Accepted Manuscript

Dynamic large strain characterization of tantalum using shear-compression and shear-tension testing

A. Dorogoy, D. Rittel

 PII:
 S0167-6636(17)30155-2

 DOI:
 10.1016/j.mechmat.2017.06.003

 Reference:
 MECMAT 2751

To appear in: Mechanics of Materials

Received date:27 February 2017Revised date:25 May 2017Accepted date:21 June 2017

Please cite this article as: A. Dorogoy, D. Rittel, Dynamic large strain characterization of tantalum using shear-compression and shear-tension testing, *Mechanics of Materials* (2017), doi: 10.1016/j.mechmat.2017.06.003

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.



Highlights

- Dynamic testing of polycrystalline tantalum in shear-compression and shear-tension.
- Characterization of the large strain behavior at high strain rate of $\sim 10^4$ 1/s.
- Utilization of Johnson-Cook material model with ductile damage and damage evolution.
- Higher damage accumulation rate in shear-tension compared to shear compression.
- Ductility is higher in shear-compression compared to shear-tension.

A CERTIFIC MAN

Download English Version:

https://daneshyari.com/en/article/5018454

Download Persian Version:

https://daneshyari.com/article/5018454

Daneshyari.com