

1. Slashing tree length into logs.



2. Logs on deck going into mill.



3. Metal detector scans for nails, wire, and other metals.



4. Sawyer Booth controls laser scanning and robotics.

## **Basic Sawmill Process at Stratton Lumber**

Photos courtesy of TRG, Stratton Lumber

- 1. Treelength high grade is processed into logs (12'-14'-16' with 4"-6" trim)
- 2. Logs are loaded onto the Log Deck; then go through a **Debarker** – goal is to remove 100% of the bark with minimal fiber removal
- 3. Logs pass through a Metal Detector and if there is metal, they are kicked out of the mill.
- 4. Each log goes through a Liner Scanner, which scans the logs every  $\frac{1}{4}$ " to determine what the saw pattern will be. Then the logs go through a **Chipper/Canter** – chips two sides of the log leaving flat surfaces on two sides and produces a cant. Then is goes through the Twin Band **Saw** – can take a board of one or both sides of the Cant. Those boards (1" or 2" thick) go to the go to the
- 5. **Edger** which gives boards a straight edge.
- 6. The cants go to **Canter-Profiler-Gang** (CPG) Saw – which cuts them into boards:
  - a. If cant is 4" thick it produces 2"x4" lumber, 6" cant produces 2"x 6" lumber, etc.
  - b. Widest board we produce is a 2" x 10" and narrowest is a 1" x 3"
- Next the boards go to the Trim Saw -7. cuts the ends of the board to a final length:
  - Boards go to Green chain 65 bins for all products
  - Spruce and Fir are kept separate as they require different drying times.



5. Edger.



6. Green lumber bundles go to kiln.



7. Kiln: continuous kiln dry.



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- 8. Boards then go to the Automatic Stacker/Sticker then head to the
- 9. Dry Kilns (photo7) Stratton has two batch kilns and one continuous kiln. Stratton Lumber installed the first continuous kiln in the northeastern US in 2017.
- 8. After the lumber is dried it goes to the Planer Mill (photo 8), where they are planed, graded and lumber bundles are

## Residuals

When you saw a round log into square lumber, half of the volume goes into lumber and the other half goes to mill residuals:



Bark is sold to biomass plant facilities to produce electricity and used to produce mulch for landscaping. Green Chips are sold to various paper mills to become newspaper, magazine paper, carboard boxes.

Sawdust is sold to wood pellet mills, particle board mills and used in our own boiler to produce steam for our kilns.

Dry Shavings are used for

litter for farm animals and

other similar uses as

sawdust.

9. Unique ID # and grade stamp on each board.



10. Lumber ready to truck.







