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Two Exciting New Products Save Lives and Reduce Costs for Railroads

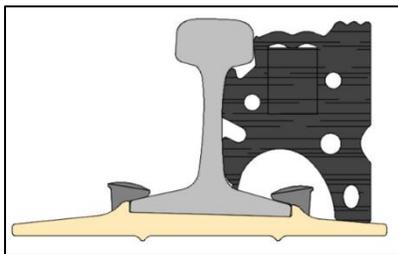
Polycorp has been working closely with Guelph Junction Railway in Canada and Seminole Gulf Railway in Florida proving out its newest solutions to grade crossing dangers, noise and vibration issues.

Shallow Flangeway “Safety” Railseal

Polycorp has developed a proven patented solution to prevent numerous cycling and wheelchair deaths at rail crossings. “It happens nearly every day, and no one was doing anything about it,” said Matt Bigger, Director of Polycorp’s Rail Division, “No one really wants to announce all the bad things that have happened to people at Grade crossings”. “A few years ago, a cyclist suffered a serious injury in my neighborhood, after getting thrown off his bike when his wheel was wedged in the flangeway gap at a railway grade crossing. This spurred my push to improve safety,” Matt added.



Matt Bigger, Director Rail Div., Polycorp



Shallow Flangeway Cross-Section

Polycorp Engineers spent years designing and testing their Shallow Flangeway Railseal prior to their partnership trials with their existing customers, the major Class 1 Railroads in North America. Shallow Flangeway Railseal reduces and optimizes the open flangeway gap, resulting in grade crossings that are much safer and easier to cross for bicycles, wheelchairs and other wheeled pedestrian-based vehicles, reducing the chance of wheels becoming wedged in the flangeway, while still allowing trains to cross pedestrian grades safely.

Designs are customized and optimized to deliver performance that exceed specifications, and Polycorp’s Rail Engineering team simulates complex systems to analyze the products theoretically, in the lab, and then in the field.



Seminole Gulf Railway Florida

Field testing at Guelph Junction Railway in Ontario, Canada, with dual access service to two major railways (CN and CP), allowed Polycorp Engineers to closely monitor all aspects of the new product, from production, installation, performance, to wear rates. Harsh Canadian winters have revealed additional benefits, which include reduced ice accumulation between the rail and the road surface, which reduces slips and falls at the crossing. The new product increases safety for both pedestrian and vehicular traffic.

Polycorp’s patented Shallow Flangeway “Safety” Railseal installed in Seminole Gulf Railway network in Florida, USA was specifically developed to increase grade crossing safety and reduce or eliminate unnecessary accidents and fatalities (the US reported 237 deaths in 2021 alone – (<https://oli.org/track-statistics/collisions-casualties-year>)). Polycorp’s Shallow Flangeway also meets all Disabilities Act requirements in both Canada and the US.



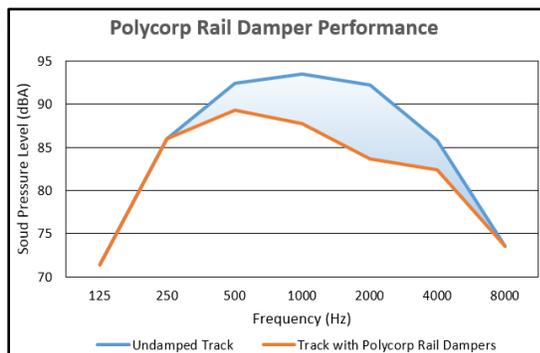
Seminole Gulf Railway Florida

Next steps in the development include integrating this product into concrete panels; making it the standard for the whole Seminole Gulf Railway network; approaching Florida State DOT agencies for approval; expanding this demonstrated design to other Class 1’s, with a push for standardization across all North American rail networks.

Shallow Flangeway Railseal can be custom engineered to address any environmental challenges, rail size and track configurations. This innovation uses Polycorp’s EPFlex® Railseal, proven over decades to prolong the life of any railroad crossing, while enhancing safety.

As the original inventor of EPFlex® Railseal and EP-LOCK II® Rail Clip Systems, Polycorp has been at the forefront of innovation and rail safety since the 1980’s.

Tuned Mass Damper (“TMD”)



Open ballast track that is near residential areas can benefit from significant noise reduction without the need to dig up the tracks, add unsightly and costly sound walls, or add other invasive methods to control noise. Polycorp Dampers can also be easily added or removed without damaging the existing rail.

Polycorp TMD’s can be easily installed in seconds, during non-revenue service hours to an existing section of track using Polycorp’s patented EP-LOCK® TMD Clip.



TMD's are designed and customized to maximize sound reduction based on area specific inputs like soil stiffness, track stiffness, rail fastener systems, and train type speed. The tunable system has proven capable to deliver optimal performance with minimal cost. (Up to 7dB performance).

Already demonstrated in the demanding markets of Europe, with several successful installations in the Netherlands, Polycorp also received the prestigious Dekra 3rd Party Certification for their noise attenuation properties. As a significant additional benefit, Polycorp's TMD's were verified to **prolong the service life** of the rail by **reducing rail corrugation and rail maintenance** by delaying the need for costly grinding.



2019 TMD Installation – Holland



Polycorp TMD

The Polycorp brand represents decades of proven product performance, field service and Customer support through its connection and history to predecessor BF Goodrich. Polycorp Customers benefit from their extensive product catalogue, superior technical support, installation support, and decades of experience as leaders and innovators in the rail industry.