

Application of Optical Method for Calcul of Deformed Object Samples

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Abstract : The electronic speckle interferometry technique used to measure the deformations of scatterers process is based on the subtraction of interference patterns. A speckle image is first recorded before deformation of the object in the RAM of a computer, after a second deflection. The square of the difference between two images showing correlation fringes observable in real time directly on monitor. The interpretation these fringes to determine the deformation. In this paper, we present experimental results of deformation out of the plane of two samples in aluminum, electronic boards and stainless steel.

Keywords : optical method, holography, interferometry, deformation

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