

RAILWORKS® TODAY

*A monthly newsletter for employees of
RailWorks Corporation and its subsidiaries*

A First for North America at Neptune



PNR RailWorks was the first in North America to use the innovative Edilon Corkelast® embedded rail system, which crews installed in preparation for the arrival of this new coal stacker-reclaimer at Neptune Terminals in British Columbia. Neptune handles more than 31 million tons of bulk products each year from across Canada destined to markets throughout world. At left, the Corkelast® pour, part of the seven-step ERS process.

In a first for North America, PNR RailWorks used an innovative rail-fastening process to install a new coal stacker-reclaimer conveyor rail system for Neptune Terminals in British Columbia.

PNR RailWorks installed an embedded rail system (ERS) typically used in European transit applications that features the durable polymer compound, Edilon Corkelast®. A hallmark of the Edilon Corkelast® ERS technique is continuous rail support that optimizes weight distribution to minimize “point loads,” or intense stress, on the rail.

Neptune Terminals, one of North America’s

largest multi-product bulk terminals, relied on PNR RailWorks to replace its aging, wood-tie crane-rail system with a more dependable alternative for its 24-hour-a-day, year-round operations.

“When Neptune was planning this expansion they wanted to reduce high point loads on the track system that led to broken rails and damaged ties,” said Project Manager Arjun Langford “There were wood ties, with space between them, and a massive, hundred-ton machine rolling over them. Because of the heavy loads, ties and fasteners broke often, meaning frequent shutdowns for emergency

INSIDE LINE

In the beginning, seemed like a really daunting task. This had never been done in North America before. It was really good to rely on the foresight and creativity of others in our company.



Arjun Langford
Assistant Project
Manager
PNR RailWorks

Another project manager, Daniel Kabat, and I spent a weekend creating an elaborate spreadsheet from a 50-page installation guideline translated from Dutch, and plotted out what we needed to do. From there, we figured out how we were actually going to do it.

I relied on the whole team to think ahead. We identified problems before they happened, and the solutions before a problem could become a barrier to moving forward with the project. For example, it was a huge operation just to get the rail ready. Typically, we use a loader, and it doesn’t matter if the metal tongs scrape the rail. In this case, with rail primed to precise specifications, we couldn’t afford any cut in the primed coating. So someone on our team had the idea to cover our forks with felt, and to wrap the rail in carpet.

It was this type of planning and teamwork that allowed us to hit any curve balls thrown at us.

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track maintenance. They wanted a way to distribute weight evenly and avoid the downtime due to track issues.”

The ERS provides the needed weight redistribution, replacing ballast, ties and rail-fastening hardware with concrete blocks that have channels for the rail and the surrounding Corkelast® “goo” that hardens to hold the rail in place.

The new system facilitates movement of a new \$45-million stacker-reclaimer that replaced a smaller, older unit. “The new machine weighs over 100 tons; there are 10 axels per side, and you don’t see any flex in the rail,” Arjun says. “The load is spread evenly.”

The work was completed in multiple phases to allow the existing system to remain operational for as long as possible. To install the ERS, crews followed an elaborate seven-step process. Rails were procured and prepped starting in December 2012. The installation process started in February and was completed in June. (See the process detail below.)

In conjunction with installation of the ERS, crews also worked at Neptune Terminals beginning in April 2012 to improve track layout and expand capacity. They constructed 8,000 feet of embedded and ballasted track with 16 No. 8 turnouts. PNR RailWorks continues to work on the expansion, which will enable the facility to handle 22 percent more materials and move all products more efficiently. Crews also continue to provide ongoing maintenance and emergency response services.

Neptune Terminals Project Leadership Team

Arjun Langford, Project Manager

John Lima, Foreman

Daniel Kabat, Consulting Project Manager

Ed Rego, Foreman

Eric Plowright, Foreman

Dave Pearce, Supervisor

Al Graham, Supervisor

7-Step Embedded Rail System Process Using Edilon Corkelast®



1. Rail Preparation

At PNR RailWorks’ Abbotsford Yard, Materials Manager Grant Sweetnam created a system of tents, heated to provide the necessary working conditions for sandblasting and priming rail during a cold, wet winter.



