Kiln Management

- Staging and Planning Kiln Charges
- Proper Sampling
- Correct MC Information
- Maximizing Performance
- Minimizing Reload Time
Staging and Planning

• Pre-stage a charge to minimize reload downtime.
• Load lumber with similar characteristics.
• Load lumber with similar initial moisture contents.
• Monitor how well the kiln is loaded.
Planning Pays Off

Planning and Staging

Minimize Reload Time

Minimize Drying Time
Reducing Reload Time By Two Hours

- Increase yearly production by at least 130,000 ft. by gaining drying time.
- Increase revenue by nearly $60,000 in added value alone
- Over 9 locations that equals an extra 1.17 million feet of lumber with an added value of over $526,000
Reduce Drying Time By 12 Hours

- Increase production by 780,000 ft. per year
- Increase revenue by $351,000 in added value
- In 9 locations that equals added production of over 7 million ft. with an added value of nearly 3.2 million dollars.
Total

- Over 8 million ft. of increased kiln production as a group
- Over 3.7 million dollars in added value
Loss Prevention
Loose Boards

- Usually end up on the ground
- Usually ruined
- Add up quickly
- Easily avoided
Loss Prevention

This is a one year projection of those 43 boards.
$2,902.50

This is a 25 year projection of those 43 boards.
$72,562.50
Improper Stacking

- Sticks not straight
- Misaligned risers
- Boards not supported by sticks
- Sticks not supporting boards
- Sticks not close enough to the end
Mud & Debris
Proper Stacking
Safety

- Pay attention to detail
- Don’t become overconfident
- Look out for others
- Report hazards
Testing Procedures
Average MC

- Moisture section is approximately 1” in length along the grain
- It is weighed “wet” and again after it is oven dried
- Ensure that scales are clean and calibrated
Kiln Sample

- Be sure to follow proper sampling techniques when choosing samples
- Paint and weigh kiln samples immediately after cutting them
Sample Coating

- Paint kiln samples with a coating that is made for kiln use.
- Coat ends thoroughly
- Do not use end wax to coat your kiln samples
Shell and Core Tests

- Use to measure moisture gradient
- Use to verify MC before raising kiln temperature
- Use to verify final MC
Stress Tests

• Cut prong test after sections have cooled
• Prong thickness should be 1/3 the thickness of the lumber
• Photocopy stress tests for future reference
Case Hardened

- Shell is in compression and core is in tension
- Continue conditioning process
The Finished Product

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