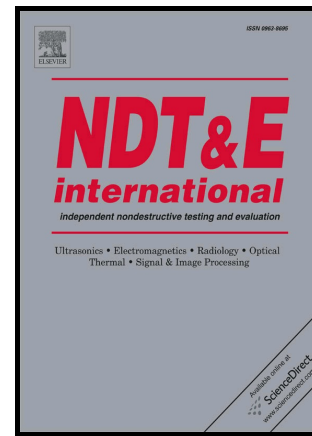


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Searching for Hidden Cracks and Estimations of Their Depths by using the Database

Marko Jesenik, Miloš Beković, Anton Hamler, Mladen Trlep



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Searching for Hidden Cracks and Estimations of Their Depths by using the Database

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Abstract :

This paper introduces measurements using eddy currents and the estimation of hidden crack dimensions. The measurements were made on the defect-free side of the aluminium plate. The dimensions of the excitation coil were investigated with the aim of optimizing the sensitivity of the measurements. Measured values were smoothed properly in order to ease further processing. Furthermore, the estimation of the crack dimensions was made using pre-calculated values obtained with a Finite Element Model. Measurements and tests were made for three different test plates with straight cracks and for one test plate with a crack that was not straight.

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