2. Demolition

Crews demolished the existing 1,100 feet of track in three separate phases, cutting rail and ties in wet coal slurry and then removing materials for disposal.

3. Pre-Cast Block Placement

A sub-contractor placed a series of pre-cast concrete blocks to support the crane rail.



4. Welding

Welders joined 39-foot rails into two continuous 1,100-foot strings.



5. Re-Priming

Crews re-primed rail in the weld locations.

6. Rail Placement

Crews completed a detailed line-and-level survey to ensure rail was within the specified tolerance. They then placed shims in the block channels to accommodate vertical and lateral offsets, and drove cork wedges into the channel to line the rail.



7. Corkelast® Prep and Pour

After confirming the rail line and level, crews were ready to pour the Corkelast® product. First, they sprayed an activating primer. Then, they mixed and poured the compound, which was fully cured after 24 hours and ready for installation of a new coal stacker-reclaimer.

RAILWORKSMART RAILWORKSAFE

Setting Up SEPTA Viaduct Project for Safety

Long before the Major Projects Division began rehabilitating the Southeastern Pennsylvania Transportation Authority (SEPTA) Bridgeport Viaduct in Norristown, PA, the project team factored in safety. Beginning with the project estimate and continuing through to execution, safety has been a fundamental consideration in the project plan. Regional Safety Director Bill Field shared some of the ways the project team has built safety into the plan.



Bill Field
Regional Safety
Director

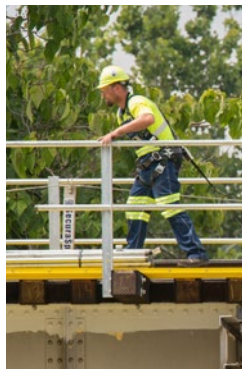
Employee input – The management team and crew met before work began to hear concerns and get ideas about how to work safely and productively. This input contributed to the work plan and some of the actions detailed below.

Upgraded fall protection – Employees are wearing an upgraded life-line system with a more comfortable, quick-disconnect harness, belt and padded plate at the D-ring. The fall protection system incorporates a 300-foot horizontal life line and rail sliders. The employees rely on retractable life lines and shock absorbers, and dual-legged lanyards to complete the personal fall protection system.



Extensive personal protective equipment (PPE) – RailWorks is providing employees with their own set of specialized PPE to improve comfort, productivity and cleanliness for a range of tasks:

- High-visibility shirts and pants
- Tyvek suits to avoid creosote burns
- Dust masks and solid face shields, particularly for use when cutting fiberglass panels for the bridge walkways.
- Mechanic gloves to provide a better fit and greater dexterity.



Professional training – An outside safety consultant who specializes in high-angle safety and fall protection trained employees prior to the start of the project.

Local emergency response coordination – The project team met with the local fire department battalion chief and this crew to answer questions and to detail all the work processes and locations. Together they reviewed contingency plans, such as a water rescue, and exchanged contact numbers. RailWorks also provided project site maps to the local emergency 911 system so there would be no confusion about where to locate workers should there be an emergency.

Modified equipment – A hi-rail stake body truck was converted into a bridge support truck customized to enhance safety in a bridge environment. This included installing hand rails outside of the cab door to allow the driver to easily hook a lanyard and have fall protection without leaving the cab. An extended, folding platform positioned outside the cab and over the fuel tank was added to give the driver a stable place to stand without untying. The lift gate was modified to allow workers to step off the back of the truck right at the track gauge. Crews also are using a chain-saw jig adapter to minimize sawdust when cutting ties.

Bridge netting – An outside contractor installed a personnel-debris net across the entire 3,000-foot bridge expanse. It is inspected weekly and will remain in place throughout the duration of the project.



