

Railroad Cross Ties



THE SITUATION

In the railroad industry cross ties are often made from timber. However for traffic and heavily used areas such as turnouts and switch yards, they can be made from steel which generates several advantages to the railroad. Steel ties are stronger than timber, this allows for wider tie spacing. It also reduces material costs in building the rail bed. Steel rail ties also maintain the track gauge. Allowing for the railroad curves to be smoother and safer.

The challenge of steel cross ties keeping them stable in the gravel ballast. The smooth hard steel does not allow the gravel to “bite,” or maintain proper alignment. This can lead increased maintenance costs to correct.

THE SOLUTION

In the past the railroad operators tried a variety of coatings but none of them stood up to the dual need to grip the gravel while not being worn away.

The LINE-X XS-350 material provided the right combination of elongation and strength to allow the gravel to grip the protective coating.

The customer dropped off the steel railroad ties in batches of 50. LINE-X sandblasted, blew off contaminants, and wiped down the railroad ties. Next they primed the ties with LINE-X FCP or XPM Primer. LINE-X XS-350 was then sprayed onto the railroad ties to complete the application.

THE RESULTS

The railroad operator was extremely pleased with the results of the application.

The LINE-X XS-350 provides a protective coating solution which bonds to the steel cross tie and helping to ensure the cross tie does not erode away. It also allows the cross tie to “bite” into the gravel ballast to reduce the misalignment issues.

This application has reduced the customer’s maintenance costs and helped to improved the safety and efficiency of their railroad line.