

Title (en)

WELDED ROTOR OF A GAS TURBINE ENGINE COMPRESSOR

Title (de)

GESCHWEISSTER ROTOR EINES GASTURBINENTRIEBWERKVERDICHTERS

Title (fr)

ROTOR SOUDÉ D'UN COMPRESSEUR DE GROUPE MOTOPROPULSEUR DE TURBINES À GAZ

Publication

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Application

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Abstract (en)

[origin: WO2011054758A1] The invention relates to a rotor (1) and a corresponding production method of a gas turbine compressor, comprising a plurality of rotor discs (3a, 3b, 4, 5) welded together, of which two or more rotor discs (3a, 3b) are welded together in a radially exterior area (9') and abut each other in a radially interior center area (9). A heat flow (8) radially outward from the center of the rotors (1) is achieved by means of the abutted joining to two rotor discs (3a, 3b), so that the material temperature of the rotor (1) during operation can be maintained below a prescribed level. The operating service life of the rotor (1) can thus be increased. The welded and abutting rotor discs (3a, 3b) according to the invention can be used at the last position in the flow direction of the compressor, wherein a rotor disc (3a) additionally comprises a recess (7) at the surface thereof that can be cooled from the outside.

IPC 8 full level

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