

Accepted Manuscript

Finite cell method implementation and validation of a nonlocal integral damage model

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PII: S0020-7403(16)31178-X
DOI: [10.1016/j.ijmecsci.2017.05.008](https://doi.org/10.1016/j.ijmecsci.2017.05.008)
Reference: MS 3683



To appear in: *International Journal of Mechanical Sciences*

Received date: 28 December 2016
Revised date: 15 May 2017
Accepted date: 17 May 2017

Please cite this article as: M. Ranjbar , M. Mashayekhi , J. Parvizian , A. Düster , E. Rank , Finite cell method implementation and validation of a nonlocal integral damage model, *International Journal of Mechanical Sciences* (2017), doi: [10.1016/j.ijmecsci.2017.05.008](https://doi.org/10.1016/j.ijmecsci.2017.05.008)

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Highlights

- Finite Cell Method is developed for a nonlocal integral damage model.
- A nonlocal integral damage model for ductile materials is implemented in a high order finite element code known as AdhoC.
- An experiment is performed on AA7075-T6 to show the validity of the used damage model and the numerical method.
- The efficiency of the method is investigated for a porous domain as a more complex geometry.

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