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Development of tensile SHPB system and properties of AM Maraging steel. CHRISTOPHER BRAITHWAITE, DAVID WILLIAMSON, NICHOLAS TAYLOR, University of Cambridge — Additively Manufactured (AM) materials have great industrial potential, but remain relatively under-studied, particularly at high strain rates. This paper describes the modification of a tensile SHPB system in order to study the properties of an AM Maraging steel and a comparison with the equivalent wrought material. Results demonstrate an unexpected level of ductility in the AM steel, as well as good levels of reproducibility. This reproducibility speaks both to the consistency of manufacture in the specimens but also the reliability of the apparatus used.

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