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Isentropic Compression Experiments at Imperial College SIMON BLAND, G. BURDIAK, J. SKIDMORE, G. SWADLING, J.P. CHITTENDEN, M. WEINWURM, S.V. LEBEDEV, G.N. HALL, F. SUZUKI-VIDAL, L. PICK-WORTH, Imperial College London, P. CONG, NorthwestInstituteofNuclearTechnology in China — We report on initial isentropic compression experiments carried out in the Institute of Shock Physics at Imperial College London. The 1.5MA MAG-PIE generator and newly commissioned 2MA MACH generator were both used to drive strip lines of various materials and thicknesses and the motion of the electrodes monitored with Het-V and laser probing. Plans for future experiments are presented including heated and cryogenic targets for studying phase changes under pressure; and the addition of external magnetic fields for shear strength measurements. New methods to drive targets to higher pressures are also discussed; along with the use of diagnostics including X-ray diffraction and scattering.

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