Author's Accepted Manuscript

The role of anelastic recovery in the creep-fatigue interaction of 9–12% Cr steel at high temperature

Shang-Lin Zhang, Fu-Zhen Xuan, Su-Juan Guo, Peng Zhao



ww.elsevier.com/locate/iimecso

PII: S0020-7403(16)30569-0

DOI: http://dx.doi.org/10.1016/j.ijmecsci.2017.01.018

MS3556 Reference:

To appear in: International Journal of Mechanical Sciences

Received date: 25 October 2016 Revised date: 7 January 2017 Accepted date: 9 January 2017

Cite this article as: Shang-Lin Zhang, Fu-Zhen Xuan, Su-Juan Guo and Pen Zhao, The role of anelastic recovery in the creep-fatigue interaction of 9–12% C steel at high temperature, International Journal of Mechanical Sciences http://dx.doi.org/10.1016/j.ijmecsci.2017.01.018

This is a PDF file of an unedited manuscript that has been accepted fo publication. As a service to our customers we are providing this early version o the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable 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

ACCEPTED MANUSCRIPT

The role of anelastic recovery in the creep-fatigue interaction of 9-12% Cr steel at high temperature

Shang-Lin Zhang, Fu-Zhen Xuan*, Su-Juan Guo, Peng Zhao

Key Laboratory of Pressure System and Safety, MOE; School of Mechanical and Power Engineering; East China University of Science and Technology, Shanghai 200237, P.R China

*Corresponding author. Fax: 86-21-64253513, Tel: 86-21-64252819. E-

mail: fzxuan@ecust.edu.cn

ccelogic

Abstract

Fatigue tests of 9-12% Cr ferrite steel with various hold times at both peak and valley points were conducted under stress control at 898K. The role of anelastic recovery in the creep-fatigue interaction was discussed systematically. Results indicate that anelastic strain increases primarily with the cycle increase and then

Download English Version:

https://daneshyari.com/en/article/5016071

Download Persian Version:

https://daneshyari.com/article/5016071

<u>Daneshyari.com</u>