



The Heat Tracing Specialists[®]



Two industrial workers wearing hard hats and safety gear are working on a complex piece of machinery in a large industrial facility. The scene is dimly lit, with some lights visible in the background.

Engineered Steam Tracing Systems



Engineered Steam Tracing Solutions

Steam tracing applications range from freeze protection to maintaining temperatures close to that of the steam itself. Thermon steam tracing systems have a low installed cost compared to multiple bare tracers, "light" tracing with spacer blocks, or jacketed systems. "Thermonized" systems also provide predictable operation and maintenance that process plants demand.



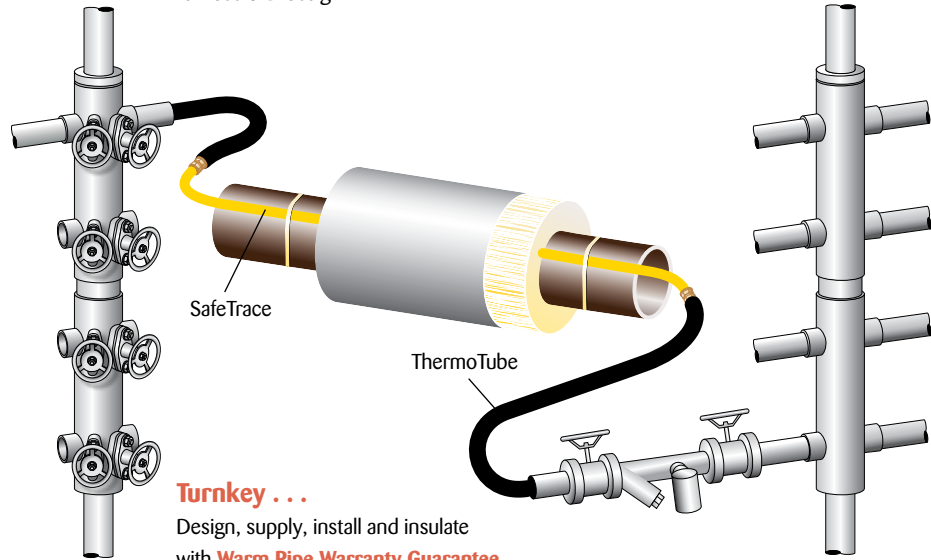
STEAM TRACING SYSTEMS EXTEND BEYOND THE PIPING, VESSELS, AND EQUIPMENT

Engineering Services . . .

- Layout circuits
- Locate supply and return manifolds
- Estimate installed costs
- Estimate condensate loads and operating costs
- VisiTrace 3-D design

Field Services . . .

- Audit/Locate existing circuits
- Complete trap data for maintenance and operations



Turnkey . . .

Design, supply, install and insulate with **Warm Pipe Warranty Guarantee**

Thermon offers a steam tracing solution for every application
MANIFOLD TO MANIFOLD

Engineered Steam Tracing Systems Provide . . .

Lower Installed Cost

- Optimized Circuit Lengths
- Fewer Steam Traps
- Manifolds Locations Optimized

plus+ Optimal Performance

- More Accurate Temperatures
- Reduced Summer/Winter Temperature Swings

plus+ Lower Operating Costs

- No Overheating - By Design
- Reduced Steam Consumption

plus+ Lower Maintenance Costs

- Fewer Traps to Replace
- Audit and Maintenance Services Available

equals = **Lowest Cost of Ownership!**

"Deliverables" Can Include:

- Steam Tracing ISO Drawings with Manifold Locations
- Steam Circuit Schedules with Manifolds and Traps Identified
- Detailed Installation Instructions



