

ZERO GRAVITY

ANTI ICING AND DEICING SOLUTIONS

Prevent third rail icing with an anti-icing strategy. Icing on the third rail will produce insufficient electrical contacts, causing power problems and preventing mass transit trains from operating. Be pro-active and stay ahead of the storm, after all, “an ounce of prevention is worth a pound of cure”.

Zero Gravity Anti-Icer is applied prior to a severe storm event. On-going applications during the storm will maintain a clear, ice-free third rail. Anti-icing provides the maintenance manager with two major benefits: keeping transit trains running on schedule and maintaining maximum safety for passengers.

If you wait until ice forms, “deicing” requires 5 to 10 times more product to melt ice than what is required to “anti-ice” in the first place. This is because typical deicers, due to their lower viscosity, create more runoff and make deicing highly ineffective. When you compare your options, anti-icing is more economical, faster, easier and is the far superior choice. You save time, money and operational interruption when you prepare an anti-icing strategy.



BENEFITS

- Eliminates power loss and stalled trains
- Prevents ice and snow from bonding to the third rail
- Maximizes safety conditions for passengers
- Defies the effects of rain, sleet, snow, wind and gravity
- Does not conduct electricity or cause shorting
- Holds fast to vertical surfaces and remains in place
- Reduces wear and tear on “contact shoes”
- More effective than electric rail heaters
- Safe to use/environmentally friendly
- Biodegradable/non-corrosive
- No electrolytes/non-galvanic
- Efficient and economical to use

Zero Gravity Smart Fluid

Third Rail Anti-Icer utilizes a NASA “Smart Fluid” technology we call Zero Gravity™. When a small amount of this non-corrosive, biodegradable substance is sprayed onto the third rail to produce a thin film of 0.01”, its viscosity reverts to high “zero” shear or static viscosity which enables it to stay in place. Third Rail Anti-Icer remains in place to be triggered later by sleet, rain or snow. It positively prevents moisture from becoming ice on the third rail!

Third Rail Anti-Icer was developed to permit uninterrupted equipment operation at freezing temperatures. With the absence of electrolytes, there is no possibility of galvanic action and corrosion. Electrical shorts and arcing are eliminated as well. Because of its non-tacky nature, it will also reduce the wear-and-tear on the contact shoe.

Zero Gravity “Smart Fluid” technology is a patented and licensed capability which permits our Third Rail Anti-Icer to be sprayed or poured, in a liquid state, and become “jello-like” in its activated state. “Smart Fluid” technology allows the same substance to be a liquid and then become an extremely resilient coating that will stay in place, even on vertical surfaces. This extraordinary product retains its long-lasting anti-icing properties which are re-activated by freezing rain, sleet or snow. It absolutely prevents ice from forming on the third rail!