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DETERMINATION OF MECHANICAL AND PHYSICAL PROPERTIES OF MATERIALS BY ULTRASOUNDS

A. Badidi Bouda, R. Halimi, H. Hamidi, M. Benzohra, S. Lebaili

Abstract : The ultrasonic waves, with the matter interaction study, is an increasingly effective tool for qualitative and/or quantitative characterization of industrial materials. In this article, we describe experimental studies, which were the work object at the Welding and Control Center (CSC), based on the measurement of some simple ultrasonic parameters such as propagation velocities and attenuation coefficients of the longitudinal and transverse waves through various samples. These measurements were taken on samples of suitable nature, shape and dimensions and eventually heat treated in order to obtain the required properties.

Keywords : Ultrasounds, Attenuation, Velocity