Abstract

Method of and arrangement for deaerating a condensate

To deaerate a condensate (K) of a combined-cycle gas turbine plant (2), this condensate (K) is heated in a feedwater tank (26) to which preheated condensate (K') is fed and from which feedwater (S) is extracted for heating surfaces (6, 42, 52, 60) connected in the water/steam cycle (3) of the steam turbine (2b) and heated by the exhaust gas (AG) from the gas turbine (2a). In order to guarantee adequate deaeration of the condensate (K) at a simultaneously high efficiency of the plant through especially high energy utilization of the waste heat from the gas turbine (2a), according to the invention a partial flow (t_1) of the preheated condensate (K') or a partial flow (t_4) of preheated feedwater (S') is used as heating medium (HZ) for heating the condensate (K). To this end, in an arrangement for carrying out the method, a low-pressure economizer (42) is connected downstream of a condensate preheater (6) in the waste-heat steam generator (1) via a feedwater tank (26), the condensate preheater (6) or the low-pressure economizer (42) having on the outlet side an outflow line (34 or 74) leading into the feedwater tank (26).

FIG 1