

Hardness Analysis of Samples of Friction Stir Welded Joints of (Al-Cu)

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Abstract : Friction Stir Welding (FSW) is a Solid-State joining process. Unlike fusion welding techniques it does not involve operation above the melting point temperature of metals, but above the re-crystallization temperature. FSW also does not involve fusion of other material. FSW of ALUMINIUM has been commercialized and recent studies on joining dissimilar metals have been studied. Friction stir welding was introduced and patented in 1991 by The Welding Institute. For this paper, a total of nine samples each of copper and ALUMINIUM(Dissimilar metals) were welded using FSW process and Vickers Hardness were conducted on each of the samples.

Keywords : friction stir welding (FSW), recrystallization temperature, dissimilar metals, aluminium-copper, Vickers hardness test

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