

Steam Boiler



Boiler or more specifically steam boiler is an essential part of thermal power plant.

Definition of Boiler

Steam boiler or simply a boiler is basically a closed vessel into which water is heated until the water is converted into steam at required pressure. This is most basic definition of boiler.

Working Principle of Boiler

The basic working principle of boiler is very very simple and easy to understand. The boiler is essentially a closed vessel inside which water is stored. Fuel (generally coal) is burnt in a furnace and hot gases are produced. These hot gases come in contact with water vessel where the heat of these hot gases transfer to the water and consequently steam is produced in the boiler.

Then this steam is piped to the turbine of thermal power plant. There are many different types of boiler utilized for different purposes like running a production unit, sanitizing some area, sterilizing equipment, to warm up the surroundings etc.