## **How To Dry Lumber For Quality And Profit**

Monday, Dec. 9
8:00 Course introduction
Why wood is dried
Safety
Softwood structure
9:30 Break
Moisture content

Oven-dry method (optional)
Wood variability

Measuring temperature and humidity
Psychrometrics, EMC

11:30 Lunch (on your own)

Shrinkage and strength

Water movement in wood

Factors affecting the drying rate Stress development and relief

2:15 Break
Drying defects
Types of schedules
Time-based schedules

Q&A 4:00 Adjourn

11:30

Tuesday, Dec. 10

8:00 Equalization
Conditioning and cooldown
Selecting an air velocity
Additional schedule considerations
Other schedule considerations

9:30 Break
High-temperature drying
Continuous kiln schedules (Optional)
Kiln designs
Steam
Steam-heated kilns, steam delivery

Lunch (on your own)

Tuesday, Dec. 10 (cont)

Steam-heated kilns, condensate return Direct-fired kilns (optional) Venting and humidification

Fan systems Baffling

Sorting in the sawmill

2:15 Break
Stacking
Loading the kiln
Preparing to dry
Q&A

4:00 Adjourn

Wednesday, Tuesday, Dec. 11

8:00 Starting and running the kiln Moisture meters MC measurement at the kiln

9:30 Break

Maintenance, mechanical 1

Maintenance, mechanical 2

How the controller works

Maintenance, control system

11:30 Lunch (on your own)

Measuring airflow

Cost of drying

Energy

Minimizing downtime

2:15 Break
Describing data
Measuring and organizing data
Analysis techniques
Q&A

4:00 Closing remarks and adjorn