Continuous communication with the crew throughout the project also helps to ensure other safety concerns are addressed, such as the weather, fatigue and coordination with subcontractors on the project site. The project will wrap up in early November.

Calendar Notes

- Sept. 29 – Oct. 2 AREMA/Railway Interchange, Indianapolis, IN
 Oct. 2-3 RailWorks Leadership Meeting, Indianapolis, IN
 Oct. 8-10 RailWorks Safety Summit, St. Louis, MO
 Oct. 8-11 RTA (Railway Tie Association) Annual Conference, Incline Village, NV

RailWorks Today

Let us know what's on your mind.

Email your questions and comments to

RailWorksToday@RailWorks.com



RailWorks Values In Action: Integrity

Employees Do the Right Thing ... Again ... and Again

The quick actions and know-how of PNR RailWorks employees provided needed assistance and prompted expressions of public gratitude at two accident scenes and a popular streetcar line.

In Ontario, a grateful mom turned to the Internet to ensure her appreciation was known.

Michele Bouwman sent a note through the PNR RailWorks website recently to thank Signals & Communications (S&C) Foreman James Lyons and signalmen John Kroft and Andrew Robb. The men came to the aid of her three children when one fell and scraped his knee after his bike wheel got caught in railroad tracks near the children's home in St. Marys.



Jesse Bouwman, 6, of St. Marys, ON, was back on his bike after PNR RailWorks employees bandaged the knee he'd injured after taking a spill near their worksite.

Our employees, working nearby on a project on VIA Rail's Guelph Subdivision in southwestern Ontario, cleaned and bandaged 6-year-old Jesse's wound and lent a phone so the boy's older sister could notify their mother.

"I am very grateful to ... these men for coming to the aid of my kids," Michelle wrote. "Thank you for going above and beyond ... We are grateful!"

That was the second Good Samaritan act in recent weeks for Andrew and James. The prior month, the pair and seven other S&C crew members were among the first to respond after a serious car accident in Oshawa.

The employees provided manpower and equipment after a single-vehicle

wreck occurred across from their hotel. When someone noticed gasoline leaking from the overturned car with the occupants trapped inside, employees quickly grabbed fire extinguishers, lining bars and traffic control signs. They flagged traffic to allow emergency vehicles access, stood ready with the extinguishers and helped paramedics pry open crushed vehicle doors in order to remove the elderly couple inside.

James and Andrew were joined that day by Lead Hand Rick Smith and signalmen Murray Blancher, John Millar, Jason Clark, Ryan Martz, Ryan Barker and Jay Alves.

Along with these employees in the S&C Division, workers in Alberta have been taking their own notable actions. On a weekend in early August, an Edmonton Radial Railway Society (ERRS) streetcar ran through a closed switch, shutting down a line. The ERRS contacted Assistant Superintendent Gary Fahl, who, although off duty on the long weekend, immediately began arranging the needed repairs. At the same time, Foreman George Dwernychuk happened to arrive with his family to ride the streetcars. Recognizing the problem, George obtained the appropriate gear and promptly corrected the issue.

"His unselfish, friendly attitude and extensive expertise saved us from a substantial financial loss and prevented the disappointment of large numbers of the public," said the ERRS infrastructure director. As a result of George's and Gary's actions, PNR RailWorks employees and family members accompanying them have free passage on the High Level Bridge Line through October 2014. The ERRS operates historic streetcars on the line across the bridge spanning the North Saskatchewan River.

Help us celebrate employee actions, including exceptional customer focus, industry leadership and integrity. As you observe or hear about RailWorks' "Values in Action," send a note to RailWorksToday@railworks.com.



PNR RailWorks S&C crew members were among the first to respond after a serious car accident in Oshawa, ON. (l to r) Signalmen Murray Blancher, John Millar, Jason Clark, Ryan Martz and Ryan Barker; Lead Hand Rick Smith; Signalman Andrew Robb and Foreman James Lyons helped out, as did Signalman Jay Alves (not pictured).

