# "RTA On The RTT"

#### 2003 Field Trip Attendees Visit TTCI, Pike's Peak And All Points Between

RTA's annual field trip is designed to be an educational adventure for all RTA members. This year's trip started with a full tour of The Transportation Technology Center in Pueblo, Colo., where RTA and AAR have cooperated for years to test ties for heavy axle loads and passenger rail applications.



RTA wishes to express sincere appreciation to all who made this trip so great—Ed Groves, Ralph Jimenez and all the people at TTCI; Carle McEvoy and staff at Rocky Mountain Steel; Craig Fetty at Meridian Rail; Ed Gallagher and Mark Paris of BNSF; and Jim Burkert and the Koppers Inc. personnel in Denver. Our hats are off to you for such a wonderful experience.

## DAY 1



After the group enjoys a presentation on all the testing programs at TTCI from Semih Kalay and Ed Groves...



...we board the bus for an inspection of the entire facility. Our host, TTCl's Ed Groves, acts as guide.



From vehicle crash evaluation testing to training for emergencies...



...such as derailments, TTCI does much more than test ties (see www.ttci.aar.com for more information)



The first stop on track is the Railroad Test Track (RTT), where wood ties have been in track for more than 25 years.



Twenty-five-year-old softwood ties and oak ties in the RTT track since 1997 were all performing as expected without unusual maintenance requirements.



At the next stop, the Heavy Axle Load test site, various ties have been tested for years. These dowel-laminated ties have been consistent performers since their installation in track in the early 1990s.



Seaman Timber Company's Robby Johnson, Billy Davis of Coastal Timber and Koppers' Paul Ladd exchange ideas about the RTT.



Other laminated products also have performed well. Glu-lam...



...and Parallel Strand Lumber (Parallam) ties continue to impress researchers.

# Seaman Timber 7 1/4 x 4 3/4 Bw PU May/June 03 p. 12





A final track walk on the FAST track gives the attendees opportunity to see all the configurations of tie species and fasteners.

#### ROCKY MOUNTAIN STEEL

The afternoon of Day 1 was so jam-packed with things to see that the group split up, with some visiting Meridian Rail and others visiting Rocky Mountain Steel, both of which are located in Pueblo.



After an intense safety briefing provided by the staff of Rocky Mountain Steel...



...Quality Supervisor Ja'net Ogle takes one of the groups through the part of the operation where steel is made.



It starts with pre-heating the enormous ladles...



...which are then loaded with scrap steel in precise grades and turned into molten metal, whereupon the mixture is electromagnetically stirred and chemically adjusted to create the exact recipe for making a variety of products, including rail.



This is followed by the ladle being received at the tundish...



...where the molten steel is measured carefully through a ceramic tube into a water-cooled jacket where it undergoes the first step in cooling as the strands of steel are created.



Ja'net shows the group a water-cooled jacket for creating the 12-inch diameter strands used to produce rail.

Saying that the steel has already cooled is relative. Here, as it traverses a vertical drop, it is still red hot. The push rollers on the left push against the enormous weight to control the descent.





As the steel runs out onto a table for more cooling, it is cut by a torch into "blooms"



Then, as it exits the table, each bloom is stamped with critical quality control data for future reference.



Once cooled, blooms are transferred to a bed...



...where they are readied for reheating.



Dan Daberkow, right, explains that reheating is necessary in the rail-making process so that the profile can be "rolled" into the heated steel bloom.



Rocky Mountain Steel is one of the few—if not the only rail maker—that has instituted quality control procedures while the rail is still hot. On this bed, several measurements are made intermittently as rail is formed from blooms.



Several additional quality control steps are necessary before rail can leave the plant. Ultrasonic testing is one of them. This photo shows test rails that are used to calibrate the ultrasonic unit.

## **Meridian Rail**

Meridian is a track work supplier and produces several items for railroad application—switches and track panels, prefabricated frogs and a host of specialized items designed to improve rail operations.

Paul Ladd of Koppers filed these pictures of the Meridian Rail tour.



## DAY 2



Day two starts with an early morning tour of the Koppers Inc. plant in Denver.

Manager Jim Burkert starts the tour with a safety briefing and an overview of the plant.



The Denver plant is being expanded. Typical production was only 300,000 ties per year on average, but the new capacity will allow Koppers to produce 900,000 ties. And, they 100 percent end plate at this facility.



Modernization will include the installation of a new sorting and stacking operation...



...and reorganization of the yard.



As Burkert explains this, he also points out that in Denver stacking for air-drying is done with minimal spacing because of the arid climate.



Koppers also produces poles. The plant's focus at the time of the visit was on treating 110-foot Doug Fir distribution poles.

#### Ashcroft Treating Plant



- Bridge Timbers, Cross Planks, Cross Ties, Pilings, Switch Ties
- Coastal & Interior Douglas Fir, Lodgepole & Ponderosa Pine, Hemlock & Mixed Hardwoods
- Full Custom Fabrication Services

A Wood Treating
Division of:





The treating operations are also expected to be upgraded as the production capacity is expanded.





The next part of the trip was arranged by BNSF's Ed Gallager. A quick visit to a tie rehabilitation operation in Big Lift...



...was followed by a trip on Denver's light rail system down...



...to Denver's very first restaurant, The Buckhorn Exchange, where BNSF graciously treated the entire group to a terrific lunch.



For some attendees, a trip on the Pike's Peak Cog Railway rounded out this year's field trip. The spectacular views at the 14,110-foot summit were enjoyed by all.

#### **RTA Field Trip Participants**

Scott Holness of Ashcroft Treating; Harry Bressler, Dick Bowlby, Floyd Bowlby and Alan Miller of Burke-Parsons-Bowlby; Klint Tuft of Canada Crossties; Glenn Whitham of Canadian Pacific; Bill Moss and Dan Moss of ChemStar; Jan and Billy Davis of Coastal Timbers; Jack Rahmes of CSX Transportation; Jeff Broadfoot of Kerr-McGee Chemical; Gary Ambrose, Bill Cameron, Paul Ladd, Phil McDonald, Elton McGough and Tim Ries of Koppers Inc.; Eric Eversgerd and Wayne Flohr of MiTek Industries Inc.; Bill Rousis of Norfolk Southern; Sam and Debbie Corallo and Jim and Susan Gauntt of the Railway Tie Association; Steve Ault and Mike Nobbe of RailWorks Wood Products: Gierschke of Robbins Engineering; Robby Johnson of Seaman Timber Co.; Jimmy and Brenda Watt of The Crosstie Connection: Tony Helms, Kenny Renfroe and Harry Scott of Thompson Industries; Paul Merrick of Trus Joist; and Steve and Jan Hanson of Webster Industries.



Afterwards, everyone posed for a photograph in the upstairs parlor. Our host, BNSF's Mark Paris, is partially visible in the center wearing a cap. Thanks for the lunch, Mark!

### On The Lighter Side





Field trips in recent years have had their share of unexpected adventure. In Missouri, a couple of years ago, a bus breakdown was chronicled. This year, right in the middle of the TTCI tour, fittingly, in the training area designed for emergency response, our bus hit a bit of soft sand. Even pushing didn't help. But the engineers at TTCI called in reinforcements and got us out of the sticky situation. Our thanks also to our unnamed rescuers.



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