



ibemo Kazakhstan Ltd.

Tel. +7 (71133) – 93077
Fax +7 (71133) – 93074
E-Mail: info-kz@ibemo.de

ӨНЕРКӘСІП ЖӘНЕ ЭЛЕКТР МАТЕРИАЛДАРДЫҢ ЖАБДЫҚТАУШЫСЫ
ПОСТАВЩИК ИНДУСТРИАЛЬНОГО И ЭЛЕКТРИЧЕСКОГО ОБОРУДОВАНИЯ И МАТЕРИАЛОВ
SUPPLIER OF INDUSTRIAL & ELECTRICAL EQUIPMENT and MATERIALS

INTANK *Oil Tank Heating System*



Domestic Fuel Oil Tanks

Commercial/Industrial Fuel Oil Tanks

Oil Tank Heating System

The Problem

For optimum safety and convenience, fuel storage facilities may be located in remote positions, outside buildings, or in unheated areas. In winter this can cause problems in waxing or coagulation of the fuel, resulting in clogged filters, plugged fuel lines and pumping difficulties, with subsequent heating system failure.

The Solution

INTANK from Heat Trace is an effective and reliable method of freeze protecting fuel oil storage tanks and associated pipe work. This ensures continuous trouble free operation and increased performance of the heating system.

Safe, Efficient, Reliable

The use of self-regulating heating cables ensures system safety through low heater surface temperatures and energy efficiency through self-regulation of the heater output.

The self-regulating characteristics of the heater means that as the temperature falls, so the output from the heater increases, thus ensuring the oil in the tank does not fall below the cloud point temperature.

As the oil then reaches the desired temperature, so the output from the heater reduces.

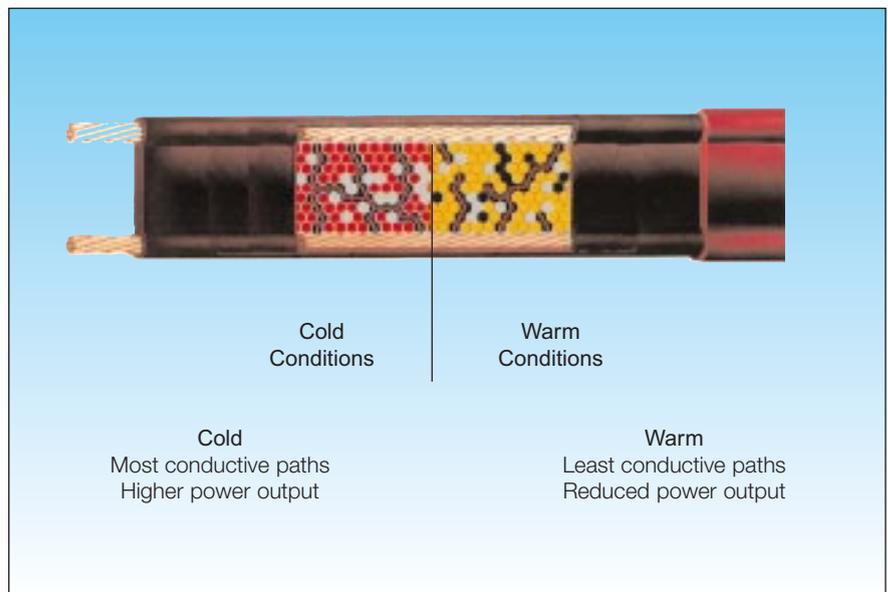
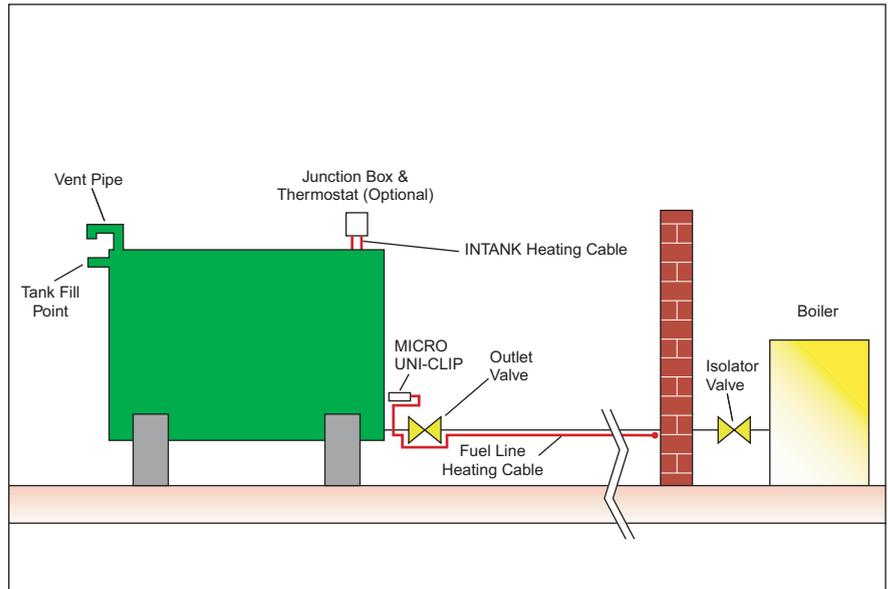
An additional air sensing thermostat is recommended to energise the system when the ambient temperature falls to +5°C.