Our Values: *Customer Focus, Employee Focus, Industry Leadership, Integrity*

ERP Goes Live



On August 5, after 12 months of planning, training and testing, 25 locations across RailWorks Track Systems, RailWorks Track Services, and the Corporate office in New York went live on the company's new JD Edwards/Enterprise Resource Planning (ERP) system.

The "Go-Live" exercise began midday Wednesday, July 31, with an early close to the current financial systems. The ERP system, as most know by now, integrates what were formerly independent processes and eliminates many manual practices.

The Go Live exercise included three and a



The continued successful implementation of RailWorks' Enterprise Resource Planning system can't occur without key Payroll Department employees, including (left to right) Payroll Associates Susana Wong, Michele King, Payroll Manager Fabi Mayor; Assistant Payroll Manager Linda Horan, and Payroll Associates Kathy Calvente and Louanne Wilson.

half days of system conversions and data validation by Payroll, Accounts Payable, Job Costing and Billing among other departments. Then, 37 members of the project team left to provide on-site support in 12 field locations during the first half of August. That set the stage for the first month-end close in the new system.

Employees continue to hit key milestones in preparation for the next Go Live, set for April 6, which will include the rest of RailWorks.

Interns Gain Experience and Build the Bench

The RailWorks summer intern program continues to create a pipeline of potential employees and provide invaluable on-the-job training, as 15 students representing six universities participated in the formal program last summer at offices across the company.

The group included three repeat interns and a new hire, which is desirable, according to Norma Resto, Human Resources manager. It means that the Build the Bench initiative – designed to bring talented candidates into our organization to fill positions created through growth, attrition or both – is thriving. "Build the Bench is alive and well," Norma says, "and the internship program is integral to that initiative."

Among the returning interns was Alex Phillips, a senior at Michigan Technological University majoring in civil engineering.

"This summer in Minooka (IL) was another great experience," said Alex, who worked on estimating for a pair of Chicago Transit Authority projects, including site surveys and logistics planning, and Enterprise Resource Planning (ERP) implementation. "It was a lot different than the last summer in New Orleans. Since they were so different, it has really helped me gain a broad experience of what RailWorks is about and what it takes to be a contributing employee."

Brad Coyne, University of Illinois senior in civil engineering, was based in the St. Louis track office the past two summers. Brad's primary role



Intern Steven Castello, based out of Jacksonville, FL, worked on projects including SunRail signal maintenance and fiber cable installation on Florida East Coast Railroad. The Michigan Tech senior found value in seeing "how things operate on a large scale and the organization needed even for the smallest things."



Evan Klein spent much of his summer laying ties at the new oil-loading terminal for Eighty-Eight Oil LLC in Fort Laramie, WY. Evan, an Oregon State University junior majoring in energy systems engineering, said he appreciated his freedom to accomplish a job the way he thought he should while still having people accessible to answer questions.

this summer was to assist the estimating department, where he worked on multiple bids and noted that his experiences "allowed me to see what working full time in a construction company entails."

Ultimately, if all goes well, the internship investment produces RailWorks employees. That's what happened at L.K. Comstock National Transit in California. Gerardo Gonzalez, who pursued a RailWorks internship after completing his master's degree in Railway Systems at Universidad Pon-

tificia de Comillas in Spain, recently started a full-time job as a project engineer based out of Concord.

Elsewhere in the organization, L.K. Comstock & Company in New York brought in 15 summer interns. And at the corporate office in New York, 13 interns helped with a variety of tasks that included validating data during ERP implementation.

Human Resources is already laying the groundwork for next summer. Department personnel will soon begin fall recruitment visits to Michigan Tech, Illinois University and South Dakota State, among other colleges.

Managers seeking interns should contact the Human Resources department: 212-502-7905.