Railway Tie Association (RTA)
Education Committee members outdid themselves with a completely new schedule and all new content for the 2021 Tie Grading Seminar, held in person in August in Florence, S.C. Participants explored defects and species with more hands-on activities than in previous Tie Grading Seminars. A completely new interactive experience left the participants with a better understanding of species and defects. The additional knowledge will be invaluable to the participants in their jobs.

**Tie Grading Seminar 2021 A Success**

We packed a lot of information into day one, and the class rose to the challenge. They learned about railroad history, mechanics of ties, and defects and their effect on performance. Then the group moved on to species with hands-on activities to keep the class engaged.

---

**DAY 1**

**Brad Crawford of Stella-Jones discusses the history of railroads and explains engineering and how the wood crosstie fits into the equation.**

**Another completely reworked presentation from Robert Pearce of Stella-Jones explains defects and how they affect ties in track.**

**Brandon Forsyth of Stella-Jones celebrates his high score in the speed grading test.**

**Brad Crawford helps Antonio Mauricio determine what makes oak different from other hardwoods, while Nate Irby of Union Pacific Railroad explains the difference to Robert Bush of Stella-Jones.**

**Ben Yurga of Stella-Jones discovers that Red Oak can be used as a bubble blower due to its porous nature.**

**Using cut tie ends to see if they can identify the species, Conners quizzes Stacey Miller, Brandon Wright and Tavaris Willis of Stella-Jones; Max Schwartz of CSX; and Dusty Aborgast of Appalachian Timber.**

**Jeff Thomas of Nisus ascertains whether this sample is oak, hickory, mixed hardwood, softwood, or an excludable species.**

**Matt Nelson and Jona Stewart of Stella-Jones decide to share their Amazon Gift Card prize for having the highest score on the big blocks quiz.**
Instructor Jim Ringe discusses what insects and fungi can do to a tie and how to keep the tie in good condition while air drying.

After taking a pressurized bath in Dr. Conners’ Magic Pickle Juice v2, Conners splits the miniature ties open to see how far the treatment penetrated the wood.

The newest member of RTA’s Education Committee, Josh Kmoch of Koppers, jumped right in with a new presentation on operations and inspection points from a plant manager’s perspective.

Crawford introduces attendees to the RTA.org and RTA’s proprietary Tie Grading app.

After lunch, attendees drove to Koppers Inc.’s Florence plant where Koppers’ Cory Bishop welcomed the group with a safety briefing before the plant tour.

Jeff Brantley and Kirk Laborde of Stella-Jones listen as Bishop explains the plant processes.

The cylinders are always one of the most interesting parts of the plant tour.

Stacey Miller of Stella-Jones and Pedro Loredo of Koppers discuss species and defects during the practice grading derby.

After the tour, Peter Snipes and Chris Barr of Koppers practice grading full-sized ties.

Day two began with learning how the environment affects ties, how to mitigate those effects, and what that looks like from a plant perspective. The class and instructors took a trip out to the plant for a tour and some hands-on work with full-size ties.

Jeff Brantley and Kirk Laborde of Stella-Jones listen as Bishop explains the plant processes.

The cylinders are always one of the most interesting parts of the plant tour.

Stacey Miller of Stella-Jones and Pedro Loredo of Koppers discuss species and defects during the practice grading derby.

After the tour, Peter Snipes and Chris Barr of Koppers practice grading full-sized ties.

Crawford introduces attendees to the RTA.org and RTA’s proprietary Tie Grading app.

After lunch, attendees drove to Koppers Inc.’s Florence plant where Koppers’ Cory Bishop welcomed the group with a safety briefing before the plant tour.

Instructor Jim Ringe discusses what insects and fungi can do to a tie and how to keep the tie in good condition while air drying.
Thank you to all the sponsors, instructors and students who attended this year’s Tie Grading Seminar. Instructors: Marshall Allen, RTA Education Committee; Terry Conners and Jim Ringe, University of Kentucky; Brad Crawford and Robert Pearce, Stella-Jones; Nate Irby, Union Pacific Railroad; Josh Kmoch, Koppers. Sponsors: Mike Goldston, Brewco; Kenny Dailey, Stella-Jones, Chuck Swann, Stella-Jones; RTA Executive Committee: Rick Gibson, RTA President, Appalachian Timber, Michael Skeen, CSX. Students: Dusty Aborgast, Shawn Conrad and Jacob Tesner, Appalachian Timber Services; Saquib Amjad, Donald Cottrill and Max Schwartz, CSX; Chris Barr, Justin Coleman, John Delung, Rajah Echols, Tony Huff, Zachary Hull, Marlon Kelly, Ryan Kragnes, Tyler Nelson, Brent Smithco, Peter Snipes and Braeden Woolwine, Koppers; Jeff Thomas, Nisus; Ryan Galbreath, Railyard Studios; Charles Adams, Daniel Barnett, Jeff Brantley, Jace Brewer, Robert Bush, Jacob Campbell, Brandon Forsythe, Kirk Laborde, Pedro Loredo, Stacey Miller, Ryan Neblock, Matt Nelson, Jona Stewart, Nicholas Thompson, Tavaris Willis, Brandon Wright, Gary Young and Ben Yurga, Stella-Jones.