

Abstract Submitted
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Lateral Stress Measurements in Pure Tungsten During Shock Loading J.C.F. MILLETT, Cranfield University, N.K. BOURNE, University of Manchester, G.T. GRAY, Los Alamos National Laboratory — Longitudinal and lateral stresses during the shock loading of pure tungsten have been measured using manganin stress gauges. The Hugoniot has been compared to the previous work of others and shown to be in close agreement. Lateral stresses have been shown to increase behind the shock front, implying that shear strength decreases. Whilst this is similar to results in tantalum, comparison with the recovery experiments of others suggests that this may be due to a brittle failure process.

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