Flaw Detection in Ultrasonics Using Wavelets Transform and Split Spectrum processing

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Abstract : In ultrasonic techniques, information on defects characterization possibilities have required more evolved techniques development than classical methods. to obtain a high probability of defect detection, these methods use signal processing algorithms in order to enhance signal to noise ration. In this paper, some signal processing algorithms mike split spectrum processing (SSP) and wavelets are developed and implemented on computer allowing their utilization in ultrasonics NDT results processing.

Keywords: NDT, Ultrasonics, Split spectrum techniques, continuous wavelets transform, digital wavelets