

June 12th to 14th, 2018
University of New Brunswick Wood Science and Technology Centre
and Maritime College of Forest Technology, Fredericton, NB

Spruce-Pine-Fir Kiln Operator Course



Quality Drying of S-P-F for Dimension Lumber and Other End Uses: Conventional & High-Temperature

This course will provide a thorough review of the basic principles involved in lumber drying. The course will progress from a presentation of the fundamentals of wood drying to the day-to-day operation of a dry kiln. Emphasis will be on drying S-P-F for dimension lumber, however, time will be dedicated to discussing drying requirements or implications for products such as MSR, glulam, and finger-jointed lumber. Both conventional temperature (up to 190°F) and high temperature (up to 240°F) drying will be discussed.

This course is equivalent to 18 Continuing Forestry Education (CFE) credits. Upon course completion, all participants will receive a certificate for verification purposes.

Who Should Attend?

The course is designed for new or experienced kiln operators, quality control personnel, and their immediate supervisors. It is also open to anyone else who feels they would benefit from a better understanding of the factors that affect a drying operations productivity and profitability.

Course Instructors

- ▶ **Peter Garrahan**, well known expert wood drying scientist with over 30 years of experience in industrial drying systems and wood drying research. Peter is a regular instructor with kiln operator courses in various regions of Eastern Canada.

Marc Savard, FPInnovations, well known expert wood drying scientist with over 20 years' experience in research and testing on the drying of Eastern S-P-F. Marc regularly presents seminars and workshops on lumber drying.

Registration Fee - \$1,750.00 (Plus HST)

Includes instructional material, Kiln Operator's Manual for Eastern Canada, handouts, daily refreshment breaks and lunch.

Course enrolment is limited to 25 students.

The full registration fee must be received prior to the course to guarantee your seat. Full refund if you cancel prior to 15 days before the course start date. Late cancellations will be subject to a \$175 cancellation fee unless course becomes filled or registration is transferred to another individual from the same company.

The organizers reserve the right to cancel the course failing sufficient enrolment. In the event of course cancellation, all registration fees will be returned in full.

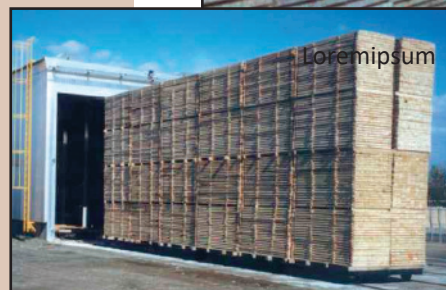
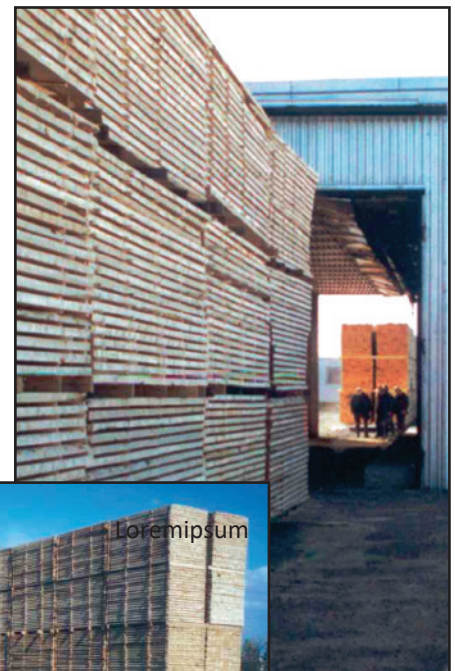
Register by completing the attached form by
Friday, June 1st, 2018. First-come, first-served basis.

For information, please contact:

• **Fred Nott**
(506) 451-6987
frederick.nott@unb.ca

OR

• **Todd MacPherson**
(506) 458-0649
ce@mctf.ca



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COURSE DESCRIPTION

June 12th - Day 1 - Registration 8:00 AM - 8:30 AM, Course 8:30 AM - 4:30 PM

- Wood anatomy related to drying
- Wood moisture relations
- Role of relative humidity, temperature, and air flow in drying
- Defining moisture content and oven-dry test procedures
- Wet pockets in balsam fir
- Drying stresses, shrinkage, and other drying defects
- Theory of developing a drying schedule



June 13th - Day 2 - 8:30 AM - 4:30 PM

- principal and use of DC-resistance moisture meters
- Principal and use of hand-held, power-loss moisture meters
- In-line moisture meters
- Drying characteristics of black spruce, white spruce, jack pine, and balsam fir
- Overview of drying alternatives (air drying, conventional kiln drying, high-temperature drying)
- Pre-sorting to improve productivity and quality
- Conventional and high-temperature drying schedules



June 14th - Day 3 - 8:30 AM - 4:30 PM

- Kiln operation and maintenance
- Kiln controllers and kiln control strategies (*i.e.* TDAL, *exiting versus entering air control*)
- Air flow requirements
- Quality control techniques
- Economics of drying
- Heat treating as an option for export lumber
- Kiln technologies



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Registration Form

Last Name										First Name									
Company																			
Address																			
City						Province / State						Postal / Zip Code							
Telephone										Fax									
E-mail																			

Registration Fee - \$1,750.00 plus HST

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Fax completed form to:

(506) 458-0652

Maritime College of Forest Technology

**Registration due by
Friday, June 1st, 2018**

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Payment Options

Cheque:

Please make cheque payable to:

UNB Wood Science and Technology Centre

Mail to:

Credit Card (Visa, MasterCard, and AMEX accepted):

Card Number

Expiration

Name as it appears on card (please print)

Cardholder's signature

For Office Use Only: ID _____

Payment

Method

Deposit #

Initial