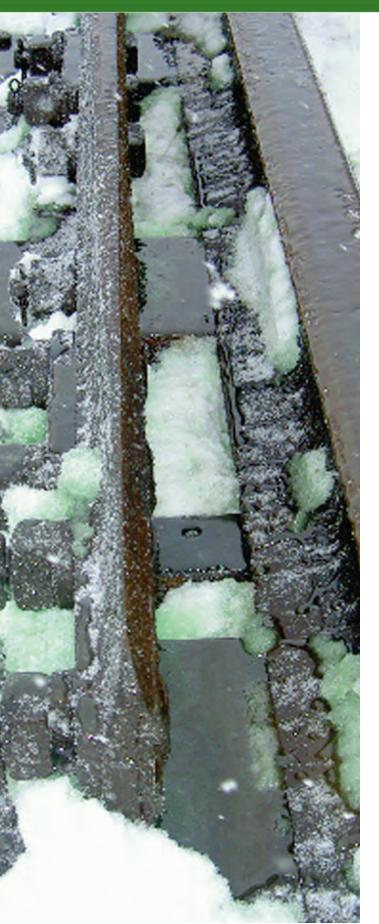
Ice Free Switch®

An anti-icer tougher than winter



Rely on Ice Free Switch -Railway Switches Will Remain in Your Command

It is unlikely that Benjamin Franklin was thinking about railway switches when he said, "An ounce of prevention is worth a pound of cure," but his statement was prescient with regard to the most effective ways to keep ice from hampering railway operations.

When applied to railroad switch points, plates and rail before nature dumps snow and freezing rain in subzero temperatures, Midwest's Ice Free Switch will remain in place and activate when needed. More efficient than rail heaters, it quickly melts falling and blowing snow to prevent switches from freezing ensuring uninterrupted switch operation in freezing temperatures.

Vital statistics

- Multi-component glycol-based liquid flows easily at -40° F
- Prevents switches from freezing and re-freezing down to -70° F
- Non-flammable, non-corrosive, and non-conductive
- High viscosity prevents run-off during application
- Holds fast to vertical surfaces and remains in place
- Completely biodegradable

Proactive
vs. Reactive:
Deicing
requires five
to ten times
more chemical
than anti-icing.



Why Ice Free Switch

The answer is performance, safety, and economy. With Ice Free Switch working for you, switches can be thrown on demand even when the temperature drops to -70° F. Snow will neither form ice in the gaps nor pack between rails, eliminating the cost and delay of interrupted operations.

Ice Free Switch reduces maintenance time because switches remain operable and it lasts longer than other methods. From a purely cost perspective, de-icing requires 5 to 10 times more of a chemical agent than does anti-icing, not to mention the back-breaking man-hours required to de-ice or open frozen switches.

From both environmental and human perspectives, Ice Free Switch is the right choice where safety is concerned. It helps prevent derailments at flangeways and keeps ice from forming and lifting rails off the tie plate, averting dangerous situations on both passenger and freight trains. The product is also safe for those applying it because: Ice Free Switch is not easily absorbed through the skin, those applying it face little risk of irritation upon contact.





Zero Gravity "Smart Fluid"

Ice Free Switch utilizes a NASA Smart Fluid technology we call Zero Gravity, co-developed by NASA/Ames Research Center and Midwest. Zero Gravity Smart Fluid technology is a patented and licensed capability which permits Ice Free Switch to be poured or sprayed in its liquid state, and become a thin "gel-like" coating in its activated state. Smart Fluid technology allows the same substance to be a liquid and then transform itself into an extremely resilient coating that will stay in place, even on vertical surfaces.





Not just for switch points, plates and rails

Ice-Free Switch will also prevent ice from forming on:

- Crossing arms
- Signals and lenses
- Car couplers
- Doors and chutes
- Movable bridges
- Flangeways
- Tunnel walls
- Hump switches
- Overhead crane rails
- Stock rails
- Chain hoists
- Door pockets

Ice Free Switch keeps your trains running safely and on time.

Special Delivery

A Full Line of Spray Systems

Midwest's anti-icing application equipment will get Ice Free Switch where it needs to go – easily and accurately. Our spray systems include 2- and 3.25-gallon-capacity stainless steel hand sprayers designed for higher viscosity switch agents; a 4.2-gallon lightweight backpack sprayer, and the 30-gallon capacity Power Treator with a dual-use pump that has a bypass assembly and pressure relief for continuous operation while treating switches. We also offer a full line of sturdy, functional track and switch brooms including a model with an ice-chopper attached.



Zero Gravity ™ • NASA Technology • Patent No. 5,772,912

If the shoe doesn't fit...

One size fits all does not always make for a good fit; unique problems require unique solutions. Midwest is not a me-too company. Our product development begins with a challenge and ends when we produce a solution that proves its worth in the field. Off-the-shelf is fine when it works, but when it does not, Midwest has the capability and tenacity to customize a formula for your specific needs.

More reasons to choose Midwest

On a daily basis, we challenge ourselves to be accessible problem-solvers so we can set a new industry standard for proactive and responsive service. Pushing the envelope is part of our corporate DNA, and we strive, always, to develop cutting-edge processes, products and services; stay on top of the learning curve, and educate our customers for our mutual success. We bring the discipline and experience gleaned as the world leader in technology to our anti-icing and deicing clients, presenting better solutions and more support than any competitor.

