THE VISCOELASTIC MINDLIN-TIMOSHENKO THIN PLATE MODEL WITH NON-LINEAR ELASTIC TERMS

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On the way from the small displacement theory to a more general visco-elastic model it is usually assumed, that nonlinear terms appear only in the description of the immediate elastic reaction of the material and its viscous creeping is still considered being linear. Using these assumptions we shall formulate the system of equations describing a motion of a Mindlin-Timoshenko thin plate and we shall investigate the existence of its solution.