

Friction Stir Welding Process as a Solid State Joining -A Review

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Abstract : Through this paper an attempt is made to review a special welding technology of friction stir welding (FSW) which is a solid-state joining. Friction stir welding is used for joining of two plates which are applied compressive force by using fixtures over the work table. This is a non consumable type welding technique in which a rotating tool of cylindrical shape is used. Process parameters such as tool geometry, joint design and process speed are discussed in the paper. Comparative study of Friction stir welding with other welding techniques such as MIG, TIG & GMAW is also done. Some light is put on several major applications of friction stir welding in different industries. Quality and environmental aspects of friction stir welding is also discussed.

Keywords : friction stir welding (FSW), process parameters, tool, solid state joining processes

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