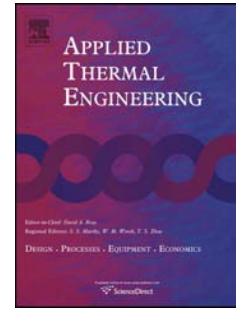


Accepted Manuscript

Influence of Water-air Ratio on the Heat Transfer and Creep Life of a High Pressure Gas Turbine Blade

S. Eshati, A. Abu, P. Laskaridis, F. Khan



PII: S1359-4311(13)00486-9

DOI: [10.1016/j.applthermaleng.2013.06.061](https://doi.org/10.1016/j.applthermaleng.2013.06.061)

Reference: ATE 4912

To appear in: *Applied Thermal Engineering*

Received Date: 10 July 2012

Revised Date: 19 June 2013

Accepted Date: 30 June 2013

Please cite this article as: S. Eshati, A. Abu, P. Laskaridis, F. Khan, Influence of Water-air Ratio on the Heat Transfer and Creep Life of a High Pressure Gas Turbine Blade, *Applied Thermal Engineering* (2013), doi: 10.1016/j.applthermaleng.2013.06.061.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Influence Of Water-Air Ratio On The Heat Transfer And Creep Life Of A High Pressure Gas Turbine Blade : ATE 4912

Highlights

- The influence of WAR on gas turbine blade heat transfer and creep life is examined.
- Coolant specific heat capacity is the key property affected by changes in WAR.
- Increase in WAR reduces the coolant and metal temperature along the blade span.
- Creep life increases with increase in WAR even if ambient temperature is increased.

Download English Version:

<https://daneshyari.com/en/article/7049815>

Download Persian Version:

<https://daneshyari.com/article/7049815>

[Daneshyari.com](https://daneshyari.com)