

Kuts I.V., Protasov A.G., Lysenko Iu.Iu., Dugin O.L. Pulsed Eddy Current Non-Destructive Testing of the Coating Thickness - XI European Conference on Non-Destructive Testing 2014, 06-10 October 2014.

Usually the procedure of eddy current nondestructive testing includes harmonic excitation of the object and then evaluation of the received signal amplitude and phase. This article is devoted to pulse eddy current nondestructive testing which is a simple and effective alternative. It is discussed the use of pulsed eddy current testing for thickness evaluation of the non-magnetic coating which is placed on the low magnetic basis. It is described the method of information signal processing which is based on the Hilbert transform. This method makes it possible to obtain a response from fronts of the exciting pulse signal for the system "sensor - object". The experimental results of coating thickness evaluation are given. The frequency and attenuation of a signal which looks like a damped sinusoid are used as informative parameters. It was found a general nature of the dependence these parameters from the coating thickness.

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