

# Application of brush seals to steam turbine generators

-- Advanced Steam Turbine Sealing Solutions from Inpro/Seal



Description: -

-application of brush seals to steam turbine generators

Theses (University of Northumbria at Newcastle) application of brush seals to steam turbine generators

Notes: Ph.D. Thesis.

This edition was published in 1999



Filesize: 21.31 MB

Tags: #US6250640B1

## British Library EThOS: The application of brush seals to steam turbine generators

A failure in any area required the inspection team to mark the finding with a blue dot and inform engineering for a disposition. With brush seals which continuously rub against the rotor, it will be appreciated that the friction generated increases the temperature about the circumference of the rotor.

## Gas and steam turbines

The decrease in sealing performance caused by the brush seal clearance as described above is minimal, while the benefits of precluding or minimizing vibrations are substantial. Replaceable J-seals are a common inter-stage sealing technology used by steam turbine original equipment manufacturers OEMs. Moreover, the blow-down effect exacerbates the problem even further.

## Brush Seals by Bearings Plus, Inc.

In 1884 , a British engineer, recognized the advantage of employing a large number of stages in series, allowing extraction of the in the steam in small steps. DETAILED DESCRIPTION OF THE INVENTION Referring now to FIG. This required a substantial increase in pressures and temperatures.

## Brush seals for steam turbine applications

Blow-down is a radially inward flow of higher pressure upstream fluid causing the bristles to deflect toward the shaft, hence increasing the force of contact between the bristles and shaft, generating even higher temperatures resultant from the frictional contact. Mobility, flexibility, decentralized power generation, shorter construction time, reliable technology, robust design, optimization for easy maintenance bring benefits and increase your added value. Densely packed bristles bend with rotor contact, giving brush seals an innate ability to follow rotor movement with minimal wear.

## Brush Seals

The likeness to conventional carbon rings makes floating brush seals easy to install without having to remove the rotor and eliminates the need for costly casing modifications required by other seal technologies. Once the high spot passed the casing split joint, the rotor rolled smoothly without

noise. The turbine knocks down steam pressure by converting it into rotational energy to drive a small pump, a compressor or other equipment.

## **Mitigating and Managing J**

The SeaFloat power plants range provides a choice of different gas turbine types and the Siemens steam turbine SST-600. Attempts to roll the rotor failed; something internal to the steam path was preventing the rotor from performing as designed. To address this market, Siemens introduced a combined high- and intermediate pressure turbine considering super critical steam conditions in order to provide a cost effective solution including the lower output range from 250 to 500 MW.

### **Development of Brush Seal Technology for Steam Turbine Retrofit Applications**

Engineered for Performance Large utility steam turbine applications pose one of the most challenging applications to implement a brush seal. We can manufacture cross-sections as thin as.

## Related Books

- [BioEthics - opportunities, risks, and ethics : the privatization of cancer research](#)
- [Zen yang dang hao xian wei shu ji](#)
- [Who wrote the Gospels?](#)
- [Physical geography of the global environment](#)
- [Luther und der deutsche volksaberglaube.](#)