

Through thickness non-destructive residual stress-mapping on Friction Stir Welds for the space industry

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OHB System AG is one of the leading space companies in Europe, delivering satellites and high-tech components for the space sector.

Friction stir welding (FSW) is of particular interest for joining of space and aircraft components made from high strength aluminium alloys because it provides high-quality joints with low distortion. We here present an initial work, started with the Institut Laue-Langevin (ILL), regarding neutron measurements for the non-destructive evaluation of residual stresses in friction stir welds.