

ABSTRACT

A cold water intake pipe 4 and a hot water extraction pipe 5 that communicate with multiple spiral tubes 101 and a steam supplying pipe 2 and a condensate discharge pipe 3 that communicate with a shell are connected to a corrugated spiral tube type heat exchanger 1. Between the cold water intake pipe 4 and multiple spiral tubes 101, communication paths 46 that communicate between the cold water intake pipe 4 and some multiple spiral tubes 101a are provided, and a valve 44 is provided to communicate between the cold water intake pipe 4 and the other multiple spiral tubes 101b when the force acting from the cold water intake pipe 4 becomes larger than the force acting from the other multiple spiral tubes 101b and to block the cold water intake pipe 4 from the other multiple spiral tubes 101b when the force acting from the cold water intake pipe 4 becomes smaller than the force acting from the other multiple spiral tubes 101b.