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Ultrasonic IR thermographic inspection of graphite epoxy composite: a comparative study of piezoelectric and magnetostrictive stimulation

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Abstract:

In this paper the experimental results of piezoelectric and magnetostrictive ultrasonic stimulation are comparatively analyzed in the evaluation of impact damage in a graphite epoxy composite sample chosen for a round robin test. By comparing theoretical and experimental results, it is shown that the equivalent power of internal friction can reach some hundreds mill watt per a single crack.