
Portable Sawmills in Technology Education

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What is it?



LT35 Specifications

Max Log Diameter - 32"

Max Cut Width - 26"

Max Log Length - 21'

Many different models based on application

Price?

Base ~\$27,000

w/accessories ~\$32,000

Ask for the Education discount

Recommended accessories

- Hydraulic Log Loader
- Hydraulic Log Turner
- Hydraulic Clamping System
- Debarker
- Log Arch
- Trailer Package



Consumables/Continuing Costs

Blades (2-5 hours each) - \$25/ea

Sharpening (up to 4x) - \$10/ea

Lubricants (Soap, Windshield Washer Fluid, ATF)

Why?

Save money on lumber

Provide an additional experience for Wood Manufacturing, Building Trades, Agriculture/Conservation Students

Use trees harvested on district land



Timeline

Mill one year, use the next

Dry for a full year

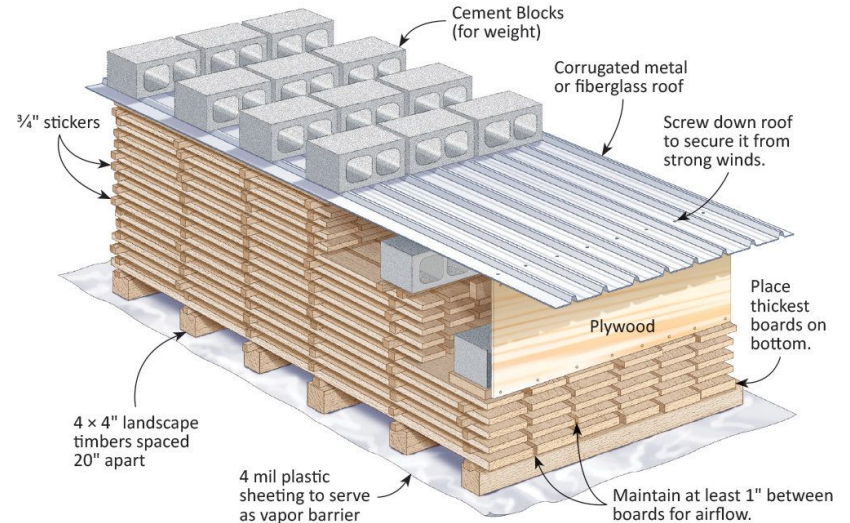
Down the Rabbit Hole!

Kiln?

Moisture Content

Framing Lumber - ~ 15%

Finish Lumber - ~ 7 - 12%



Raw Material/Partnerships

- Wausau School Forest
 - Primarily Oak, Poplar, Red Pine
 - Marathon County/City of Wausau Forestry and Parks
 - LOTS of Ash and any other trees taken down
 - Cross-curricular opportunities
 - Agriculture Education
 - Timber Cruising
 - Log Scaling
 - Wood duck house construction
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Order of Operations - Framing Lumber

1. Start with opening cut (~4-6" clear width)
2. Rotate 90°, cut face perpendicular to first
3. Rotate 90°, cut to correct width for desired stock off bed
Remember saw blade kerf (~ $\frac{1}{8}$ ")
4. Rotate slabs 90°, cut to correct height for desired stock

Notes:

- You may be able to get several 1x boards before milling 2x stock
- Pay attention to the height off the bed for the first cut of the 3rd and 4th sides so the last cut works out
- We cut our material $\frac{1}{4}$ " over nominal dimension (2x4 = $1\text{-}\frac{3}{4}$ " x $3\text{-}\frac{3}{4}$ ")



Order of Operations - Hardwood Lumber

1. Start with opening cut (~4-6" clear width)

2. Rotate 90°, cut face perpendicular to first

OR

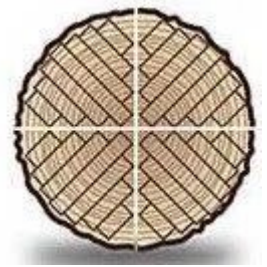
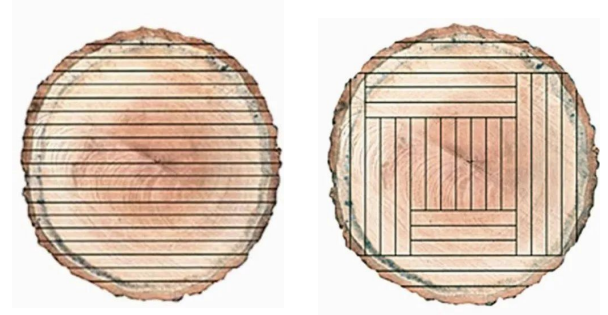
2. Rotate 180°, cut face parallel to first

THEN

???

Plain Sawing vs. Quarter Sawing vs. Flat Sawing vs. Rift Sawing

Great Teachable Moment



What's Next

Regular use in wood manufacturing classes

Offer to mill logs from community members (for a fee)

Rough sawn lumber sale (in conjunction with the annual Plant Sale)

Links

[DNR Forest Products Resources](#)

[Woodmizer](#)

[Sawmill Instructions](#)
