

Abstract Submitted
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Impact performance of aluminium foams in a direct impact Hopkinson bar TOM COWIE, LEWIS LEA, CHRIS BRAITHWAITE, SMF Group, Cavendish Laboratory, University of Cambridge — The impact performance of aluminium foams has been studied using a direct impact Hopkinson bar. The bar system, including the striker, has been equipped with a PDV system as opposed to gauges, which allows for much more complete deformation information to be obtained. A series of interrupted tests which limit the strain in the material to a known value, in conjunction with x-ray tomography have given valuable insight into the failure mechanisms of aluminium foams and the localisation of damage within the structure.

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