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The effect of varying aspect ratios on the low strain rate behaviour of metals and polymers AMNAH KHAN, JENS BALZER, WILLIAM PROUD, Institute of Shock Physics, Imperial College London — This poster looks at the effect of varying aspect ratios, from 1:4 to 3:1, on a number of different materials, including aluminium and polycarbonate. A range of strain rates ($10^{-4} \, \mathrm{s}^{-1}$ to $10^{+3} \, \mathrm{s}^{-1}$) is achieved using quasi-static Instron equipment, drop weight machines and Split Hopkinson Pressure Bars. The mechanical behaviour is discussed, and high-speed video used to further the analysis.

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