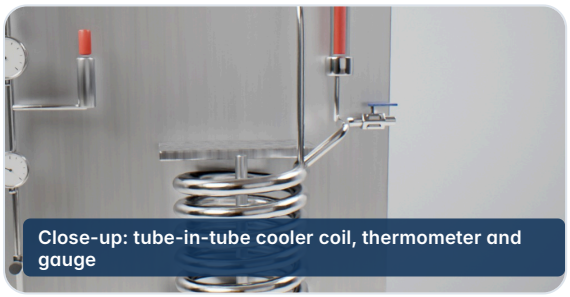
PRODUCT DATASHEET

Tube-in-Tube Cooler Sampling Panel for Hot Liquids

Panel with a tube-in-tube sample cooler that brings hot liquids down to a safe temperature before sampling

Product page





Close-up: tube-in-tube cooler coil, thermometer and gauge

OVERVIEW

The Tech Inc. Tube-in-Tube Cooler Sampling Panel for Hot Liquids cools a hot liquid sample before anyone touches it. The sample runs through the inner tube of a coiled tube-in-tube cooler while cooling water flows the other way in the outer tube, so the sample leaves cool, at a steady temperature and without flashing.

TYPICAL DESIGN DATA

Sample inlet	To about 400 °C and 100 bar, depending on model
Sample outlet	Typically below 40 °C with design cooling water
Cooler	Tube-in-tube or coil-in-shell, counter-flow, 316 stainless; alloy coils on request
Codes and standards	Pressure parts to ASME B31.3; water sampling practice to ASTM D3370
Cooling water	About 0.5 to 2 m^3/h
Protection	Relief valve on sample side; thermometer on outlet
Panel	316 stainless plate on legs, or in a cabinet

MODELS AND CAPACITIES

- **TI-TCP-150** – sample to about 150 °C
- **TI-TCP-300** – sample to about 300 °C
- **TI-TCP-400** – sample to about 400 °C
- **TI-TCP-E** – enclosed cabinet version

Indicative sample inlet temperature.

ORDERING CODE

Example **TI-TCP-300-C**: **300** sample inlet temperature class: 150, 300, 400; **C** container: C cylinder, B bottle.

SCOPE OF SUPPLY

Included: factory acceptance test with a written report; drawings for approval, material certificates and manual. **Options:** pressure-reducing valve; temperature switch with alarm; stainless cabinet; chilled-water cooler for very low outlet temperature.

KEY ADVANTAGES

- **Safe** – sample cooled before it is handled
- **Closed** – no flashing or vapour loss
- **Steady** – the same outlet temperature every time
- **Compact** – cooler, gauges and valves on one panel

Designed and built by Tech Inc. · **Part of the Davey Group since 1990**

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