

HEAT TRACE™
SETTING THE STANDARDS LEADING THE WAY

The
Heat Tracing Authority™





Heat Trace Limited.....

30 YEARS ON!

The History

When Neil Malone founded Heat Trace Limited in 1974, electric heat tracing was still in its formative years. In the three decades since, it has developed into a significant industry based on quality principals.

Throughout this time, Heat Trace Limited has been at the forefront, deeply involved in the development of BS6351 – Electric Surface Heating, the first European standard published in 1982, through to IEC62086 – a harmonized World Standard launched in 2000.

From the start, Heat Trace developed products and systems not only satisfying the new standards, but also meeting Heat Trace's own corporate objectives of improving.....

“safety, efficiency, reliability and performance”.

These highly focused objectives engendered a corporate culture within the company that remains to this day. The result has been a stream of novel, patented products – both heating cables and control and monitoring equipment – that have seriously influenced the direction and focus of the heat tracing industry.

Today Heat Trace Limited is a global company providing complete heat tracing solutions. In addition to systems manufacture, services include consultancy, system design, installation and commissioning, project management, maintenance and training.

Heat Trace Limited has become



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Innovation

Heat Technology

Heat Trace Limited developed and patented the world's first cut-to-length parallel resistance heating cable in the 1970's. This was followed in the early 80's by 3 phase Longline series cables for heating long pipelines. Both of these heaters were based on foil technology and remain within the company's product range today.

More recent developments include the patented AHT, the world's first mineral insulated, metal-sheathed cut-to-length parallel resistance cable for high temperatures or high power duties.

As an innovative company, Heat Trace Limited have recognized that a complete heat tracing system must include purpose made products and solutions for instrument lines, sample lines and site-run small bore pipework. HotLine pre-insulated tubing bundles provide the ideal solution for these applications.

Other patented heater systems include the "Duoflex" heater, for long distance sub-sea flexible heated pipes, developed with our partner company Technip Coflexip, as well as "HOTWAT Pipe". A pre-insulated and heat traced instant hot water pipe for buildings.

Today, Heat Trace Limited manufacture the world's largest range of self-regulating semi-conductive heating cables, from 12 volts to 750 volts, with outputs up to 120W/metre and withstand temperatures of up to 250°C, the world's highest withstand temperature for this style of heater. Heat Trace have also patented a process for resurrecting failed semi-conductive heating products (usually of competitor manufacturers!)

Heat Trace invests a significant proportion of its revenue into research and development, resulting in many new patents and innovative products and processes.



Control and Monitoring

Heat Trace Limited were perhaps the first heat tracing company to recognize the important link between control technology and the "safety, efficiency, reliability and performance" of heat tracing installations.

The company patented Powermatch, a self-regulating proportional controller (as opposed to ON/OFF thermostatic control) that turns heater power up or down in response to changes in heat losses. Although launched almost 20 years ago, the benefits of proportional control to safety and efficiency have only recently been recognized on a global basis.

Today, Heat Trace's range of electronic control and monitoring equipment extends from simple thermostats, to microprocessor controls capable of integration with full plant SCADA and DCS systems.

Innovation led technology has resulted in Heat Trace becoming....





Heat Trace Limited.....

Research & Development

Research & Development

Work is currently being carried out in several important fields, such as :

- Polymer technology
- Metallurgy
- Composites
- Electronics
- Programmable power control.

This work is carried out within the group's own R & D Laboratories, sometimes in conjunction with major research and educational establishments. Products proving often takes place with the assistance of Government Departments, such as the Department of Energy.

In addition to becoming one of the world's leading manufacturers of heating cables and associated equipment, Heat Trace's Research & Development Division ensures that we continue in

"Setting the Standards and Leading the Way"



Quality Assurance

In addition to manufacturing products, a high quality Design and Engineering facility is available from a number of globally located design centres. Together with the manufacture of a complete and comprehensive product range, our worldwide installation and commissioning service, enables us to offer complete, or partial, turnkey projects.

System design and manufacture is carried out in accordance with all International Standards for electric with BS EN ISO 9001 Quality Management System. All products carry International Approvals, such as ATEX; IEC; VDE; CSA; FM; Lloyds; Det Norske Veritas and other accredited International Test Houses.

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Applications

Commercial

Commercial applications for heat tracing exist almost everywhere and systems may be found in domestics, municipal and institutional buildings; hospitals; nursing homes; office blocks; leisure complexes; educational establishments' etc.

Heat Trace can supply energy efficient systems for:

- Freeze protection of pipes / tanks
- Heating of hot water pipes
- Floor warming
- Heated walls
- Roof and gutter heating for snow/ice prevention
- Snow/ice prevention on roads/ramps/walkways/steps & access areas, etc.
- Heating fuel storage tanks

Residential

A new company HeatSafe Cable Systems Limited has been established to satisfy heating for residential applications.

