

## Buckling analysis of the plates with Initial transversal deformations

Elena-Felicia Beznea  
Dunarea de Jos University of Galati

### ABSTRACT

*In the paper the results obtained on buckling behaviour of plates made of composite materials used in ship structures are presented. The fabrication technologies are mostly based on the hand made. So, the probability to occur material imperfections is too big. These imperfections, such as deviations from the designed directions of fibers, deviations from the designed thicknesses of the layers, and from the total thickness of the panel, inclusions can contribute to the plates characteristics changing. The results obtained by numerical analysis of the composite plates with initial transversal imperfections were compared with the results obtained for the plates made of steel, having the same type of imperfections.*

*Keywords: modal analysis, initial tensions, finite elements*

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