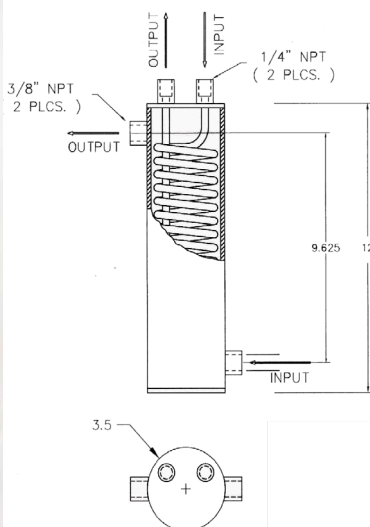




SAMPLE COOLER ESC-SS

PRODUCT DATA SHEET



PURPOSE

To cool hot water or steam samples for easy handling and effective sample collection. The Eddington Industries Sample Cooler is suitable for use on hot water, saturated steam, or superheated steam services.

FEATURES

- Rugged all-welded construction
- Heat exchange area - one sq. ft.
- 316 Stainless Steel coil

SPECIFICATIONS

Coil Material	Shell & End Plate Material	Coil Pressure	Shell Pressure	Coil Pressure Drop	Shell Pressure Drop
316 SS, ASTM A249	Shell 304 SS, ASTM A312	2250 PSIG @ 750°F	250 PSIG @ 250°F	2 PSIG @ 500 CCM	3 PSIG @ 3 GPM
	Ends 304 SS, ASTM SA240	2500 PSIG @ 500°F		8 PSIG @ 1000 CCM	8.5 PSIG @ 5 GPM
		3000 PSIG @ 250°F		20 PSIG @ 1500 CCM	

Pressure drop above is for flowing samples of water (not steam).

PERFORMANCE

Cooling water flow: 3 to 5 GPM

Hot Water Samples

Approach Temperature

Sample Flow (CCM)	Sample Inlet Temperature (°F)			
	200°F	400°F	600°F	700°F
500	2	4	6	7
1000	8	23	38	65
1500	20	55		

Saturated Steam Samples

Approach Temperature

Sample Flow (CCM)	Sample Inlet Temperature (°F)				
	150 PSIA @ 358°F	250 PSIA @ 401°F	500 PSIA @ 467°F	750 PSIA @ 511°F	1000 PSIA @ 545°F
500	70	55	37	28	22
1000			113	95	80

Superheated Steam Samples

Approach Temperature

Sample Flow (CCM)	Sample Inlet Temperature (°F) 1000 PSIA @ 750°F
500	39

- Approach temperature is added to the cooling water inlet temperature to obtain sample outlet temperature.
- Numbers given above vary with steam quality and are approximate.
- Increasing cooling water flow will reduce cooling water outlet temperature.
- Steam samples are to be throttled on the discharge of the cooler.