

Title (en)
Method for operating a gas turbine and rotor of a gas turbine

Title (de)
Betriebsverfahren für eine Gasturbine und Rotor einer Gasturbine

Title (fr)
Procédé d'exploitation d'une turbine à gaz et rotor de turbine à gaz

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Application
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Abstract (en)
The rotor (1) of a gas turbine has a plurality of rotor blade rows comprising a plurality of rotor blades (2). Each rotor blade is provided with a root (3) connected to a rotor body (4), a platform (5) that defines, with the platforms (5) of the other rotor blades (2) and a casing (6), a duct (7) in which the hot gases flow, and an airfoil (8) which exchanges mechanical power with the hot gases flow. Each rotor blade (2) also comprises beneath the platform (5) and at opposite side zones towards the root (3), a seat (9) housing a couple element (10) arranged to lie between two adjacent rotor blades (2) to couple the rotor blades (2) and additionally to seal the duct (7). During operation, the rotor blades (2) are all connected by the couple elements (10) and vibrate together as a coupled system, such that the natural frequencies of the rotor blades (2) vibrating together as a coupled system are away from the excitation vibrations. The present invention also relates to a method for operating a gas turbine.

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Citation (search report)
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