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Selected Publications:

Book:

Harry Kraus, Thin elastic shells: an introduction to the theoretical foundations and the analysis of their static and dynamic behavior, Wiley, 1967

Journal Articles, etc.:

H. Kraus, "Thermally induced vibrations of thin nonshallow spherical shells, AIAA J., vol. 4, no. 3, pp. 500–505, 1966. doi:10.2514/3.3464

Fox, J.D.; Kraus, H.; Penny, R.K.: Shakedown of pressure vessels with ellipsoidal heads. Proc. Inst. Mech. Engrs. 186 (1972) 431.

L.E. Penzes and H. Kraus, "Free vibration of prestressed cylindrical shells having arbitrary homogeneous boundary conditions", AIAA Journal, Vol. 10, No. 10, 1972, pp. 1309-1313

Brown, K. W. and Kraus, H., "Stability of Internally Pressurized Vessels with Ellipsoidal Heads," Paper presented at the 2nd National Congress on Pressure Vessels and Piping Technology, San Francisco, June 23-27, 1975.

Brown, K.W.; Kraus, H.: Stability of internally-pressurised vessels with ellipsoidal heads. J. Press. Vess. Tech., Trans. ASME 98 (1976) 157–161

ABSTRACT: Cylindrical vessels with 2:1 ellipsoidal heads in the range of radius to thickness ratios from 200 to 5000 were analyzed with a finite element program to determine the internal pressures that would cause circumferential wrinkling (buckling). The vessels and heads were taken to be of equal thickness and linear work hardening was assumed wherever appropriate. The buckling pressures were obtained by the adjacent equilibrium method; thus, post-buckling behavior was not considered. Comparisons to other contemporary analyses and experimental data were also made.