Feed pump

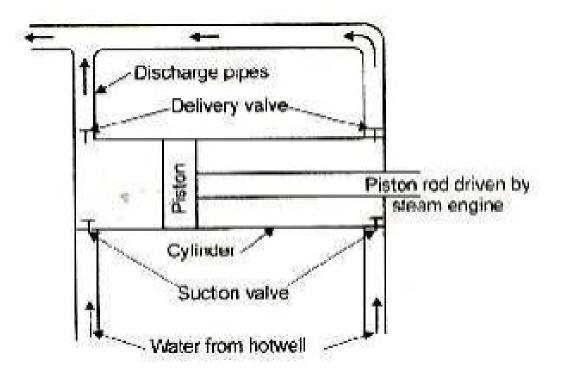


Figure: Feed pump (reciprocating type).

It delivers feed water into the boiler drum.

Feed pump

Function

It delivers feed water into the boiler drum.

Location

It is placed in between boiler and water supply source (hot well).

Construction

The feed pumps used may be of reciprocating type or rotary type (centrifugal pump). The reciprocating pump may use plunger or piston. It is driven by a steam engine or electric motor. The piston rod of the steam engine is connected directly with the piston rod of the pump (figure).

Working

When the piston moves to the right, vacuum is created in the left side of the piston. The water from the hot well is forced into the cylinder through the left side suction valve. When the piston returns (moves to the left), vacuum is created in the right side of the piston. The liquid from the well is sucked into the cylinder through the right side suction valve. At the same time, the liquid in the left side of the piston is forced out through the left side delivery valve into the delivery pipe. The operations are repeated. During each stroke, suction takes place on one side of the water is delivered continuously in the boiler.

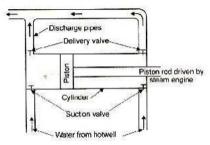


Figure: Feed pump (reciprocating type).

Figure: Feed pump (reciprocating type).