High Heat Delivery

“Thermonized” with SnapTrace® or other Thermon Heat Transfer Compounds

Application: Asphalt, Resids, Sulfur

Medium Heat Delivery

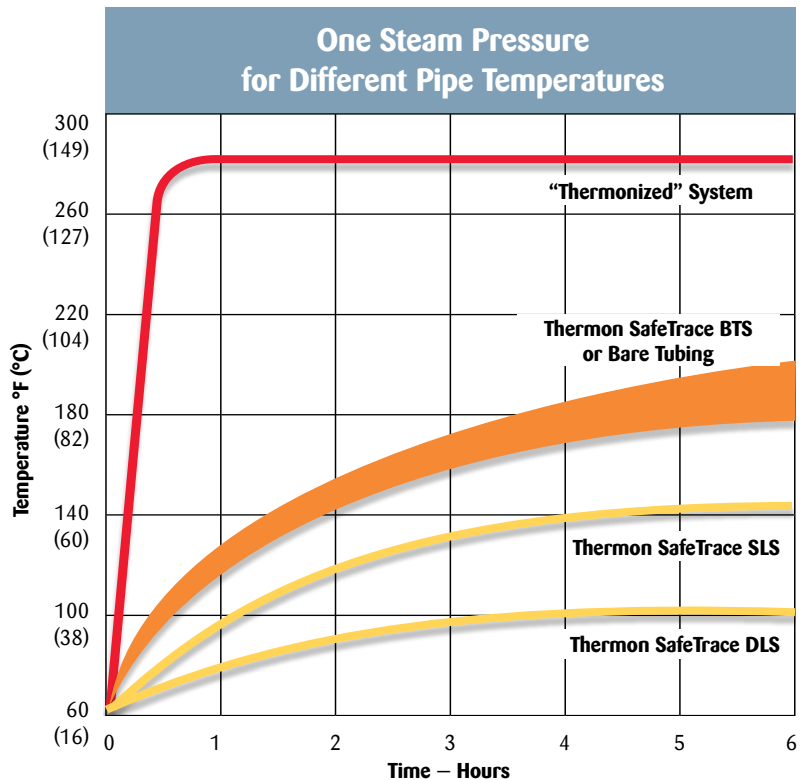
SafeTrace™ BTS or Bare Tracing

Application: Fuel Oils, Heavy Grease, Crude

Low Heat Delivery

SafeTrace™ SLS or DLS for “Light” Traced Systems

Application: Caustics, Acids, Amines, Small Water Lines



Heat-up and maintain characteristics for Thermon systems on 2" NPT (50mm) lines with 1" (25mm) insulation with 50 psig (3 barg) steam service (298°F/148°C)

Pipe Temperature Ranges with a Common Steam Pressure/Temperature

- Thermonized Tracing with Thermon Heat Transfer Compounds:** Insulated pipe approaching temperature of steam/fluid media.
- SafeTrace BTS Bare Tracing:** (Medium range)
- SafeTrace SLS & DLS Isolated Tracing for lowest pipe temperature:** (Low range)

High Maintain Temperatures

“Thermonized” with Thermon Heat Transfer Compounds

- Consistent Heat Transfer Properties
- Less Than 20% of Cost for Steam Jacketing
- Reduce Bare Trace Circuits by 3 Times or More

SnapTrace® Preformed Extrusions for Fast Installation

- Available in 4' (1.22 m) lengths
- Significantly Reduces Installation Time
- No Surface Preparation Required
- Use With Up to 208°C (406°F) Fluid/Steam

HT Compounds for Piping, Valves and Irregular Surfaces

(Maximum temperature ratings shown)

- T-3:** 371°C (700°F)
- T-99:** 1,000°C (1832°F)
- T-80:** 163°C (325°F)
- T-85:** 190°C (375°F)
- T-802:** 135°C (275°F) Two part compound

“Medium” Maintain Temperatures

SafeTrace™ BTS: 38°C to 121°C (100°F to 250°F)
SafeTrace Isolated Steam Tracers reduce or eliminate risk of burns.

Low Maintain Temperatures

“Light Tracing” alternative to “spacer blocks”

SafeTrace™ SLS-IT: 24°C to 93°C (75°F to 200°F)

SafeTrace™ DLS-IT: 5°C to 54°C (75°F to 130°F)

For additional information see Thermon Form TSP0005.

- Increase Circuit Lengths
- Reduce Number of Circuits and Traps
- Reduce Operating Costs
- Installed with Special Adhesive Tape



More Engineered Steam Tracing Solutions

TubeTrace® Heated Instrument Tubing

- Reduces installation time and costs.

Type SP/MP Single/Multiple Process Tubes

- “Heavy Traced” for higher temperature maintenance
- The tracer tube is in direct contact with the process tube(s), so process tube temperatures will be very close to the tracer tube temperature.

Tube Temperature Range:
5°C (40°F) to 205 °C (400°F)*

Maximum Exposure:
205°C (400°F)*



Type SI/MI Single/Multiple Isolated Tubes

- “Light Traced” for freeze protection and lower temperature maintenance.
- The tracer tube is insulated from the process tube(s), so process tube temperatures will be significantly lower than the tracer tube temperature.

Tube Temperature Range:
5°C (40°F) to 121°C (250°F)

Maximum Exposure:
205°C (400°F)*



TubeTrace bundles are also available with Thermon Electrical Heat Tracing Products (see CLX0025 for more information).



Steam Supply/Condensate Return

ThermoTube® Pre-Insulated Tubing

- Reduces installation time and costs.

Continuous Temperature Range:
Service to 205°C (400°F)*

ThermoTube ratings to 593°C (1100°F) also available*.

* Higher tube temperatures are possible with XINS-extra insulation HT and HTX type designs.



HeatSheet® Tank and Vessel Heating Units

- Provides 2 to 3 Times the Heat Transfer of Plate-Type Coils
- No Risk of Cross-Contamination with Process
- Light-weight Stainless Steel for Easy Installation
- Low Profile—Oversized Insulation Not Required

For electrically heated tank applications consider FlexiPanel® pad-type heating systems and/or Thermon electric heat tracing systems (see TMP0025 for more information).



The Heat Tracing Specialists®

www.thermon.com

With Design, Manufacturing, and Warehouse Facilities Worldwide.

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