

Title (en)

METHOD AND DEVICE FOR COOLING A LOW-PRESSURE STAGE OF A STEAM TURBINE

Title (de)

VERFAHREN UND VORRICHTUNG ZUR KÜHLUNG EINER NIEDERDRUCKSTUFE EINER DAMPFTURBINE

Title (fr)

PROCEDE ET DISPOSITIF POUR LE REFROIDISSEMENT D'UN ETAGE BASSE PRESSION D'UNE TURBINE A VAPEUR

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Application

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Abstract (en)

[origin: DE19823251C1] The invention relates to a method and device for cooling at least one low-pressure stage (4) of a steam turbine (1) comprising a steam admission area (2) and a steam exhaust area (3). The steam turbine (1) is connected to at least one condenser (5) or is configured as a back pressure turbine. Condensate and/or steam from a cooling system (6) is injected as a cooling medium into the low-pressure stage (4) via a dosing device (7). Said condensate and/or steam is injected according to a temperature value which is measured in the low-pressure stage (4) and according to a parameter which is directly or indirectly correlated to the mass flow rate through the low-pressure stage (4). In an advantageous manner, such a method for cooling a low-pressure stage (4) of a steam turbine (1) reduces the exposure of the steam turbine (1) blades to the risk of erosion resulting from the beating of drops and is easier to control than control systems which are only dependent on temperature.

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