

Abstract

Provided is a gas turbine system (1) including: an ammonia tank (13) configured to store ammonia; a combustor (12) connected to the ammonia tank (13); an exhaust flow passage (102) connected to the combustor (12); a boiler (14) provided in the exhaust flow passage (102); a steam turbine (16) connected to the boiler (14); a condenser (17) connected to the steam turbine (16); a seawater flow passage (107) (heat-medium flow passage) passing through the condenser (17); and a heat exchanger (20), which is arranged on an upstream side of the condenser (17) in the seawater flow passage (107), on a downstream side of the condenser (17) in the seawater flow passage (107), or in a flow passage (106) that connects the steam turbine (16), the condenser (17), and the boiler (14), the heat exchanger (20) through which an ammonia flow passage (103) that connects the ammonia tank (13) and the combustor (12) to each other passes.

(Fig.1)