Complete System

INTANK is a complete system comprising heating cable, power junction box and mounting bracket, termination kits, tank entry glands, caution labels.

Associated Pipe Work

Freeze protection may also be required on the associated tank outlet pipe work. This may be achieved using Heat Trace's 17FSM2-CF self-regulating heating cable straight traced to the pipe beneath thermal insulation.

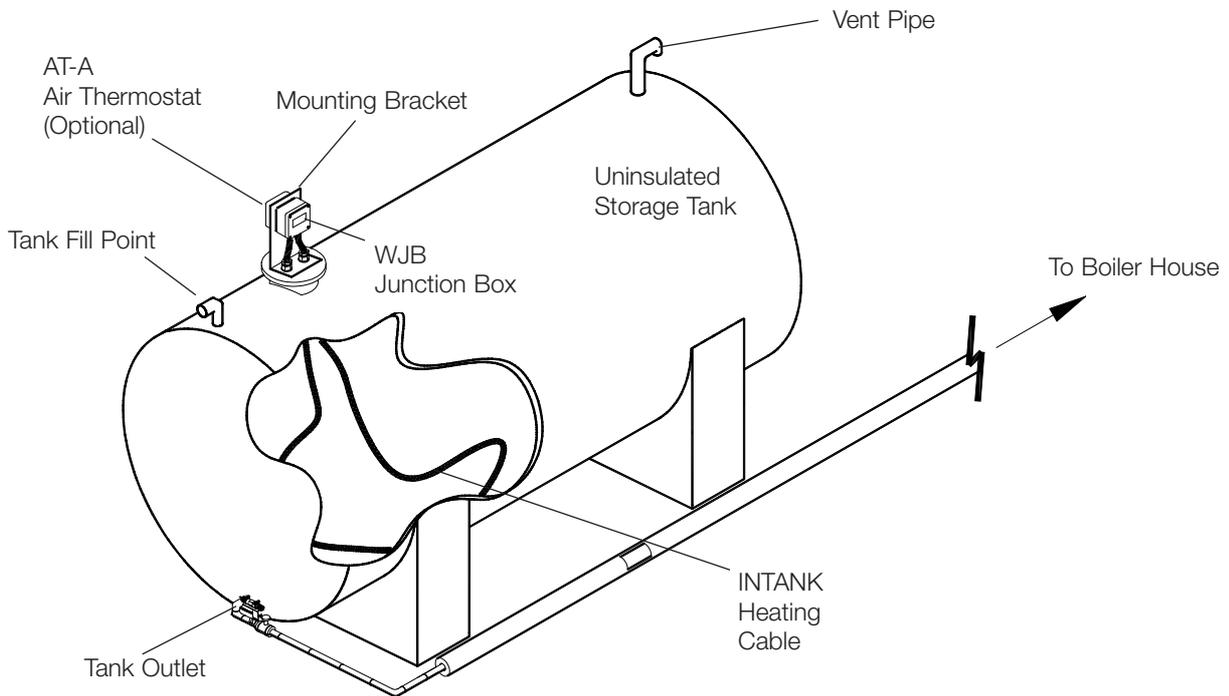


Design Guide

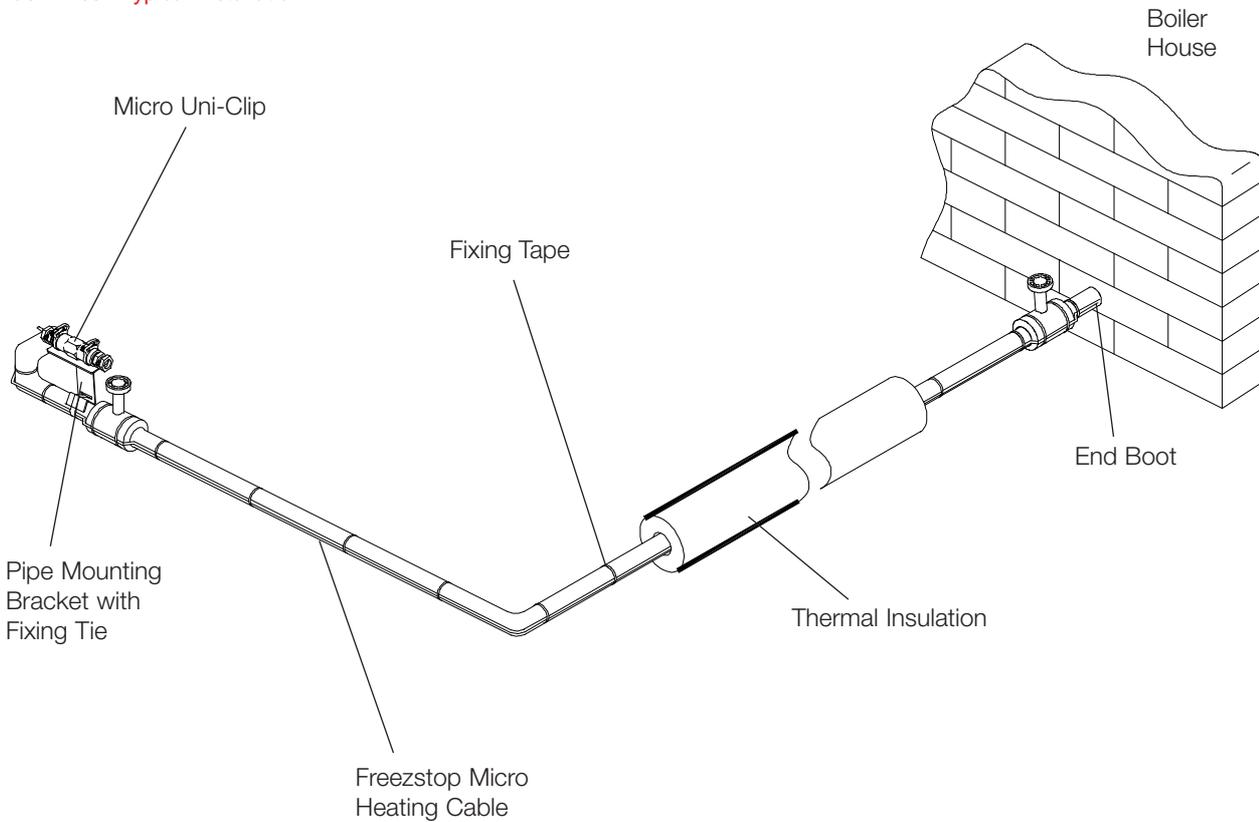
| | | | | |
|--|--|---|--------------------------------|----------------------------|
| Available INTANK kit sizes | Tank Size (Litres) | INTANK Product Ref | Installed Load (W) | Breaker Size Type C (Amps) |
| | up to 2000 | IT-2 | 600 | 6 |
| | 5000 | IT-5 | 1000 | 10 |
| | 10000 | IT-10 | 1300 | 10 |
| | 20000 | IT-20 | 1800 | 16 |
| <i>NB. For larger capacity tanks, and for flow rates exceeding 500litres/hour contact your local Heat Trace representative</i> | | | | |
| Kit Contents | Heating cable Termination kits | Junction box Tank entry components | Mounting bracket CAUTION label | |
| <u>Optional Item</u> | | | | |
| AT-A air sensing thermostat. Maximum capacity 16 Amp. Suggested set-point +5°C | | | | |
