## **Workshop Background**

This workshop is packed with valuable and important information for kiln operators and managers. The variety and quality of the information make this a must attend event. The workshop will focus on drying systems, controlling lumber quality, species specific drying, wood structure and drying science. Over twenty breakout topics will be covered to help you maintain a successful kiln operation.

This fast-paced workshop will include several lab exercises to apply concepts taught in the classroom.

#### Who Should Attend?

Kiln Operators, Purchasers, Sales Representatives, Production Supervisors, Plant Managers and others who deal with wood moisture related issues

#### Location

Northcentral Technical College Antigo Campus Wood Technology Center of Excellence 312 Forrest Avenue, Antigo, Wis., 54409

## Agenda

#### Monday, August 6 8:00 a.m. – 5:00 p.m. Wood Structure & Drying Science

- The Drying Operation
- Structure of Wood as it Relates to Drying
- Determining the Moisture Content of Wood
- The Use of Kiln Samples
- Wood-Moisture Relations and Shrinkage
- Relationship Between Relative Humidity, Temperature and Equilibrium Moisture Content of Wood
- Kiln Operation Exercise

#### Tuesday, August 7 Drying Systems

- 8:00 a.m. 5:00 p.m.
- Drying Stresses and Defects
- Kiln Schedules: Development, Modification and Use
- Equalizing and Conditioning Treatments
- Causes and Control of Sticker, Fungal and Chemical Stain in Lumber Drying
- Lumber Stacking, Air Drying, Shed Drying and Predrying
- Effects of Air Velocity on Drying
- Kiln Operation Exercise
- Small Scale Dehumidification and Solar Drying

# Wednesday, August 8 Controlling Lumber Quality

8:00 a.m. – 5:00 p.m.

- Drying Maple and Other White Woods
- Drying Mixed Species
- Drying Trends: Kiln Size, Lumber Quality and Customer Demands
- The Effective Use of Moisture Meters
- Dry Kiln Instrumentation and Control
- Kiln Buildings and Equipment
- Kiln Operation Exercise

# Thursday, August 9 8:00 am – 12:00 p.m. Species Specific Quality Drying

- Boiler Basics
- Proper Boiler Maintenance
- Final Kiln Operation Exercise
- Wrap-up and Presentation of Certificates

# **Speaker Lineup**

#### **Travis Allen**

Instructor, Wood Technology Northcentral Technical College

#### Mike Stewart

Boiler Specialist Johnson Controls

#### Bob Pope

Sales Representative, SII Dry Kilns

#### **Dr. Scott Bowe**

Professor, Wood Products Specialist University of Wisconsin-Madison

#### **Collin Buntrock**

Forest Product Services Specialist WI Dept. of Natural Resources

# Registration Form

st Name	First Name I	Middle Initial
eet Address	CityState	Zip code
me Phone ()	Birthdate/Email Address.	dress
ninterested in the following classes:		
edit Card:MasterCardVISA	Credit Card Number:	
piration Date:Se	Security Code: Signature:	
e following information is not required, but will e/ethnicity and high school attendance is used	e following information is not required, but will help us identify your records should you need an official transcript of attendance. It is kept confidential. Aggregate data on e/ethnicity and high school attendance is used for state and federal funding purposes. Though your response is optional, it is very much appreciated.	pt of attendance. It is kept confidential. Aggregate data on optional, it is very much appreciated.
cial Security Number	or Student ID Number	
ce/Ethnicity: American Indian, Asi	ice/Ethnicity: American Indian, Asian, Black, not Hispanic,Hispanic, White,not Hispanic,Native Hawaiian/other Pacific Islander	lispanic,Native Hawaiian/other Pacific Islander
ail registration form with payment to: No.	<b>ail registration form with payment to:</b> Northcentral Technical College Attn: Continuing Education 1000 W Campus Drive Wausau WI	00 W. Campus Drive Wallsall, WI 54401

### **Registration Information**

\$450 for Great Lakes Kiln Drying Association Members \$500 for Non-Members

Fees include workshop materials, light morning refreshments and a group dinner on Tuesday evening.

**How to Register** 

Wausau, WI 54401

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Mail	Online	Phone
Send check	www.ntc.edu/ce/	715.675.3331,
with completed	conferences	option 1
registration form to:		Toll free
Northcentral		888.682.7144,
Technical College		E . F061
Attn: Registration		Ext. 5861.
1000 W. Campus Drive		

**For More Information** 

Contact Continuing Education at 715.803.1034 or 888.682.7144, Ext.1034 or ce@ntc.edu

#### **Hotel Information**

Super 8 Hotel 715.623.4188 535 Century Avenue, Antigo

A room with two queen beds and light housekeeping services during the week. A full breakfast consisting of cereal, breakfast sandwiches, oatmeal and pastries is provided.

Holiday Inn Express 715.627.7500 2407 Neva Road, Antigo

A full hot breakfast plus cereal, fruits and pastries is provided.

Non-profit Org. U.S. Postage **PAID** Permit No. 578 Wausau, WI

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TECHNICAL COLLEGE

TOOD W. Campus Dr. Wausau, WI 54401

Kiln Drying NTC Antigo Campus August 6 - 9, 2018

RETURN SERVICE REQUESTED



# Kiln Drying Short Course Drying Quality Lumber

August 6 - 9, 2018 Antigo, WI







Presented by Northcentral Technical College and the Great Lakes Kiln Drying Association