

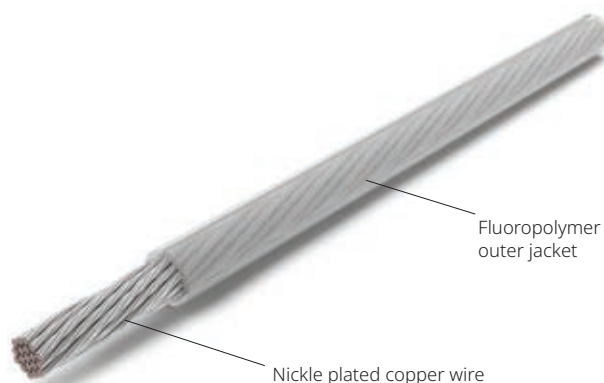
# STS-HT Skin-effect Trace Heating System Wire

**Raychem**

Electrical process temperature maintenance for high temperature pipelines and embedded applications

## PRODUCT OVERVIEW

### Skin-effect Insulated Conductor Construction



Raychem STS-HT Tracing Wire is a specially formulated, chemical resistant wire made specifically for high temperature STS Trace Heating applications up to 260°C. STS Systems using STS-HT Wire are ideal for heating pipelines transporting materials such as sulfur and asphalt.

These STS Wires meet all requirements of internationally recognized standard IEEE 844.1/CSA C22.2 No. 293.1 and IEEE 844.2/CSA C22.2 No. 293.1 at 2,400 Vac and are approved for use in hazardous and nonhazardous locations when used as part of a Chemelex designed STS Trace Heating System.

Raychem STS Trace Heating Systems are ideal for embedded or long pipeline applications to minimize the number of connection and power source locations. Circuit lengths up to 12 km (7 miles) are possible.

Raychem STS-HT Wires meet the requirements of the U.S. National Electrical Code and the Canadian Electrical Code, when properly installed and commissioned in a STS Trace Heating System designed by Chemelex.

For additional information, contact your local Chemelex office.

## APPLICATION

|                     |                                                        |
|---------------------|--------------------------------------------------------|
| Area Classification | Hazardous and nonhazardous locations                   |
| Traced surface type | Metal and Concrete                                     |
| Chemical resistance | Organic and aqueous inorganic chemicals and corrosives |

## PERFORMANCE RATINGS

|                               |                     |
|-------------------------------|---------------------|
| Voltage Rating                | 2,400 Vac maximum   |
| Maximum Operating Temperature | 260°C (500°F)       |
| Power Output Rating (maximum) | 150 W/m (45.7 W/ft) |

## APPROVALS

|                                          |                                 |
|------------------------------------------|---------------------------------|
| PTB 21 ATEX 1005 X                       | IECEx PTB 21.0011X              |
| ⊠ II 2 G Ex eb 60079-30-1 IIC T6...T2 Gb | Ex eb sb IIC T6...T2 Gb         |
| ⊠ II 2 D Ex tb IIIC T80°C...T300°C Db    | Ex tb sb IIIC T80°C...T300°C Db |

## DESIGN AND INSTALLATION

STS-HT Wires are an integral part of a complete, engineered Raychem STS Skin-effect Trace Heating System. These systems are custom designed and engineered based on the specific needs of the application. Chemelex requires that all STS Trace Heating System designs be completed and approved by Chemelex engineers. Chemelex Field Service personnel are also recommended for installation and commissioning of STS Trace Heating Systems.

## PRODUCT CHARACTERISTICS

|                   | Dimensions<br>(Max OD) | Weight<br>Per km (3280 ft) | Bend Radius<br>(@-55C) | Conductor Size             |
|-------------------|------------------------|----------------------------|------------------------|----------------------------|
| STS-HT/33.25 Wire | 13.2 mm (0.52 in)      | 500 kg (1102 lb)           | 84 mm (3.3 in)         | 33 mm <sup>2</sup> (#2AWG) |
| STS-HT/21.25 Wire | 11.2 mm (0.44 in)      | 333 kg (734 lb)            | 77 mm (3.0 in)         | 21 mm <sup>2</sup> (#4AWG) |
| STS-HT/13.25 Wire | 9.9 mm (0.39 in)       | 233 kg (514 lb)            | 60 mm (2.4 in)         | 13 mm <sup>2</sup> (#6AWG) |

|                    |                |
|--------------------|----------------|
| Maximum Pull Force | 90 kg (200 lb) |
| Outer Jacket Color | Clear          |

## ORDERING DETAILS

| Description       | Part number |
|-------------------|-------------|
| STS-HT/33.25 Wire | P000001474  |
| STS-HT/21.25 Wire | P000000635  |
| STS-HT/13.25 Wire | P000001475  |

## STS SYSTEM COMPONENTS

offers a full range of connection kits for power connections and splices for STS Wires. These connection kits must be used to ensure proper functioning of the product and compliance with warranty, code, and approvals requirements.

Additional components, installation tools and accessories required to install, test and commission an STS Skin-effect Trace Heating System are available .