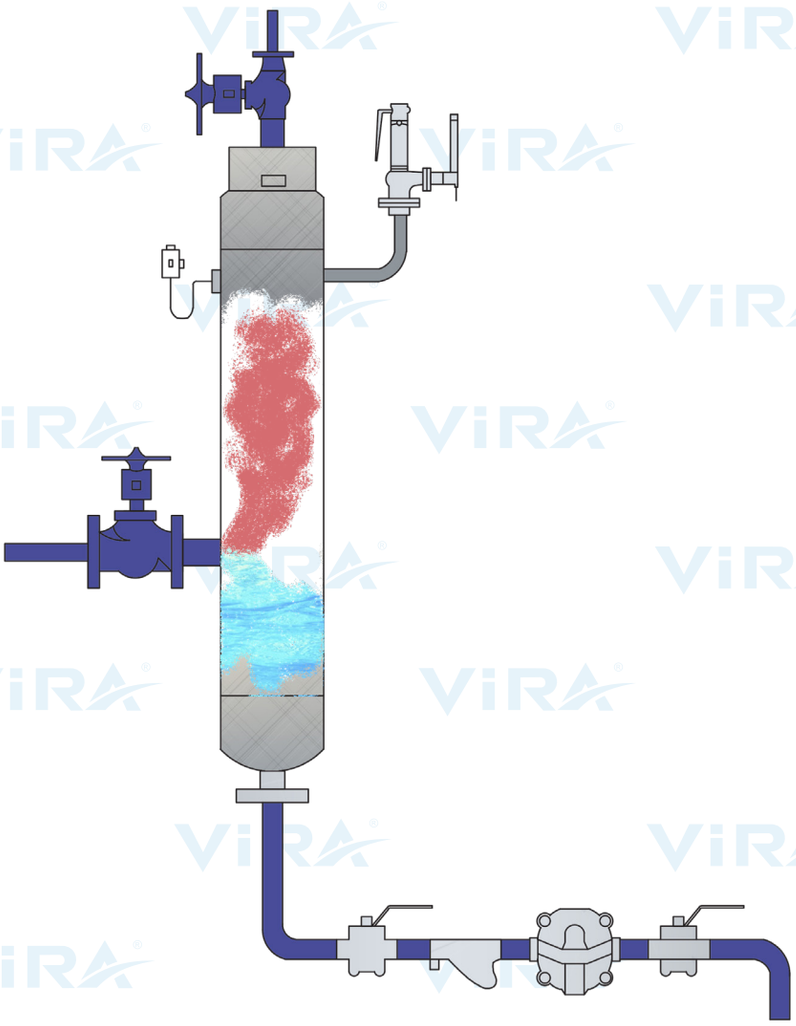
FLASH STEAM

Flash steam is produced when high-pressure condensate is discharged to a lower pressure. The word 'flash' describes the way it is formed.

Inside steam piping or any pressurized vessel, steam is generally utilized at a pressure above the atmospheric pressure. When this steam loses its heat either by transferring it to the product being heated or by radiation loss to the environment, condensate is formed. This condensate which is formed is also at the same pressure and temperature as that of steam.

This pressurized condensate is exposed to atmospheric pressure and it has energy more than it can contain at atmospheric pressure. This excess energy is used to convert a portion of this condensate into steam. This phenomenon is called flashing and the steam so generated is referred to as flash steam. ır.



Condensate can be reused in many different ways;

- As heated feedwater, by sending hot condensate back to the boiler's deaerator, for any applicable heating system.
- As hot water, for cleaning equipment or other cleaning applications
- As steam, by reusing flash steam.

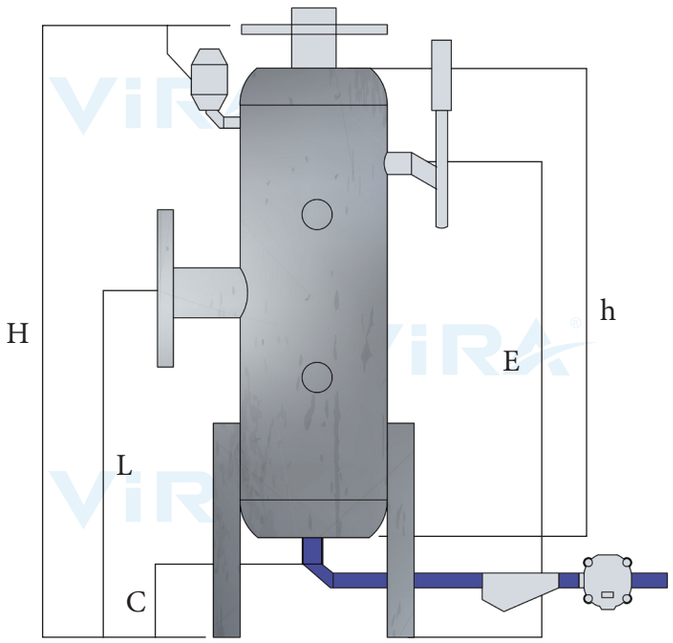
Benefits;

