## **Checks, Ties & Videotape**

## How The 2006 Tie Grading Class Braved A Scorcher To Make The Grade

The components of the Railway Tie Association's (RTA) tie grading seminar have been tweaked in recent years in an effort to locate subtle improvements that will enhance students' learning experiences. The seminar was expanded by a half day to include a videotape-based look at the engineering behind the specifications for wood crossties. A CD ROMbased exercise on tie defects was added. All the presentations have been revamped, and the manner in which wood species identification is taught at the seminar has had a facelift. This year, even in the face of sweltering heat, testing proved that these changes have had a profound impact. How hot was it in Russellville, Ark., where the event was held? One actual temperature reading...107 degrees, and the heat indices soared above that. But, the tie grading seminar class of 2006 braved it all to turn in some of the best scoring ever in the final ID practicum at the conclusion of the seminar. And, Thompson Industries also turned up the heat with one of the best hosting jobs in recent memory. The following photo essay tells the story of this year's seminar.

*—Report filed by Marshall Allen, Southern California Regional Rail Authority, RTA Education Committee Chairman* 



Following the half-day video seminar on the engineering principles behind the use of the wood crosstie, the seminar turns to the first session on species identification. Dr. Terry Conners of the University of Kentucky illustrates the key elements of the seminar.



The session covers everything from softwoods to hardwoods and gives students the essential tools to differentiate between individual species.



The class is asked to study the fine points and hone their understanding of diffuse porous, semi-ring porous and ring-porous wood species.



The next session conducted by Jim Watt of The Crosstie Connection focuses on tie defects.







This classroom session is extended to the field with a review of the morning's work prior to grading full-sized ties. Watt works with one group...



...while Dr. Conners takes time with another.



Once this is completed, it's time to grade ties.



The goal is to identify species and determine whether the ties make the grade.



If not, then the grader must correctly identify the defect or defects that make the tie either an industrial-grade tie or a cull.



After each student has a chance to grade each tie, the day concludes with Watt providing a walk through of the key points of the day.



Day 2 starts with a review of species identification, this time using large blocks.



Larger samples that the students have yet to view reinforce that certain wood species can be confusing...

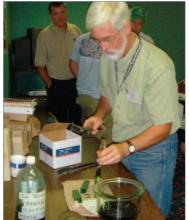


...but in the end everyone has a good handle on species identification.



This is followed by a presentation on the elements of a well-run and wellmaintained treating plant from Dr. Jeff Morrell of Oregon State University.





Dr. Conners then discusses wood preservation. This demonstration uses "Dr. Terry's" magical, mystical "pickle" juice under vacuum/pressure to illustrate how sapwood is easier to penetrate than heartwood.

Then, it's off to the plant for lunch graciously provided by Thompson Industries...





A tour of a well-managed treating plant is always a highlight. Here, RTA President Tony Helms of Thompson Industries starts the tour by talking about all the plant upgrades made at the Thompson facility over the past few years...



Watt follows with more information on wood treatment and an explanation of how different species react to pressure treatment.

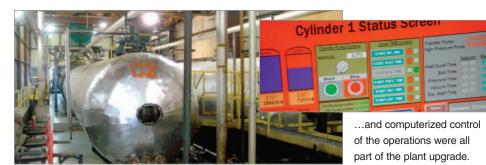


...and a plant tour.

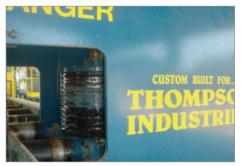


...the most important of which is expansion of plant capacity to process more than a million ties annually.





Installation of additional cylinders...



....new incising, and ...

railcars or trucks.



...precision trimming equipment by Brewer Inc. have also been added.





Preboring of ties...



Enhancements to end-plating equipment allows for greater throughput...

...as does the new grading station.



All that production ships out on center-beam

After the tour, it's on to the final exam.



Now its time to put all that knowledge to a final test. Jason Eichelberger of Burke-Parsons-Bowlby (foreground and on the cover) was our practicum winner.



The instructors, students and RTA Education Committee Chairman Marshall Allen and staff all wish to thank Tony Helms and all the folks at Thompson Industries for their efforts in making this year's rendition of the RTA Tie Grading Seminar a superb learning experience—from the gallons of water and Gatorade to the dinners and the plant set-up and even a few photos for this article by Jeff Broadfoot—we couldn't have done it without you!

## 2006 Tie Grading Seminar Attendee List

Alvin Eshe; Jackie Roberts, Jason Eichelberger, Joe Fields and John Thomason of Burke-Parsons-Bowlby Corp.; Colin McKelvie of Canadian National; Marshall Allen, RTA Education Committee chairman; Eric Calhoun of Dotson Sawmill; Jim Gauntt of RTA; Jeff Morrell, Jimmy Watt and Terry Conners, instructors; Anthony Weaver, Eric Sandgren, James Choate, Jamie Skipper, Josh Kmoch, Kevin Reinhart, Mitch Weatherford, Nathan Franklin and Randall Rex of Koppers Inc.; John Friend of Missouri Hardwood Products; Adam Cooper of North American Tie & Timber; Tony Helms, RTA president; Dustin Smith and Dwight Mitchell of Seaman Timber Co. Inc.; Pat Foster, Redonna Hendry and Van Hendry of Southern Treating & Distribution; Anthony Brewer, Charlie Christopher, Forest Phillips, Harold Cochran, Jason Campbell, Larry Krening and Randy Christopher of Thompson Industries; and Steve Lish, RTA Education Committee vice-chairman.