

# **MECHANICAL PROPERTIES OF ALUMINUM JOINTS WELDED BY FRICTION STIR WELDING**

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## **ABSTRACT**

The influence of tool rotational speed and welding speed during friction stir welding is studied in the case of aluminum plates with 6 mm thickness. When a tool rotational speed of 1000 rpm is applied with welding speed of 1.5 mm/sec, an optimum tensile strength was obtained in this investigation. Also, it has been found that the microhardness increases with welding speed and decreases as the rotational speed increased.

**KEYWORDS:** Aluminum Alloys, Friction Stir Welding, Hardness, Tensile Strength