| Fuel Lines Frost Protection System | For frost protection of fuel lines on pipes sizes up to 38mm nominal bore, with a minimum of 20mm mineral wool thermal insulation complete with a waterproof cover or cladding. | | | |
| | Heater type 17FSM2-CF, self-regulating heating cable, should be straight traced to the pipe work, in accordance with standard installation instructions. | | | |
| | Required heater length will be the total pipe length plus an additional 0.5 metre for each termination into the junction box. Max length with 10 Amp breaker is 56 metres at -20°C. | | | |
| | <u>Components</u> | | | |
| | 17FSM2-CF | Heating cable (pipe length + 0.5m for connection) | | |
| | UC/M | Micro Uni-Clip connection unit (Max. 20 Amp) | | |
| | PB/UCM | Pipe mounting bracket for Micro Uni-Clip | | |
| | BES1 | Boot end seal | | |
| | RTV0.5 | Silicone sealant | | |
| | PFS025 | Pipe fixing strap | | |
| | CL | Caution labels (1 every 6 metres of pipe) | | |
| | FT/HTP | Adhesive fixing tape | | |
| Design Data | The above system design is based on maintaining +5°C with a minimum ambient temperature of -20°C. For different parameters contact Heat Trace's Design Office, or your local Representative. | | | |
| Electrical Protection | Supply voltage 220/240 VAC Residual current device (rcd) 30mA Minimum switch-on temperature -20°C | | | |

