Article Abstract

Title:	**A variational analysis for large deflection of skew plates under uniformly distributed load through domain mapping technique**
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Abstract:	In the present paper, the static behaviour of thin isotropic skew plates under uniformly distributed load is analyzed with the geometric nonlinearity of the model properly handled. A variational method based on total potential energy has been implemented through assumed displacement field. The computational work has been carried out on a square normalized domain based on an appropriate domain mapping technique. Validation study for the present work has been carried out quite extensively to establish its accuracy and stability. The developed method is quite general to be applied readily for any classical boundary condition, but to maintain brevity results have been furnished for clamped and simply supported boundaries only.
Keywords:	Skew plate; Variational method; Domain mapping; Large deflection; Jacobian