

1.10.19. SIMULATION ASSISTED POD OF A HIGH FREQUENCY EDDY CURRENT INSPECTION PROCEDURE

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Structure reliability guaranty requires prior evaluation of non destructive testing methods. The concept of Probability of Detection (POD) is generally used to quantitatively assess performances and reliability of testing operations. High costs of POD campaigns combined with continuous increase in configurations needing POD determination make cost reduction of POD campaigns a major issue. Development and maturity of NDT modelling tools is today a credible prospect for low cost NDT data generation useable in the context of POD studies.

This paper presents first results of simulation assisted POD of a high frequency eddy current inspection procedure obtained with the new POD module of CIVA. The methodology used for describing uncertainties on the input simulation parameters is described and comparisons with experimental results are presented and discussed.