



DOWNLOAD



## Strain rate sensitivity of automotive sheet steels: influence of plastic strain, strain rate, temperature, microstructure, bake hardening and pre-strain

By Patrick Larour

Shaker Verlag Jun 2010, 2010. Buch. Book Condition: Neu. 21x14.8x cm. Neuware - This experimental work shows the different parameters influencing the strain rate sensitivity behaviour of automotive sheet steel grades in crash conditions. Most investigations have been performed in the strain rate range [10<sup>-3</sup>-200s<sup>-1</sup>] and temperature range [233-373K] with servohydraulic tensile testing machines. Additional Split-Hopkinson bar testing results up to 103s<sup>-1</sup> have also been included at room temperature. The focus has been laid on the 'apparent' strain rate sensitivity, determined based on multiple dynamic flow curves at constant strain rate in a semi-logarithmic (b10 values) or logarithmic (m values) way. It has been shown that the dynamic behaviour in the investigated strain rate and temperature range is clearly thermally activated for a wide range of automotive sheet steels. This means that an increase in strain rate is nearly equivalent to a decrease in temperature. The strain rate sensitivity values are dependent on the strain rate range considered, as well as on the temperature and plastic deformation range chosen. The strain rate sensitivity decreases with increasing plastic strain level due to a gradual exhausting of work hardening potential combined with adiabatic softening effects. The strain rate sensitivity increases with decreasing...



**READ ONLINE**  
[ 5.38 MB ]

### Reviews

*This is basically the very best book we have go through until now. I have got read and i also am confident that i am going to gonna study once again again in the future. I am just very happy to inform you that this is basically the very best ebook we have read inside my own life and might be he very best publication for at any time.*

-- **Angus Hickle**

*It is not difficult in read through easier to comprehend. It is packed with knowledge and wisdom You may like just how the article writer write this pdf.*

-- **Kristy Hermann**

## You May Also Like



### **Maurice, or the Fisher's Cot: A Long-Lost Tale**

Alfred A. Knopf. Hardcover. Book Condition: New. 0375404732 Never Read-12+ year old Hardcover book with dust jacket-may have light shelf or handling wear-has a price sticker or price written inside front or back cover-publishers mark-Good Copy- I ship FAST with FREE tracking!!...



### **Read Write Inc. Phonics: Pink Set 3 Storybook 1 Scruffy Ted**

Oxford University Press, United Kingdom, 2016. Paperback. Book Condition: New. Tim Archbold (illustrator). 167 x 135 mm. Language: N/A. Brand New Book. These engaging Storybooks provide structured practice for children learning to read the Read Write Inc. Set 1 and 2 sounds...



### **Funny Poem Book For Kids - Cat Dog Humor Books Unicorn Humor Just Really Big Jerks Series - 3 in 1 Compilation Of Volume 1 2 3**

CreateSpace Independent Publishing Platform. Paperback. Book Condition: New. This item is printed on demand. Paperback. 132 pages. Dimensions: 9.0in. x 6.0in. x 0.3in.LIMITED-TIME SPECIAL: Special Bonus Inside! Thats right. . . For a limited time you can download a FREE audiobook version...



### **MY FIRST BOOK OF ENGLISH GRAMMAR 3 IN 1 NOUNS ADJECTIVES VERBS AGE 5+**

EURO KIDS. Paper Back. Book Condition: New. Please note: We do not ship to PO Boxes, please provide us with your complete delivery address.



### **Way it is**

Second Story Press. Paperback. Book Condition: new. BRAND NEW, Way it is, Donalda Reid, It's the 1960s - the time for equal rights, peace, and love. But for Ellen Manery, it's the time to work hard and finish high school early. She'd...



### **Klara the Cow Who Knows How to Bow (Fun Rhyming Picture Book/Bedtime Story with Farm Animals about Friendships, Being Special and Loved. Ages 2-8) (Friendship Series Book 1)**

Createspace, United States, 2015. Paperback. Book Condition: New. Apoorva Dingar (illustrator). Large Print. 214 x 149 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.Klara is a little different from the other cows, because she has a very special...