

Abstract

The present application relates to a fuel gas heating device for heating a fuel gas supplied to a gas turbine. This device is provided with a hydrocarbon gas heater and a hydrogen-containing gas heater for heating, respectively, a hydrocarbon gas supplied as a fuel gas and a hydrogen-containing gas. The hydrocarbon gas heater heats a hydrocarbon gas by heat exchange with a first heat medium supplied from a first heat medium supply line. The hydrogen-containing gas heater heats a hydrogen-containing gas by heat exchange with a second heat medium supplied from a second heat medium supply line that branches from the first heat medium supply line.