

Steam separators (Steam Driers)

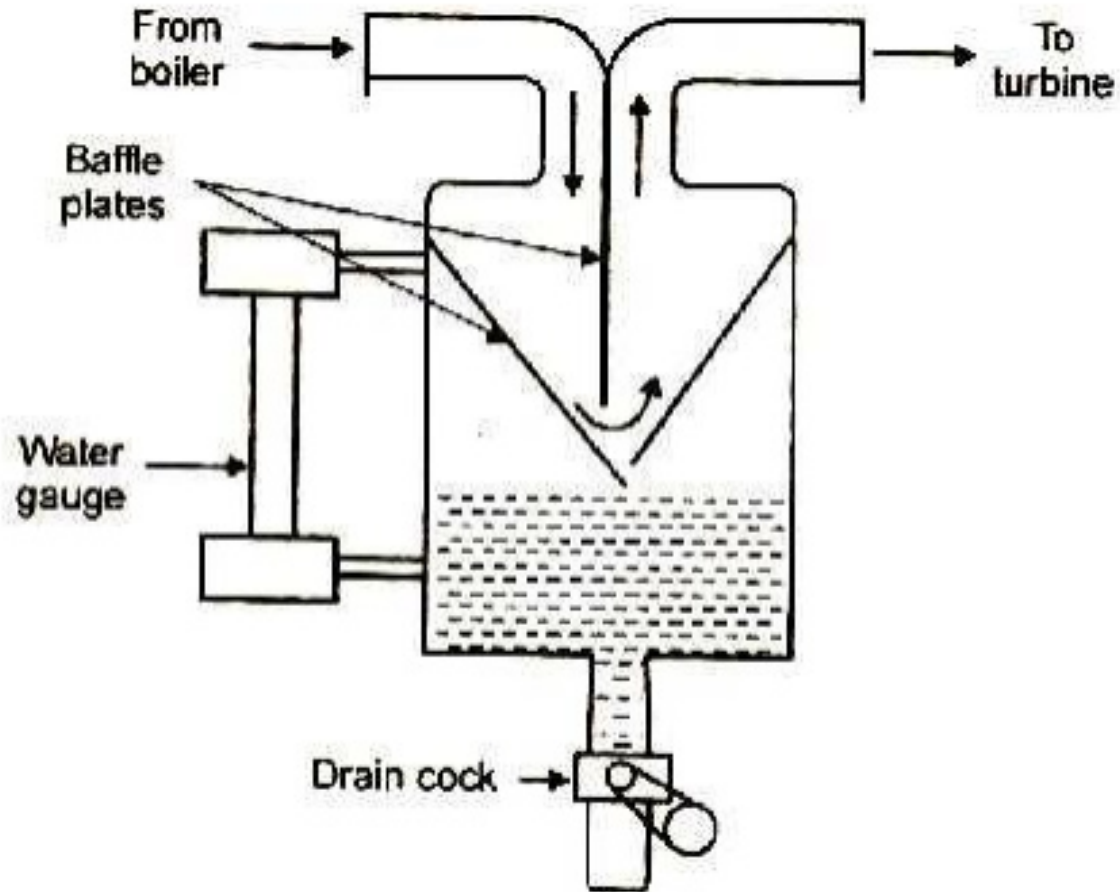


Figure: Steam separator

It separates water particles from steam before it is supplied to a steam engine or turbine. Thus it prevents the damaging of turbine blades due to moisture present in steam.

Steam separators (Steam Driers)

Function

It separates water particles from steam before it is supplied to a steam engine or turbine. Thus it prevents the damaging of turbine blades due to moisture present in steam.

Location

It is located in the supply line near the turbine or engine.

Construction

There are different types of steam separators. A separator with baffle plates is shown in figure. It consists of a cylindrical vessel. The vessel is fitted with baffle plates. A water gauge is fitted to indicate the water collected in the separator to drain away to separated water.

Working

The steam is allowed into the separator. The steam strikes the baffle plates and the direction of the flow is changed. As a result, heavier water particles in steam falls down to the bottom of the separator. The separated steam is free from water particles. It is passed to the turbine or engine through the outlet pipe.

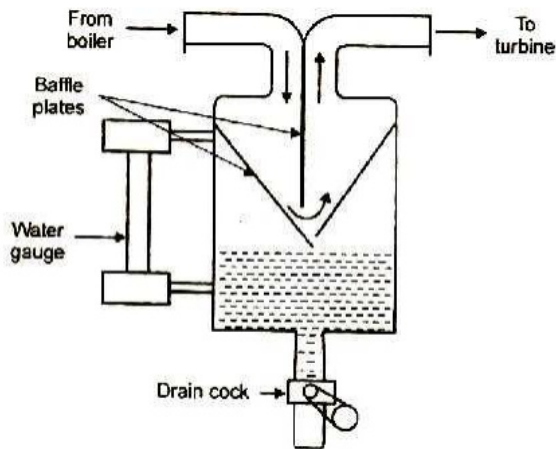


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