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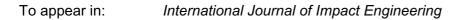
Experimental and Numerical Studies on the Expanding Fracture Behavior of an Explosively Driven 1045 Steel Cylinder

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 PII:
 S0734-743X(16)30907-1

 DOI:
 10.1016/j.ijjimpeng.2017.07.008

 Reference:
 IE 2955



Received date:11 November 2016Revised date:20 June 2017Accepted date:5 July 2017

Please cite this article as: Mingtao Liu, Guowu Ren, Cheng Fan, Tiegang Tang, Xiaoyan Wang, Haibo Hu, Experimental and Numerical Studies on the Expanding Fracture Behavior of an Explosively Driven 1045 Steel Cylinder, *International Journal of Impact Engineering* (2017), doi: 10.1016/j.ijimpeng.2017.07.008

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Highlights

- The fracture behavior of a 1045 steel cylinder subjected to internal explosive loading is studied.
- The initiation and propagation of multiple shear bands in the expanding cylinder are
- numerically reproduced.
- The fracture mechanism, size and velocity of fragment are analyzed and compared between the experiment and simulation.
- The close agreements between experiment and simulation demonstrate the validity of the multi-stage model for shear bands.

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