Abstract

Method for operating a gas-turbine and steam-turbine plant and plant working accordingly

In a gas-turbine and steam-turbine plant with a waste-heat steam generator (6) which is located downstream of the gas turbine (2) on the exhaust-gas side and the high-pressure preheater (48) of which is connected into the water/steam circuit (8) of the steam turbine (4) having a low-pressure part (4c), there is provided according to the invention, to achieve as high a plant efficiency as possible, a heat exchanger (72) which is arranged outside the waste-heat steam generator (6) and of which the primary-side inlet is connected to the outlet of the high-pressure preheater (48) and of which the primary-side outlet is connected to the inlet of the high-pressure preheater (48) and which is connected on the secondary side into an overflow conduit (38) opening into the low-pressure part (4c) of the steam turbine (4). In a corresponding method for operating a plant of this type, low-pressure steam (ND) flowing into the steam turbine (4) is superheated as a result of indirect heat exchange with a part stream (t_s) of preheated feed water (S), the said part stream being extracted in the high-pressure preheater (48).

FIGURE