HeatSafe cable is a multi-purpose self-regulating heater and HOTWAT Pipe is a patented heated and thermally insulated hot water pipe. Similarly frezfree Pipe is a heated and thermally insulated freeze protected cold water pipe.

HeatSafe has a unique patented 'WarmWall' building construction whereby HeatSafe cable is contained within the walls of a building comprising blocks of high thermal storage capacity, enabling the emission of low level heat throughout a building operated from low tariff electricity.

WarmWall and HOTWAT Pipe produce significant energy savings, assisting in the reduction in CO² emissions to improve our environment.



Transportation

Heat Trace's Transportation Division specializes in heating systems for all modes of transport.

The range of track and switch heating systems is designed to meet the exacting standards required in the transportation industry. Whether the requirements is for high power constant wattage output heaters, or for high power self-regulating heaters, you may be sure that the Heat Trace range of products has the reliability and durability required for all heating applications, including switch points, swing nose crossings, live contact rails, monorail systems, urban transit systems and tramways.

Heat Trace provide complete systems incorporating heaters, ancillary equipment and all necessary control and weather monitoring systems.

Additional products have also been developed for door threshold heaters, catenary heating, snow and ice prevention systems for platforms, walkways, access ramps, station canopies, etc., under floor heating for offices and waiting rooms, together with freeze protection systems for rolling stock water and fuel supplies.

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Applications

INDUSTRIAL

Electric heat tracing

Industrial applications may be found in oil and petro-chemical plants, refineries, pharmaceutical production, power generation, water and waste treatment plants, food processing, plus many others.

Heat Trace manufacture full heat tracing systems for:

- Short or long pipelines
- Complex in-plant piping systems
- Above ground, buried, or sub-sea pipelines
- Externally or internally traced pipelines
- Safe or hazardous area installations
- Tanks and vessels
- Hoppers
- Instrumentation and sample lines
- Instrument enclosures
- Temperature maintenance, or heat raising to temperatures up to 600°C.

Steam heat tracing

Since the early 1900's, steam tracing has been the primary means of industrial heat tracing – even today 70% of all industrial heat tracing systems are in fact steam.

Where steam supplies are available, steam for heat tracing is considered to be “free” surplus energy. However, steam tracing of pipe work and vessels is generally inefficient and difficult to control, when compared with`



OFFSHORE

In the harsh offshore environment safety and reliability are high priorities. Heat Trace are able to supply high quality products and services to meet the demands of the industry. Flexible sub-sea heated pipelines, heated riser systems, topside pipeline heating (freeze protection and temperature maintenance) helicopter platform snow and ice prevention systems – these are just some of the application solutions available from Heat Trace Limited.

SPECIALIST APPLICATIONS

For above ground and buried long pipelines, where a limited number of power supplies are available, Heat Trace are able to provide a comprehensive range of special long pipe line heating systems, using series resistance heaters and skin effect current tracing systems.

Other specialist applications include hopper heating modules for electrostatic precipitator hoppers, cut-to-length pre-insulated heating tubing bundles for instrumentation and sample lines and a flexible sub-sea heated pipe system for use in deep sea exploration and production applications.

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As you would expect from a high caliber company, Heat Trace is able to fulfil the expectations of clients who wish to entrust the widest possible range of services to a single contractor able to manage all aspects of a heat tracing project.

A complete range of Design & Engineering Services is available – ensuring that all requirements of the client are satisfied.

Consultancy

From Concept through to Commissioning – Heat Trace Limited offers a full turnkey project capability, from the initial enquiry through site surveys to final client handover.

Design

All design work is carried out in accordance with ISO9001 certification. Using the latest CAD software, system design complies with the latest national and international standards and approvals including: IEC, IEEE and CENELEC.

Bespoke Software

Heat Trace's own system design software, is available in CDROM format. It works out heating requirements and is the only system that is able to optimize an installation by selecting the generic and specific types of heater, controller and monitoring systems, it can also uniquely generate isometric drawings of the calculated heating circuits.

Installation

Fully qualified installation and site supervision engineers are available to ensure that systems are installed in full accordance with the specified design and that systems conform to national and international standards and codes.

Commissioning

Our commissioning engineers will carry out final inspection and testing,



Project Management

Dedicated Project Managers will ensure the smooth operation and completion all major projects.

Maintenance

Annual Maintenance Contracts are available to ensure the system always remains at its optimum operating efficiency.

Personnel Training

Training in product knowledge, system design, installation and maintenance procedures can be provided, either on-site, or at one of our Affiliate/Partner company premises.

Local Contact :

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