

SafeTrace™ Isolated Steam Tracers



The Heat Tracing Specialists®

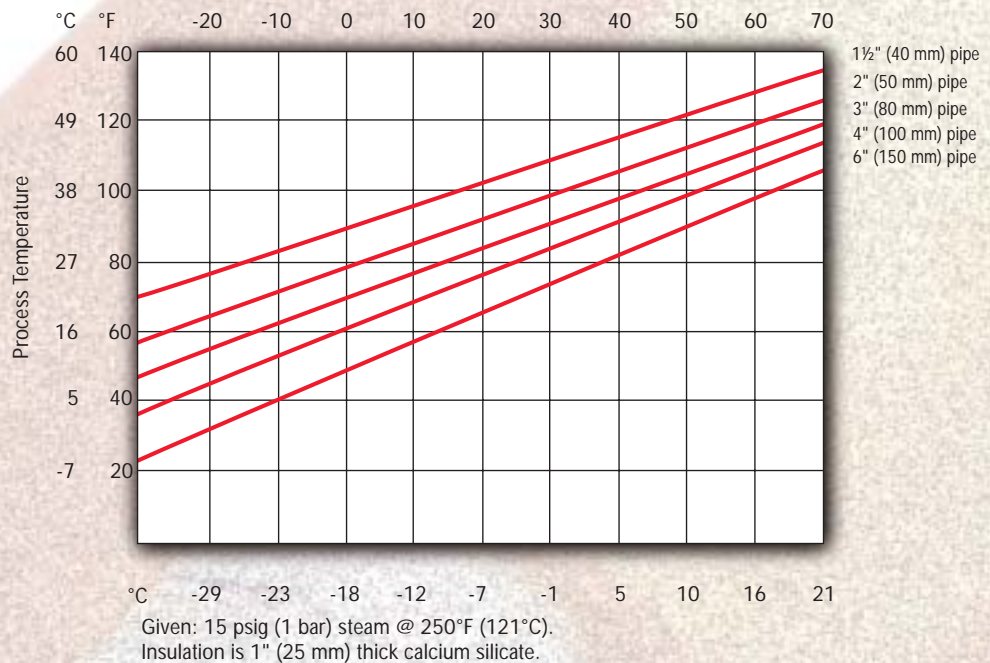
SafeTrace™ Isolated Steam Tracers

For over four decades Thermon has helped heat tracing customers get more heat out of their steam tracer tubing. Today many heat tracing customers are demanding less—heat that is! To meet these demands, Thermon created a family of isolated steam tracers, SafeTrace, specifically designed to winterize pipes while reducing burn risks and decreasing steam consumption when compared to conventional bare tube steam tracing. Additionally, SafeTrace steam tracing tubes provide accurate and predictable heat transfer properties necessary to maintain temperature-sensitive or corrosive products.

SafeTrace steam tracers are designed to be easily installed without the need for channels, spacer blocks or metallic attachment bands. The tracers are simply attached to the pipeworks or vessel with a temperature-rated adhesive tape.

Two SafeTrace versions (DLS and SLS) can be installed continuously from the steam supply header, along the heat-traced line and continue to the condensate return manifold. SafeTrace makes this possible through a composite construction (patent pending) that culminates with a safety yellow polymer jacket.

Typical Pipe Temperatures With SafeTrace DLS-IT
Ambient Temperatures
Wind Load 25 mph (40 km/hr)



SafeTrace Provides . . .

Increased Safety

- SafeTrace IT tracers comply with ASTM Std C-1055 for skin exposure temperatures of less than 136.4°F (58°C) when in contact with a hot surface for five seconds.
- Safety yellow jacket alerts plant personnel to inherently dangerous materials such as steam per ASME/ANSI A13.1-1996.

Precise Heat Transfer

- Permits winterization for any size of pipe.
- Provides predictable temperature control.
- Eliminates hot/cold spots associated with bare metal tracers and spacer blocks.
- Prevents damage to temperature-sensitive or corrosive products.

Reduced Costs

- Installed Cost
 - 1/3 less labor than spacer blocks
 - Reduces number of trap stations
 - Installs with tape
 - Eliminates need for transition lines and fittings
- Operating/Maintenance Costs
 - Reduce steam usage by 20% to 50%
 - Fewer fittings cut maintenance and repair



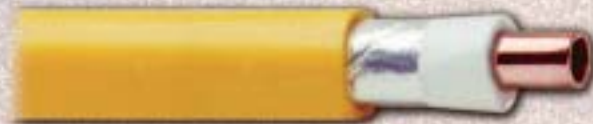
SafeTrace DLS-IT



Specifications/Ratings . . .

Available tube diameters 3/8" and 10 mm
 Available tube materials copper & stainless steel
 Typical pipe temperature range 40°F to 130°F
 (5°C to 54°C)
 Maximum exposure temperature 420°F (215°C)
 Minimum installation temperature -40°F (-40°C)
 Maximum recommended steam pressure 250 psig
 (17 bar)
 Skin contact temperature <136.4°F (58°C)

SafeTrace SLS-IT



Specifications/Ratings . . .

