Superior Insulating Qualities

Seneca Insulated Rail Joints feature a tough polyurethane insulation bonded to microalloy joint bar sections. The one-piece polyurethane/steel structure provides reliable circuit isolation and maintains electrical and physical stability in heavy rail traffic and under varying environmental conditions. Seneca’s polyurethane is a specially formulated compound highly resistant to deterioration by ultra-violet, ozone, weathering, abrasion, or the shocks and flexing stresses of heavy rail traffic. The dense polyurethane material is firmly bonded to the entire rail joint, and provides superior insulation between the joint and the rail. The result is a rigid unitized structure designed to withstand years of heavy-duty service...provide high-dielectric isolation for signal circuits...and require little or no maintenance. Seneca Insulated Rail Joints meet all current AREMA specifications; test data is available upon request. Designs are available for rail sizes up to 141 pounds. When ordering, please specify rail size, rail drilling, bolt diameter, and elevation.
For reliable circuit isolation, quick delivery, easy installation, and lowest long-term cost…specify Seneca Insulated Rail Joints.

Minimum Cold Flow – Withstands Vertical and Longitudinal Pressures
Seneca Insulated Rail Joints are virtually immune to cold-flow, the most common cause of insulation failure. Because of its bonded-to-steel construction, the joint flexes as a unit with both vertical and horizontal stress. Our tough molded NEMA Grade G-10 end post provides wear-resistant easement between rail ends, and will not cold-flow under high temperature. Seneca joints preserve electrical insulation under the most rugged use and environmental conditions.

Quick and Dependable Delivery
Our focus on customer service allows us to offer the fastest delivery times in the industry (usually less than four weeks, and we often have common sizes in stock). Our customer service staff interacts with our plant manager on a daily basis, keeping track of the production status of each customer’s order, so that our customers can depend on us for on-time deliveries.

Simple to Install – Saves Time & Money
Seneca molds the bolt hole insulated bushings into each insulated joint bar at our factory, which saves time and reduces frustration for track maintenance personnel when installing the joint on track. Installation of Seneca Insulated Rail Joints is far simpler than with multi-component joints, when the bushings must be field installed, which can be difficult and wasteful expenditure of a customer’s time and money. This unique design also eliminated the need for our customers to carry additional inventories of bolt hole bushings. Finally, each insulated joint kit includes all the hardware needed for installation and is packaged together so the storage and inventory are greatly simplified.

Recessed Design Allows For Rail Wear
Our design accommodates wheel flange even after abnormal rail wear without disrupting insulation. Seneca can often accommodate special requests, such as adjusting flange clearance for extraordinary rail wear, making toeless joints, making double insulated joints, etc.

Performance Proven For
- Transit Systems
- Grade Crossings
- Signal Locations
- Retarder Yards
- Electric Railways
- Automated Railways
- Mining Systems

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