

PEES Power Systems

The blades of the power generator fan were blown off



Overview

the part you need to attach the puller is STILL on the generator. 75mm cap screw and washer, most of the way in, leaving maybe 1/4" - 1/2" of space from tight. then attach a puller to pop the fan. The potential failure of generator rotor fan vanes and blower blades has been identified as an area for detailed risk assessment in the electric power generation industry. The lifetime of these components are usually established on the basis of probabilistic crack initiation. The blades were laying in the bottom of the pan. The core of the fan was split and loose. The cooler air rotates in one close cycle, in this manner, the air after passing from i side of rotor, exits from the top of generator, and with passing from one cooler, cools with water flow. In gas turbine power plants, a fan is used as a cooling system to dissipate generated heat in coils (copper conductors) and generator electric circuits at the end sides of its rotor.

The blades of the power generator fan were blown off



Fracture Analysis of Generator Fan Blades

The failed fan consisting of 11 blades was mounted on the generator-rotor at the turbine end, and had a total service life of about 41000 hours prior to the failure. The fan rotational speed ...

fan hitting muffler on 22kw Generac Generator

you can order up a diagnostic manual for your unit that has nice pics and description how to do it. after new fan is installed the rotor bolt needs to be tightened to 30 Ft Lbs.



Lower cost
larger system

20Kwh

30Kwh



Verified Supplier

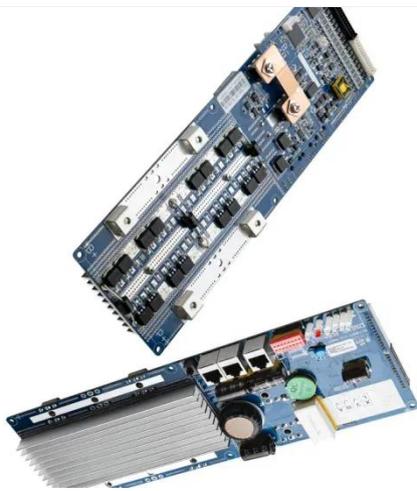


Understanding Steam and Gas Turbine - Generator Fan Failures

The potential failure of generator rotor fan vanes and blower blades has been identified as an area for detailed risk assessment in the electric power generation industry.

Failure analysis of generator rotor fan blades

The mechanical analysis capable of predicating stress and dynamic characteristics of turbo generator fan blades is needed to decrease blade failures. The experimental method and FEM ...



Failure Investigation of Gas Turbine Generator Cooling Fan Blades by

Fracture surfaces of two sets of rotor blades failed after strong testing procedures of aircraft engines in the test-stand are investigated by means of SEM. While the process of fatigue fracture in...

Microsoft Word

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Failure Investigation of Gas Turbine Generator Cooling Fan

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short circuit between rotor and stator and consequently generator explosion and lots of financial loss. Cooling system equipments were supplied by GEC-ALSTHOM Belford under the following ...

Understanding Steam and Gas Turbine - Generator ...

The potential failure of generator rotor fan vanes and blower blades ...



Failure Investigation of Gas Turbine Generator Cooling Fan ...

In order to study the imposed stresses of the fan blades due to operation, fan should be simulated. To do this, Computational Fluid Dynamic (CFD) code and Finite Element Method (FEM) were deployed ...

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Three kinds of blades were found in the turbine casing after the accident:

fractured blades, cracked blades and uncracked blades. The failure was at the turbine side of the generator and according to ...



Analysing the Failure of Gas Turbine Blades

Gas turbine blade failures can occur due to various reasons such as fan blade off, bird strike, icing, and containment issues. Understanding these failure scenarios is crucial for ensuring ...

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