Installation

Oil Tank Heater - Typical Installation



Fuel Lines - Typical Installation



Bill of Materials - Order Form

CUSTOMER NAME AND ADDRESS:

Contact: _____

Tel: _____

Fax: _____

Order Number _____

Order Date / / Date Required / /

SUPPLIER DETAILS:

Heat Trace Limited

Tracer House, Cromwell Road,

Bredbury, Stockport

Cheshire, SK6 2RF

England

Contact: Sales Department

Tel: +44 (0)161 430 8333

Fax: +44 (0)161 430 8654

| QUANTITY | TYPE REF. | DESCRIPTION | UNIT PRICE | EXTENDED |
|------------------------|-----------|------------------------------------|------------|----------|
| OIL TANK HEATER | | | | |
| pcs | IT-2 | 600W kit for up to 2000 litre tank | _____ | _____ |
| pcs | IT-5 | 1000W kit 5000 litre tank | _____ | _____ |
| pcs | IT-10 | 1300W kit 10000 litre tank | _____ | _____ |
| pcs | IT-20 | 1800W kit 20000 litre tank | _____ | _____ |

FUEL LINE HEATER

| | | | | |
|-----|-----------|---|-------|-------|
| m | 17FSM2-CF | Heating tape (pipe length + 0.5m per termination) | _____ | _____ |
| pcs | UC/M | Micro Uni-Clip Connector | _____ | _____ |
| pcs | PB/UCM | Micro Uni-Clip Pipe Mounting Bracket | _____ | _____ |
| pcs | BES1 | End Seal | _____ | _____ |
| pcs | RTV0.5 | End Seal Adhesive | _____ | _____ |
| pcs | NT/SF | Fixing tie (1 per PB/UCM) | _____ | _____ |
| pcs | CL | Caution Labels (1 per 6m of heat traced pipework) | _____ | _____ |
| pcs | FT/HTP | Adhesive PVC fixing tape, 12mm x 33m | _____ | _____ |

THERMOSTAT CONTROL (Optional)

| | | | | |
|----|------|--|-------------|---------|
| ea | AT-A | Air sensing thermostat, 16A single phase max | _____ | _____ |
| | | | SUBTOTAL | £ _____ |
| | | | C & P | £ _____ |
| | | | VAT | £ _____ |
| | | | TOTAL PRICE | £ _____ |

Additional materials needed to complete the heat tracing installation:

- All mains and interconnecting cables/glands
- Thermal Insulation

Presented by:



ibemo Kazakhstan Ltd.

Tel. +7 (71133) – 93077
Fax +7 (71133) – 93074
E-Mail: info-kz@ibemo.de

ӨНЕРКӘСІП ЖӘНЕ ЭЛЕКТР МАТЕРИАЛДАРДЫН ЖАБДЫҚТАУШЫСЫ
ПОСТАВЩИК ИНДУСТРИАЛЬНОГО И ЭЛЕКТРИЧЕСКОГО ОБОРУДОВАНИЯ И МАТЕРИАЛОВ
SUPPLIER OF INDUSTRIAL & ELECTRICAL EQUIPMENT and MATERIALS



BS EN ISO 9001 Certificate No. 0160

ibemo Kazakhstan Ltd. 09302 Republic of Kazakhstan , West Kazakhstan Oblast, Aksai, Pramzone, BKKS office complex
Tel.: +7(71133) - 93077 ; Fax: +7 (71133) - 93074; e-mial: info-kz@ibemo.de

The information given herein, including drawings, illustrations and schematics (which are intended for illustration purposes only), is believed to be reliable. However, Heat Trace Ltd makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. Users of Heat Trace Ltd products should make their own evaluation to determine the suitability of each such product for specific applications. In no way will Heat Trace Ltd be liable for any damages arising out of the misuse, resale or use of the product.