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## STUDY ON PHASED ARRAY ULTRASONIC NONDUSTRUCTIVE TESTING FOR ALUMINIUM ALLOY FRICTION STIR WELDING

## Abstract

The typical defect characteristics in aluminium alloy friction stir welding(FSW) were analysed in the paper, and the basic priciples and characteristics of phased array ultrasonic testing(PAUT) were investigated. The typical defects in aluminium alloy of FSW were detected using PAUT technology, and the testing results were compared with optical microscopy. The experiment results presented showed that the PAUT has potential usage in nondestructive inspection of FSW.