

Investigation on Effect of Tool Size & Welding Parameters on FSW Butt Joint – A Review

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Abstract:

This review paper discuss about the effect of tool geometry (Tool Pin Profile & Tool Shoulder Diameter) and different friction stir welding parameters like Tool rotational speed, Tool travel speed, Tool force on butt weld joint of different sizes and grades of material. The tool profile plays critical role in determining the end properties of welding joint apart from other parameters like rotational speed, welding speed and axial force. [1] [2] the paper focuses on FSW parameters in different conditions and their effect on mechanical properties and microstructure of weld join. [2] The careful selection of FSW process parameters can avoid the void formation, micro cracks and other defects.[15]

Keywords:

FSW, Tool Pin Profile, Tool Shoulder Diameter, Rotational Speed, Travel Speed, Al-Alloy (AZ91D), Tensile Strength

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