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## BUCKLING AROUND THE PENNY-SHAPED INTERFACE CRACK

### Abstract

*In the framework of the piece-wise homogeneous body model with use of the Three-Dimensional Linearized Theory of Stability the buckling problem of the circular sandwich plate with two parallel interface penny-shaped cracks is studied. The rotationally symmetrical buckling is considered and it is assumed that the lateral boundary of the plate is clamped and circumferentially compressed inward through this clamp by fixed radial displacement. Corresponding eigen-value and boundary value problems are solved numerically by employing FEM, local buckling of the coating layers around the cracks is investigated, the numerical results illustrating the influence of the problem parameters to this phenomenon are presented.*