Tempco's electrically heat-traced tubing assemblies are designed for optimum transfer of non-explosive liquids or gases. Tempco's high purity PTFE Teflon® provides maximum flexibility for low pressure applications. Choose copper, aluminum or stainless steel tubing for high pressure applications.

We offer machine-wrapped heat tracing from 1/4" O.D. to 1-3/4" O.D., as well as hand-wrapped tracing of unusually small or large outer diameter tubing to meet a wide range of applications.

The key to Tempco's flexible, energy efficient, heat-traced tubing is the powerful low-profile heat tape spirally wrapped around your choice of tubing. The heat tape is manufactured with a top reflective layer to direct heat into the tube. This reflective layer, combined with the heat tape applied directly to the surface of the tube, results in a highly efficient thermal transfer. The simplicity of the heater design allows for the heated assembly to be extremely lightweight and flexible for use in portable and stationary applications. Each tube is then insulated with one or two layers of Nomex felt, depending on the temperature to be maintained.

**Typical Applications**

- **Aerospace** Satellites, Vacuum Chambers, Testing, Laboratory
- **Automotive** Fuel Cell Development, Cold Chamber Testing
- **Composites** Adhesives, Epoxy Transfer, 2-Part Spray
- **Environmental** EPA-Required Testing, Diesel Emissions
- **Food Industry** Viscosity Control, Production Technology
- **Gas Samples** Stack Samples, Analyzer Components
- **Government** Meteorological Analysis
- **Industrial** Machinery, Systems Engineering, Semiconductors
- **Laboratory** Thermal Testing, Instrumentation
- **Medical** Flow Control, Instrumentation, Scientific Research
- **Pharmaceutical** Production Machinery, R&D, Testing
- **Transportation** Aviation Freeze Protection, Heated Lines
- **Universities** Mechanical, Chemical, Electrical Engineering

**Design Features**

- Base tubing can be Teflon®, Nylon®, Stainless Steel, Copper or Aluminum
- Machine-wrapped low-profile flexible heat-tape with multiple heat conductors provides efficient thermal transfer, resulting in even heating from end to end.
-spirally wrapped Nomex® felt insulation bound in place with nylon braid.
- Outer layer from simple heat shrink to moisture/contaminant resistant resistant durable outer silicone sleeve.
- Temperature range to 400°F / 200°C.
- Heated Length to 100 ft. available in 1ft. increments. 1ft. unheated section at each end, shipped bare or with fittings.
- Assembly can be designed with a replaceable inner tubing.
- Temperature sensors include Type J, K or T thermocouples and RTDs.
- Thermostats can be built in, eliminating the need for separate control.
- Standard power leads include flying leads, 6 ft. cordset with standard plug or industrial Hubbell Twist-Lock® plug.
- Up to 5 total Heated / Unheated tubes in the same bundle.
- Built-in indicator lamps for Power On, Heat On or Over Temperature.
- Voltage from 12VDC - 240 VAC.
Ordering Information

Heated Tubing Assemblies are very application specific; Tempco will design and manufacture a Heated Tubing Assembly to meet your process requirements.

To receive a quote send a completed copy of the following Quote Request Form to Tempco.

**Electrically Heated Tubing Assembly Quote Request**

**Application Information**
- Desired Operating Temperature _________
- Ambient Condition (indoor, outdoor?)___________
- Worst Case Ambient Temperature ________
- Expected Pressure _____________________
- Material in the Tubing ___________________________
- Comments ____________________________________

**Tubing Information**
- Tubing Material _____________________________
  (PTFE Teflon®, Copper, 304 SS, Aluminum)
- Outside Diameter ______________
- Wall Thickness if Known ______________
- Heated Length _______________________
- Overall Length _______________________
- # of tubes ______________________
  How many heated __________
  How many unheated __________
- If replaceable inner tube required: __ Yes __ No
  Replaceable inner tube OD _____________
- Comments ____________________________________

**Electrical Information**
- Watts (total if Multi-Tube) __________
- Volts ______________
  Phase: __ Single __ Three
- If Multi-Tube: Watts per Tube __________
- Comments ____________________________________

**Lead Information**
- Style: __ Teflon® __ Industrial Cordage
  __ 120VAC cordset w/ standard 5-15 plug
  __ 240VAC cordset w/ standard 6-15 plug
  __ High Temp Fiberglass
- Length _____
  Optional Plug _____________________
- Comments ____________________________________

**Sensor & Control Information**
- Built-in Temperature Sensor: __ Yes __ No
- Thermocouple Type (J, K, T) ___________
- RTD (PT100) __ Yes __ No
- Lead Length __________
- Lead Type _____________________________________
- Built-In Thermostat __ Yes __ No
  Setpoint _______ (Choices limited to (°F): 40°, 77°, 86°, 98°, 104°, 120°, 140°, 176°, 212°, 248°, 302°, 356°)
  Indicator Lamps: ___ Green, type _________________
  ___ Red, type ___________________
- Comments ____________________________________

**Fitting Hardware Information**
- Bare ____ Compression + NPT: Male ___  Female ___
  Comments ____________________________________

**External Covering Information**
- ___ Bare Heat Trace Only
- ___ Heat Shrink
- ___ Insulated Polyester Braid
- ___ Insulated Industrial Scuff Coat
- Comments ____________________________________