Staitech

HSC50 Sample Cooler

The HSC50 Sample Cooler is designed to allow clean steam and Water For Injection(WFI) samples to be taken quickly, easily and safely whilst maintaining product sterility during testing. Intended for use in systems where fouling of the coil through scale build-up is anticipated, the HSC50 can be easily disassembled for cleaning.

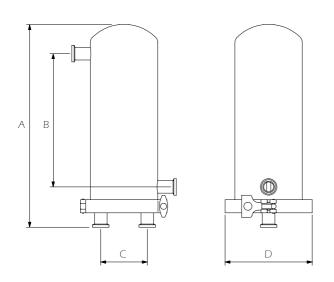
Applications requiring such a unit include continual pure steam condensing for conductivity monitoring and cooling of WFI for pump seal librication.

Sampling is achieved by bleeding a flow of clean steam or WFI through the central coil controlled using a throttling valve(HSV60). Cooling medium: typically mains water, passing through the shell of the unit absorbs heat from the test sample, condensing or cooling the sample prior to discharge from the coil.

All surfaces wetted by the sample medium have a maximum surface finish of 0.5 microns Ra. Full material certification is supplied for wetted parts.

Features offered by the HSC50 include:

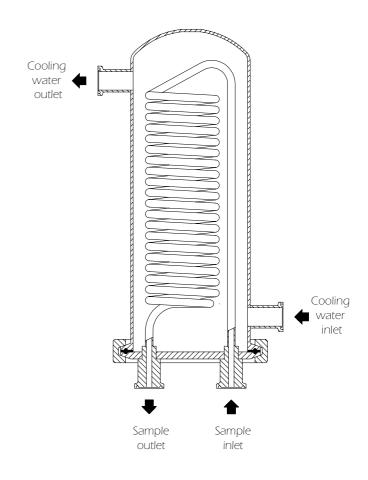
- 316L stainless steel construction suitable for clean steam and WFI systems.
- Unit designed to be disassembled easy to clean.
- Fully sterilisable/autoclavable satisfies validation criteria.
- Availability of hygienic sample valve allows fine control of sample flow during testing.
- Simple to install use of Tri-Clamp compatible fittings ensures that the HSC50 is simple to install.



Dimensions(mm)

Α	В	С	D	Weight(kg)
305	200	70	140	3.2

Specification subject to change without notice



Product Specification

Sample connections	1/2" Tri-Clamp® compatible			
Cooling water connections	3/4" Tri-Clamp® compatible			
Shell, coil & fittings	316L stainless steel			
Coil surface area	0.09m ²			
Coil design pressure	8 barg			
Shell design pressure	6 barg			
Surface finish				
Wetted surfaces External body and fitting	0.5 microns Ra* gs Satin polish			

*Coil formed from tube having an internal finish of 0.4 microns Ra.

Mounting

The HSC50 is designed to be mounted in a vertical orientation using a standard 4" pipe clamp.

Capacities(approximate)

Steam - 10 I/h of condensate at 30 $^{\circ}$ C from steam at 3 barg Water - 30 I/h of water from 85 $^{\circ}$ C to 30 $^{\circ}$ C

Based on a cooling water temperature of 20°C and flow rate of 0.1 l/s. Consult Staitech for other duties