

# WINTER TIPS

# MAINTENANCE CHECKLIST

With the inevitable approach of cold weather, pipelines and industrial processes will once again be the target of freezing temperatures. As the leading provider of electric heat-tracing products and services, Pentair Thermal Management has put together a "Winter Maintenance Checklist" to help you protect your product and your plant against freeze-up.

# PERFORM AN INSULATION RESISTANCE TEST ON ALL HEAT-TRACING CIRCUITS

An insulation resistance (IR) test allows you to verify the integrity of the heating cable. Perform an IR test on each heat-tracing circuit as detailed in product installation and maintenance manuals. Confirm that values are consistent with product specifications indicated.

#### TEST ALL GROUND-FAULT BREAKERS

All ground-fault breakers should be tested according to the manufacturer's instructions.

#### CHECK HEATING TRACING COMPONENTS

Damaged or improperly installed components can result in water ingress, corrosion, or the loosening of electrical connections. Check the components against installation documentation to confirm that the installation is correct. Ensure that all component locations are marked with the Electrical Connection labels supplied with the kit.

#### CHECK YOUR THERMOSTAT OR CONTROLLER

A thermostat or controller will allow you to optimize your energy usage while keeping your process running at temperature. Before the winter season, review settings and alarms to ensure that they are set properly. Also perform all basic maintenance procedures as found in product operation and maintenance manuals.

#### PERFORM A POWER CHECK

Checking the power will allow you to validate that the power output of the heat-tracing system matches the power output of the original design. Refer to product installation and maintenance manuals for test procedures and to verify that values are consistent with product specifications.

## CHECK YOUR DISTRIBUTION PANEL AND SECONDARY WIRE AND CONDUIT

Visually inspect the conduit distribution system for openings in conduit, damaged or missing components and low point drains.

## CHECK YOUR INSULATION

Insulation plays a critical role in the overall heat-tracing system. No insulation or wet insulation reduces heat transfer from the heating cable to the pipe and can render electric heat tracing completely ineffective. Visually inspect all lines for missing, damaged or wet insulation. If weatherproof cladding is being used to protect the insulation from the environment, it must also be checked for continuity.

#### MAINTAIN INSTALLATION AND MAINTENANCE RECORDS

Complete installation and maintenance records will allow you to verify what system tests have been completed, original electrical values etc... This information can be valuable in determining if the system is operating properly over time.

#### STOCK CRITICAL SPARE COMPONENTS AND CABLE

If, after completing all of the above checks, you should still have a failure of your electric heat-tracing system, stocking spare components and cable will allow for timely repairs or replacements. All Installation and Maintenance Manuals can direct you in the repair or replacement of heat-tracing system components.

With such world renowned brands as Raychem, DigiTrace,
Pyrotenax, Tracer and TraceCalc Pro, Pentair Thermal
Management offers the industry's most complete line of industrial strength heat-tracing Products and Services for:

- Pipe Freeze Protection
- Tank Heating and Tank Insulation
- Heat-tracing Control, Monitoring and Remote Communications Systems
- Long Pipeline Applications
- Pavement Snow Melting and Roof & Gutter De-icing
- Comprehensive Heat-trace system design

Additional installation/maintenance documentation can be found on our Web site at **www.pentairthermal.com**. All installation manuals, instructions etc. must be followed when installing, repairing or replacing any Pentair Thermal Management product.

For additional assistance with your heat-tracing system or to schedule an evaluation of your heat-tracing system contact your local Pentair Thermal Management representative, or phone **Pentair Thermal Management** directly at +1.800.545.6258.



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