

Buckling under External Pressure of Cylindrical Shell with Thickness Variation

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Summary

This study focuses on the buckling of cylindrical shell with small thickness variations under external pressure. Asymptotic formulas in terms of the thickness non-uniformity parameter are derived by the combined perturbation and the Bubnov-Galerkin methods. In addition to the analytic investigation, numerical analysis is also being performed. Results from these formulas are discussed and compared with those obtained by other authors.

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