



## Working principle

This product is a shell-and-tube heat exchanger. The sample flows in and out from the top, while the cooling water enters from the bottom and exits from the top. Utilizing the principle of counter-current heat exchange, the cooling water on the shell side cools down the sample water or sample gas flowing through the tubes, thereby providing qualified samples for instrument analysis services.

## Product feature

The **COOL-DT-22H-SS** Sample Cooler features a compact structure, high heat transfer efficiency, easy cleaning, and long service life. The sample tube adopts a double-layer spiral tube design with a size of 6.35\*1.65mm, utilizing high-quality 316L stainless steel heat exchange tubes. A laminar flow design, specifically for high-temperature and pressure conditions with low flow rates, it is installed at the before COOL-DT-22 as a primary cooler. If the sample or cooling water is corrosive, the same dimensions can be made with 6MO, 2205, 904L, Monel 400, Inconel 625, or Hastelloy C276.



**Specifications**

<b>Model</b>	<b>COOL-DT-22-SS</b>
Heat exchange surface area	0.22m <sup>2</sup>
Inner coil size/length	1/4"O.D.×0.065" /11.21 Meter
Coil design	600°C @35.8MPa
Service Condition	primary cooler
Service Cooling water Condition	≤35°C 4-5barg
Body material/size	304SS/89*2*304
Inner coil material	SS316L
Weight	10kg

Note: The above materials are suitable for use when the sample is non-corrosive. If the sample is corrosive, the same dimensions can be made with 2205,904L,6MO,Monel 400, Inconel 625, or HC276 .If the cooling water is corrosive, the same dimensions can be made with 2205,904L,6MO,Monel 400.

**Dimensional Drawing**