

Title (en)
METHOD OF OPERATING A GAS AND STEAM TURBINE INSTALLATION AND INSTALLATION OPERATING ACCORDING TO SAID METHOD

Title (de)
VERFAHREN ZUM BETREIBEN EINER GAS- UND DAMPFTURBINENANLAGE SOWIE DANACH ARBEITENDE ANLAGE

Title (fr)
PROCEDE PERMETTANT DE FAIRE FONCTIONNER UNE INSTALLATION A TURBINES A GAZ ET A VAPEUR ET INSTALLATION
FONCTIONNANT SELON LEDIT PROCEDE

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Application
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• DE 4409196 A 19940317

Abstract (en)
[origin: DE4409196A1] The invention concerns a method of operating a gas and steam turbine installation (1) in which the heat present in the expanded working substance (A') and obtained from the gas turbine (2) is used for generating steam for the steam turbine (10) in a water-steam circuit (12). The working substance (A) for the gas turbine (2) is generated by combustion of a fuel (B, B') with the supply of compressed air (L). According to the invention, in order to increase the efficiency of the installation, before it is introduced into the steam turbine (10), the generated steam is superheated by means of heat produced during a hydrogen-oxygen combustion process. Connected downstream of the gas turbine (2) on the waste gas side, the installation (1) comprises a waste heat steam generator (14) containing a number of heating surfaces (20 to 28) arranged in the water-steam circuit (12) of the steam turbine (10). A hydrogen-oxygen burner (58) is provided between the waste heat steam generator (14) and the steam turbine (10) in the water-steam circuit (12).

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