Gas
Liquid & Slurry
Solid & Powder
Steam & Water

Sample Coolers

SINGLE HELICAL TUBE IN SHELL

SAMPLE CONDITIONING

The Sample cooler series consists of two sample coolers designed and rated for ultra-supercritical plant applications.

Both cool a sample from a process stream. It may seem simple, but it is a uniquely designed small tube in a shell heat exchanger. The sample to be cooled flows through the tube side of the cooler, and the cooling fluid, usually water, flows through the shell side. The cooled sample then is taken to a laboratory for analysis or piped to in-line process instrumentation for continuous monitoring of properties such as conductivity, pH or other chemical constituents.

MODELS

TS-GSC | TS-CLSC

BENEFITS

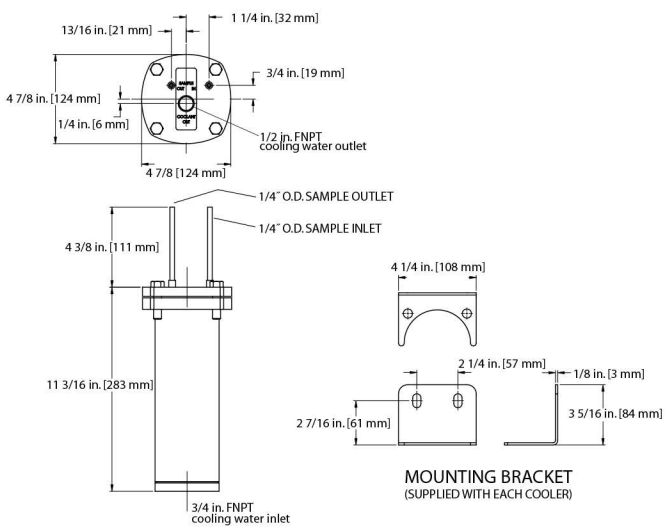
The TS-GSC sample cooler is the most efficient and cost-effective sample cooler available. It offers optimal service for flows below 1800 cc per minute for single phase and below 1000 cc per minute for condensing heat transfer. Standard tube side materials are Alloy 625,SS316,Copper

The TS-CLSC sample cooler is designed for efficient and cost-effective sample cooling where higher flow or low pressure drop is required. It offers optimal service for flows below 3500 cc per minute for single phase and 2000 cc per minute for condensing heat transfer. Standard tube side materials are Alloy 625,SS316,Copper

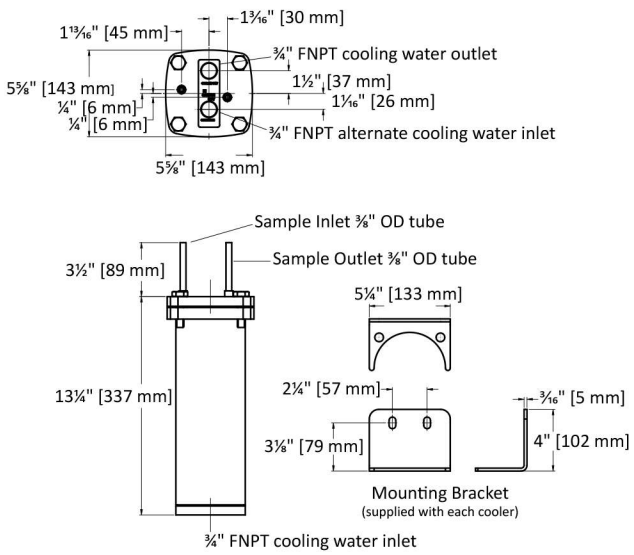
FEATURES

- Seamless Alloy 625 tube
- Rated for the newest ultra-supercritical power plants (5175 psig at 1150°F [356 barg at 621°C])
- Higher temperatures available depending on process pressure
- Double-wound helical coil design
- Minimizes cooling water needs
- Retained shellside gasket reduces reassembly time
- Mounting bracket can be installed without removing flange bolts

TS-GSC SAMPLE COOLER



TS-CLSC SAMPLE COOLER



SPECIFICATIONS

models	shell design	tube design	tube material	shell material	area	shipping weight
TS-GSC	450 psi at 650°F (31 bar at 343°C)	5175 psi at 1150°F (356 bar at 621°C)	Alloy 625 1/4 in OD x 0.035 in AW seamless	304 SS	2.4 ft² (0.22 m²)	17 lb (8 kg)
TS-CLSC	300 psi at 650°F (20 bar at 343°C)		Alloy 625 3/8 in OD x 0.065 in AW seamless		3.5 ft² (0.33 m²)	29 lb (13kg)