Accepted Manuscript

A modified unified viscoplasticity model considering time-dependent kinematic hardening for relaxation with effect of loading history

Wufan Chen , Fenghua Wang , Takayuki Kitamura , Miaolin Feng

PII: S0020-7403(17)31642-9
DOI: 10.1016/j.ijmecsci.2017.09.048
Reference: MS 3959

To appear in: *International Journal of Mechanical Sciences*

Received date: 16 June 2017
Revised date: 2 September 2017
Accepted date: 26 September 2017

Please cite this article as: Wufan Chen , Fenghua Wang , Takayuki Kitamura , Miaolin Feng , A modified unified viscoplasticity model considering time-dependent kinematic hardening for relaxation with effect of loading history, *International Journal of Mechanical Sciences* (2017), doi: 10.1016/j.ijmecsci.2017.09.048

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.

ACCEPTED MANUSCRIPT

Highlights

- A modified constitutive model was proposed based on the unified visco-plasticity theory.
- Both positive and negative strain rate sensitivities with a long holding time can be simulated by the proposed model.
- Several examples show some potential descriptions and the strong dependence on prior uploading strain rates for relaxation.
- Parameter selection for the proposed model is discussed in detail.

ACCEPTED MANUSCRIPT

Download English Version:

https://daneshyari.com/en/article/5016060

Download Persian Version:

https://daneshyari.com/article/5016060

Daneshyari.com