AN INTRODUCTION
Worldwide Representation

Corporate HQ & Primary Manufacturing Plant - Helsby, England
Technology & Innovation Centre - Bredbury, Stockport, England

AFFILIATES

KOREA
Heat Trace Korea - Korea

CHINA
Heat Trace Asia - P.R.China

SOUTHERN AMERICA
Heat Trace Argentina - Argentina

INDIA
Heat Trace India Pvt Ltd - India

EASTERN EUROPE
Heat Trace Eastern Europe - Germany

MIDDLE EAST
Heat Trace Middle East - UAE

Represented around the world in over 50 countries
Neptech Inc. is the primary distributor of Heat Trace Products for the United States of America.

**Headquarters:** 2000 East Highland Road, Highland, MI 48357

**Phone:** 810.225.2222

**Fax:** 810.225.1155

**Websites:** www.neptechinc.com | www.flexotherm.net
Quality Assured for Design, Manufacture & Supply
Heat Trace takes an active role in the development and implementation of electric heat tracing industry standards. All of Heat Trace’s products conform to several International Standards, some of which are listed below:

- **ATEX**: EN60079-0; IEC60079-31 & IEC62086-0
- **IECEx**: IEC60079-0 & IEC60079-1
- **FM**: ANSI/IEEE Std 515
- **VDE**: 114665       DIN VDE 0254
- **CSA**: C22.2 Nos. 130.1; 130.2; & C22.2 No. 138
- **Lloyds**: EN50014, EN50019, BS6351, IEEE Std 515
- **GOST R**: POCC GB.ГБ05.В02364   GOST R 51330.0-99 (МЭК 60079-0-98) GOST R 51330.8-99
On average, engineering/manufacturing companies invest about 2 to 4% of turnover in Research & Development.

Funding for R&D is critical if we are to grow to meet the changing needs of customers ahead of the competition.

Heat Trace invests over 15% of turnover in R&D.

Innovation led technology and a strong global marketing strategy, means new and lucrative markets become available, ensuring continued growth and success.
GENERAL OVERVIEW OF HEAT TRACE'S PRODUCT RANGE
Full Range of Heating Cables

... the most complete range of heating cables available from one source!

... with longest circuit lengths and highest withstand temperatures!

... all self-regulating cables incorporate Inherently Temperature Safe technology
Self-Regulating Heating Cables

Freezstop Low & Medium Temperature Range

FREEZSTOP MICRO - FSM
Withstand temperatures 65°C ON/85°C OFF Outputs 11 - 17W/m

FREEZSTOP LITE FSLe
Withstand temperatures 85°C ON or OFF Outputs 12 - 31W/m

FREEZSTOP REGULAR FSR
Withstand temperatures 85°C ON or OFF Outputs 10 - 40W/m

FREEZSTOP EXTRA FSE
Withstand temperatures 100°C ON or OFF Outputs 17 - 60W/m

Please note: All HTL heater withstand temperatures are NOT restricted by cumulative operating hours
Self-Regulating Heating Cables

FailSafe High Temperature Range

FAILSAFE PLUS FS+
Withstand temperatures 225°C ON or OFF Outputs 15 - 60W/m
Silicone rubber primary insulation. Option for braid or continuous metal jacket. Optional corrosion resistant outer jacket

FAILSAFE SUPER FSS
Withstand temperatures 225°C ON or OFF Outputs 15 - 75W/m
Fluoropolymer primary insulation. Option for braid or continuous metal jacket. Optional corrosion resistant outer jacket

FAILSAFE ULTIMO FSU
Withstand temperatures 250°C ON or OFF Outputs 15 - 100W/m

FAILSAFE ALUMINIUM AFS
Withstand temperatures 300°C ON or OFF Outputs 15 - 150W/m
Mineral primary insulation. Continuous metal jacket. Optional corrosion resistant outer jacket

Please note: All HTL heater withstand temperatures are NOT restricted by cumulative operating hours
Parallel Constant Power Heating Cables

High Temperature Range

Heat Tracer PHT
withstand temperatures 285°C
Outputs 10 - 70W/m

Heat Tracer AHT
withstand temperatures 425°C
Outputs 10 - 150W/m

Heat Tracer RHT
withstand temperatures 425°C
Outputs 50 - 200W/m
(Rail heating applications)

NO COMPETITION!!
Series Constant Power Cables

Longline HTP1 & 3F
1F up to 5km; 3F up to 2km between supply points
Withstand temperatures 105°C

Longline HTS1 & 3F
1F up to 5km; 3F up to 2km between supply points
Withstand temperatures 230°C

Longline SP & Duoflex Very Long Pipeline Systems
Up to 20km between supply points
Withstand temperatures up to 230°C

SkinTrace
Up to 30km between supply points
Withstand temperatures 230°C

NO COMPETITION!!
Control & Monitoring Systems

Mechanical & Digital Thermostats
Ambient or surface sensing capillary or digital thermostats suitable for safe and/or hazardous areas, with a variety of temperature and current ranges

Microprocessor-Based Systems
Computer assisted energy management and auditing system for critical and/or large heat tracing installations, offering multiple circuit control, including:
- Temperature monitoring
- Heating cable monitoring
- Energy efficiency
- Remote control and data acquisition
- Integration with plant DCS/SCADA systems
PowerMatch Micro+ Controller

PowerMatch Micro+ (PMM+)

APPLICATIONS
Freeze protection
Process Heating

BENEFITS
Significant energy savings
Fewer controls
1 unit controls multiple circuits
Reduced overall system cost
Optimises system safety
Remote alarm facility
Long Cross Country Pipelines
Subsea Pipeline Heating Systems
Helicopter Platform Heating
Downhole Heating Systems
Transportation Systems
Long Cross Country Pipelines

Pre-Insulated Heated Piping Systems
Subsea Pipeline Heating Systems

2011 - World’s 1st Electrically Trace Heated Reeled P-i-P

DuoFlex & LongLine\textsubscript{(SP)} ETHPiP ... Developed in partnership with

Technip
Helicopter Platform Heating

World’s 1st Polar Class Deepsea Drill Ship

90FSU2-NF - 900W/m²

ATEX Approved (T-Class: T2)

Heaters in aluminium deck structure c/w thermal insulation
Downhole Heating Systems

**BENEFITS**

- Maintains oil at correct temperature
- Eliminates hydrates & wax deposits
- Cut-to-length capability
- Self-regulating output
- Flexible with high mechanical strength
- Eliminates high temp at upper levels
Transportation Systems

Transportation Systems - Ongoing Developments

Network Rail, UK

Chicago Transit Authority, USA

LIVE / 3rd RAIL HEATING
Transportation Systems

PANTOGRAPH SHOE HEATER
Transportation Systems

Transportation Systems Ongoing Developments

SELF-REGULATING CATENARY WIRE HEATER
Heat Trace Limited
... continues to be a company ...

... Globally recognized as

... Setting the Standards & Leading the Way
Neptech Inc. Manufacturers Flexotherm™ Heated Products:

- Heated Sample Lines
- Custom Insulated / Heated Blankets
- Heated Vinyl Blankets
- Heated Transfer and Dispense Hose
- Stack Testing Lines
- 275 / 330 Gallon Tote Blankets
- Heated Multiplexers
- Heated Filter Housings
- Temperature Control Modules
- Dual Rinse Cleaning Carts
- Heated Sample Probes