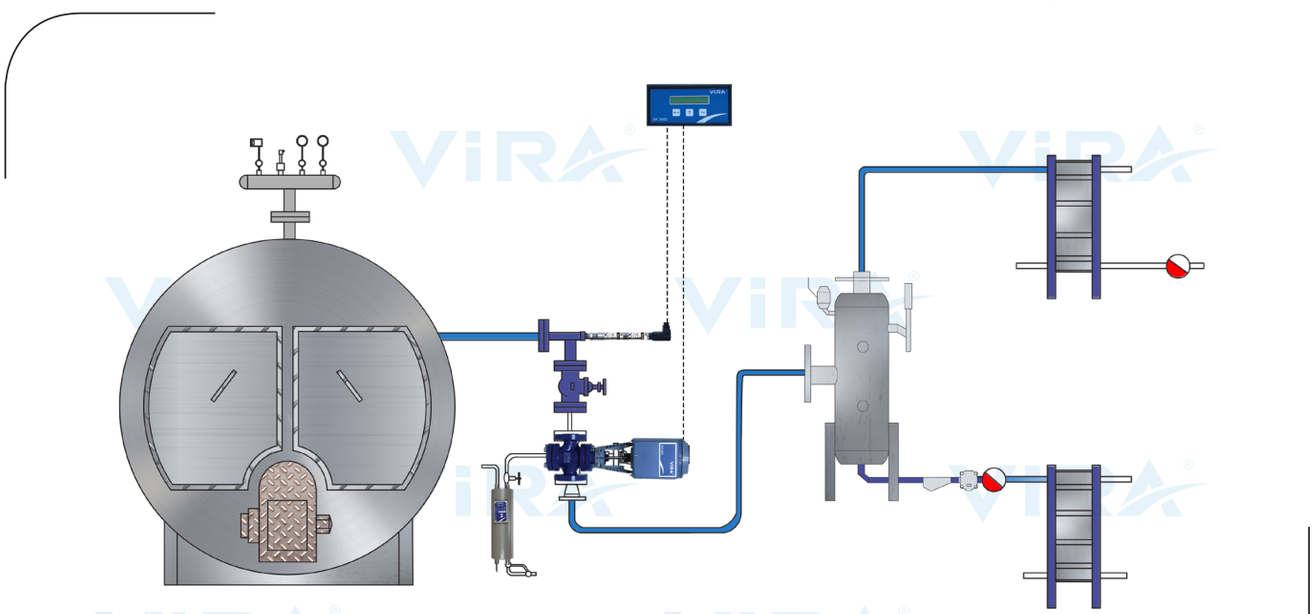
- Reduced fuel costs
- Lower water treatment expenses
- Environmentally safe and friendly

VFS

Flash Steam Tank

DIMENSIONS				
Model No	VFS-6	VFS-8	VFS-12	VFS-16
	mm	mm	mm	mm
h	914	914	1016	1219
L	533	533	584	660
C	241	241	241	241
H	1295	1321	1407	1613
E	914	914	1016	1219





Flash Steam Tank Application Example

To achieve maximum flash steam, the maximum amount of condensate is required. For this reason, the capacity of the steam traps should be carefully selected taking into account the counter-pressure capacity. Also, in systems with temperature control valves, it should be taken into account that the pressure will drop as soon as the valve is closed.

The use of flash steam should be close to the outlet of the high pressure condensate. Transporting low pressure flash steam requires larger diameters and increases the cost of insulation. In addition, the heat losses that will occur in large diameters will reduce the benefits to be obtained from the recovery of flash steam.

There should be a suitable area for flash steam usage. Usage areas should be in capacities equal to or above the flash steam amount. In places where flash steam is missing, steam can be used from a higher pressure steam line by reducing the pressure.

Since the flash steam used in heating is not necessary in the summer, the flash steam recovery system will be ineffective.