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Brazilian Disc Experiments on a Cold Spray Material C.H. BRAITHWAITE, Fracture and Shock Physics, SMF Group, Department of Physics, Cavendish Laboratory, J J Thomson, Avenue, Cambridge CB3 0HE, UK, B. AY-DELOTTE, Georgia Institute of Technology School of Materials Science and Engineering, 771 Ferst Drive, J. Erskine Love Building, Atlanta, GA 30332-0245 USA, A.P. JARDINE, Fracture and Shock Physics, SMF Group, Department of Physics, Cavendish Laboratory, J J Thomson, Avenue, Cambridge CB3 0HE, UK — Characterisation of novel materials presents a number of unique difficulties to the experimenter, however these are problems which must be overcome in order to effectively utilise such materials in systems level applications. A series of experiments were performed to probe the tensile behaviour of a two cold sprayed composite materials containing a mixture of nickel, aluminium, tungsten and zirconium. Data were acquired at two different strain rates and collected using high speed photography, strain gauges, force-extension measurements and digital image correlation techniques. Comparisons were made with modelling on representative microstructural elements in the CTH code.

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