



CONNECT AND PROTECT

RAIL AND TRANSIT SYSTEMS

Heating, Wiring and Leak Detection - Products,
Services & Solutions



RAYCHEM
Pyrotenax

Solutions to enhance safety, comfort and performance of rail and transit operations



PYROTENAX TRACETEK

For more than 30 years, we have provided quality solutions for winter safety, comfort and performance to Rail and Transit design, construction, operation and maintenance professionals. To prevent snow and ice buildup on rails, switch points, catenary wire, doors and platforms, you can rely on nVent services.

Our service-proven heating solutions include highly efficient heaters, engineered attachment accessories and advanced control and monitoring methods that result in optimized and reliable systems with best in class warranties.

Our nVent RAYCHEM Pyrotenax System 1850 Fire Rated Wiring products are 2-hour fire-rated Mineral insulated cables used for emergency power, ventilation and lighting circuits in subway systems and tunnels around the world.

Our nVent RAYCHEM TraceTek leak detection products quickly and accurately detect, locate and provide alarms for many liquid leaks including water and fuels. TraceTek is commonly used to protect critical computer and control equipment and backup generators

In addition to our outstanding products, nVent provides a variety of professional design, installation and maintenance services that enable greater safety, comfort, reliability and performance for your rail and transit operations.

nVent Rail and Transit Systems

This brochure highlights our products and services used in the following rail and transit applications:

HEATING APPLICATIONS:

- Contact rail heating
- Switch point heating
- Platform snow melting
- Catenary wire de-icing
- Rail Car Threshold and auxiliary freeze protection
- Transit vehicle surface heating

FIRE RATED WIRING APPLICATIONS:

- Signal, power, control and lighting
- Power feeders
- Emergency lighting
- Ventilation fans

LEAK DETECTION APPLICATIONS:

- Computer and control rooms – Water detection
- Backup generators and other fuel detection



Contact Rail Heating



Switch Point Heating



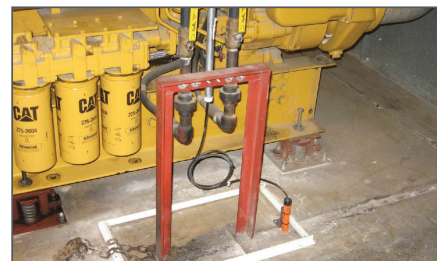
Platform Snow Melting and De-Icing



Rail Car Heating



Fire and Performance Wiring



Leak Detection



Engineering Design &
Installation Services

Heating



CRH CONTACT RAIL HEATING SYSTEM

nVent RAYCHEM Contact Rail Heating System includes industry leading power limiting and self-regulating heating cables, attachment methods and control systems that reliably eliminate ice and snow accumulation on the contact rail and the resultant service interruptions.

- Optimized energy efficient design for each rail type and operating conditions
- Service-proven rugged mechanical design reduces potential for in-service damage
- Advanced control system with radio communication capability

SWITCH HEATING SYSTEM

RAYCHEM Switch Point, Switch Rod Heaters and Controls offer the latest service-proven solution for track switch snow melting and de-icing – Fully customizable solutions that realize 50% energy savings while increasing service life over conventional tubular electric heaters.

- Rugged design = longevity
- Flat heater element profile = maximum thermal transfer
- Power output from 75 w/ft. – 300 w/ft.

Heating



CAT CATENARY HEATING SYSTEM

RAYCHEM CAT Heat System of service-proven, long-line electric heaters, mounting hardware and controls is used to de-ice the overhead contact surfaces (OCS) between the Contact/Trolley Wire and the Pantograph in order to eliminate costly service interruptions.

- Thermally conductive sheath allows for efficient rapid heat transfer into the contact wire
- Lightweight triangular heater profile permits ease and speed of installation
- Mounting clips ensure that the heater remains securely attached to the contact wire during all service conditions

THRESHOLD HEATING SYSTEM

RAYCHEM Threshold heating solutions improve safety for riders and operating personnel by efficient removal of ice and snow allowing consistent smooth door operation in challenging winter weather conditions. Many documented instances of doors frozen open have led to passenger ejection with accompanying injuries and financial liabilities.

- Safety-yellow graphics provide high visibility for passenger and operator safety
- Permanent anti-slip surface reduces slip and fall accidents

Heating



PLATFORM HEATING

RAYCHEM Platform Surface Heating Solutions supply electric heat uniformly and efficiently to ADA mandated platform pavers or composite panels keeping them completely free of ice and snow during the winter months. Our energy conserving controls ensure the most efficient and cost effective operation.

- Prevents ice and snow accumulation
- Can be installed onto new or existing platforms
- Power output per ASHRAE guidelines and standards

SECTION 6 – AUXILIARY FREEZE PROTECTION SYSTEMS

RAYCHEM Auxiliary Freeze Protection Systems yield industry leading protection, performance and safe operation of rolling stock.

APPLICATIONS INCLUDE:

- Heated door surrounds and door guides
- Toilet drain, tanks and suction line heater
- Pneumatic, hydraulic and ramp/steps system heaters

TRANSIT VEHICLE SURFACE HEATING (TVSH) APPLICATIONS

RAYCHEM Transit Vehicle Surface Heating (TVSH) includes service-proven electric radiant heated panels designed to provide healthful, reliable, and comfortable heat for passengers and operating personnel on rolling stock.

- Comfortable, healthful, energy efficient, space saving heat source
- Consistent thermal performance and long-term reduced operating costs
- More space for passengers, handicapped access, bicycles, etc.

Performance And Fire Rated Wiring

Leak Detection



PYROTENAX



TRACETEK



PYROTENAX SYSTEM 1850 FIRE RATED WIRING

Pyrotenax Fire Rated Wiring Solutions are designed for and Agency approved to keep power flowing to Mission Critical and Life-safety applications in the event of fire. Proven applications include Emergency Fire pumps, and Emergency Lighting and Ventilation Systems in Tunnels and Stations.

- Meets stringent NFPA, UL and CSA Codes and Standards
- Great for both retrofit and new construction applications – saves space
- Best in Class performance and Warranty

TRACETEK FUEL AND WATER DETECTION SYSTEMS

TraceTek Fuel and Water Leak Detection solutions detect and locate leaks within seconds. They can be integrated into a variety of system wide monitoring and control systems

APPLICATIONS INCLUDE:

- Water leak detection in communication, data and control rooms
- Fuel leak detection in back-up generators

North America

Tel +1.800.545.6258

Fax +1.800.527.5703

thermal.info@nvent.com

Europe, Middle East, Africa

Tel +32.16.213.511

Fax +32.16.213.603

thermal.info@nvent.com

Asia Pacific

Tel +86.21.2412.1688

Fax +86.21.5426.3167

cn.thermal.info@nvent.com



nVent.com