

Abstract Submitted
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Material Strength in Vanadium¹ STEPHEN POLLAINE, ROBERT CAVALLO, THOMAS LORENZ, BRUCE REMINGTON, ED ALLEY, DAVID BAILEY, Lawrence Livermore National Laboratory — Preliminary results of measurements of vanadium strength at 600 kb and 1 Mb, at strain rates between $10^7/s$ and $10^8/s$, are inconsistent with the Steinberg-Guinan [1] model, which is independent of strain rate, but can be made consistent with other models, such as PTW [2]. We compare several different strength models to the data.

[1] D.J. Steinberg, S.G. Cochran, and M.W. Guinan, J. Appl. Phys. 51, 1498 (1980).

[2] D.L. Preston, D.L. Tonks, and D.C. Wallace, J. Appl. Phys. 93, 211 (2003).

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