

Abstract Submitted  
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**Numerical Studies on the Explosive Welding by Smoothed Particle Hydrodynamics (SPH)** KATSUMI TANAKA, National Institute of Advanced Industrial Science and Technology — A particular characteristic of an explosively produced weld is that the profile of the weld interface often has a regular wavy appearance. An effect of detached shock wave and jetting on the metal interface of explosive welding has been shown by SPH (Smoothed particle hydrodynamics). Numerical results show wavy interface which is observed in several experiments. High speed jet between interface and Karman vortex after oblique impact of a flyer plate to a parent plate were major mechanism of explosive welding.

Katsumi Tanaka  
National Institute of Advanced Industrial Science and Technology

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