Centrifugal Boiler Blow Off Condensate Cooler

CEMLINE® blow down/condensate coolers are designed to receive blow down from a steam boiler, flash the blowdown to steam, and cool the condensate going to drain. CEMLINE Blow Down/Condensate Coolers are ASME code constructed and stamped for 150 PSI working pressure. Minimum Steel thickness is 3/16" where conditions require these vessels to be constructed with 1/4", 3/8" or ½" steel thickness.

The blow down enters the tangential inlet where it meets a 90 degree stainless steel wear plate. The wear plate will prevent erosion of the side wall of the vessel. The tangential blow down entry causes the blow down to swirl around the circumference of the vessel where part of the liquid will flash to steam and the balance will settle to the bottom. The internal flash will go through the vent to atmosphere and the hot condensate and sludge will fall to the bottom where it will flow by gravity to the drain leg.

The temperature of the condensate will activate the thermal control valve which will feed cold water into the drain leg where the cold water and hot condensate will mix. This results in drained liquid temperature which is acceptable for municipal sewage. The Blow down vessel is available without the condensate cooling leg.

Catalogue – Click here