Available tube diameters 3/8" and 10 mm
 Available tube materials copper & stainless steel
 Typical pipe temperature range 75°F to 200°F
 (24°C to 93°C)
 Maximum exposure temperature 420°F (215°C)
 Minimum installation temperature -40°F (-40°C)
 Maximum recommended steam pressure 250 psig
 (17 bar)
 Skin contact temperature <136.4°F (58°C)

SafeTrace BTS



Specifications/Ratings . . .

Available tube diameters 3/8" & 1/2"
 and 10 mm & 12 mm
 Available tube materials copper & stainless steel
 Typical pipe temperature range 100°F to 250°F
 (38°C to 121°C)
 Maximum exposure temperature 420°F (215°C)
 Minimum installation temperature -40°F (-40°C)
 Maximum recommended steam pressure 250 psig
 (17 bar)

**DLS-IT vs. Bare Metal Tube
 Energy Consumption Comparison**

Pipe Size in (mm)	Bare Tracer °F (°C)	DLS-IT °F (°C)	Temp. Diff. °F (°C)	Energy Savings
2 (50)	193 (89)	118 (48)	75 (41)	24%
4 (100)	159 (71)	87 (31)	72 (40)	35%
6 (150)	120 (49)	70 (21)	50 (28)	42%
8 (200)	101 (38)	57 (14)	44 (24)	44%

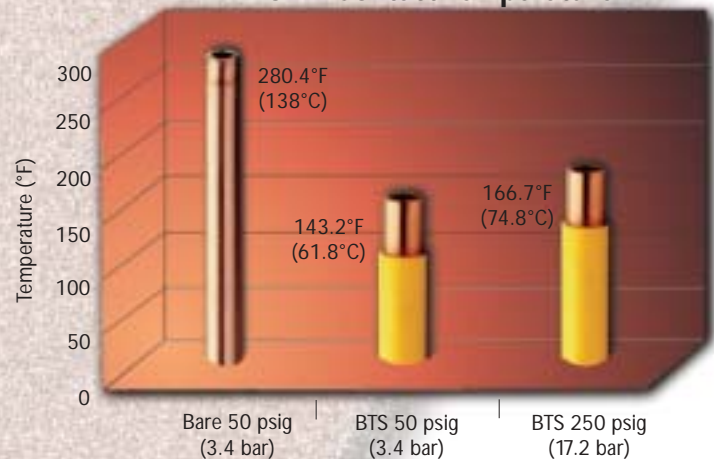
Design Conditions: Maintain 50°F, Low Ambient 0°F, Insulation 1½" Calcium Silicate, Steam 50 psig. Energy savings is based on 60°F annual mean temperature.

**SLS-IT vs. Bare Metal Tube
 Energy Consumption Comparison**

Pipe Size in (mm)	Bare Tracer °F (°C)	SLS-IT °F (°C)	Temp. Diff. °F (°C)	Energy Savings
6 (150)	120 (49)	85 (29)	35 (20)	28%
8 (200)	101 (38)	67 (19)	34 (19)	34%
10 (250)	92 (33)	60 (16)	32 (17)	35%
12 (300)	79 (26)	50 (10)	29 (16)	36%

Design Conditions: Maintain 50°F, Low Ambient 0°F, Insulation 1½" Calcium Silicate, Steam 50 psig. Energy savings is based on 60°F annual mean temperature.

**BTS vs. Bare Metal Tube
 Skin Contact Temperature**



Skin temperature after 5-second contact with tracer (per ASTM C-1055).
BTS provides equivalent thermal performance to bare tracing.

Thermon . . . Worldwide

USA

Charlotte, North Carolina
Chicago, Illinois
El Dorado Hills, California
Houston, Texas
San Marcos, Texas
Wilmington, Delaware

Canada

Calgary, Alberta
London, Ontario

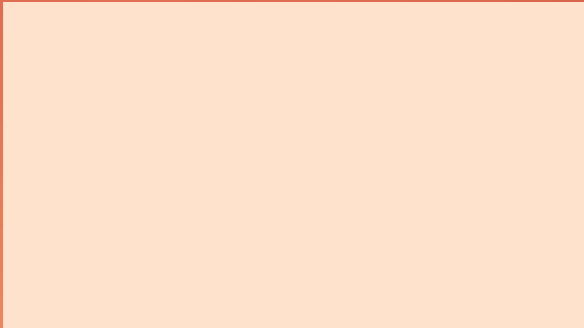
International

Auckland, New Zealand
Bombay, India
Burbach, Germany
Melbourne, Australia
Milano, Italy
Newcastle, England
Oslo, Norway
Paris, France
Pune, India
Seoul, Korea
The Hague, Netherlands
Yokohama, Japan

Other Products

Thermon manufactures a complete line of steam and electric heat tracing products.

Thermon is represented in your area by:



THERMON . . . The Heat Tracing Specialists®

Corporate Headquarters

100 Thermon Dr. • PO Box 609 • San Marcos, TX 78667-0609

Phone: (512) 396-5801 • Facsimile: (512) 754-2420 • **1-800-820-HEAT**

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