

Microstructural Changes Determining Joint Strength in Friction Stir Welding of Aluminium Alloys

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Keywords: welding, friction, microstructure

Abstract. In the paper the results of a wide experimental activity on friction stir welding (FSW) of aluminum alloys are reported. In particular the butt joints of two different materials, namely AA1050-O and AA6082-T6 were considered. Grains dimensions and precipitates density were investigated both in the parent materials and after the welding processes. Furthermore post-welding heat treatments effects on the joint strength were studied.