning & Preparation

- Conditioning tubes installed to optimize moisture content and material control

Pellet Mill Upgrades

- Mills lowered by 18 inches for improved flow & maintenance access
 - Bearings replaced
 - New dies ordered
 - 400 HP variable speed drives installed on both mills
-

3. Finished Pellet Handling

Hot Pellet Conveyance

- Drag conveyor system (*ordered; installation pending*)
- Negative air steam extraction installed

Cooling & Screening

- Counterflow cooler
- High-frequency screener

Product Handling Options

- Drop-out chute for optional manual bagging
- Bulk bag load-out capability

Storage

- Finished pellet surge hopper installed
 - 125-ton storage silo (*on site; installation pending*)
-

4. Packaging & Palletizing

Bagging System

- 40 bags per minute form-fill-seal bagger
- Handles 5 lb to 40 lb bags

Automation & Palletizing

- Pallet injector system
- FANUC robotic stacking system (*includes spare heads*)

Final Packaging

- Stretch wrapper installed
- Hooder system (*purchased; scheduled for July installation*)

Loading Docks

- 2 dock levelers

Rolling Stock

- 3- Mitsubishi forklifts with fork positioners
- 1- 40-ft boom manlift
- 1-27-ft seizer lift
- 1-rough train spider forklift

5. Chips & Chunks Handling (Auxiliary Systems)

- Debarker
- Hydraulic wood splitter
- 5 TPH wood knife chipper