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Selected Publications:

Book:

Shell Stability Handbook, Lars A. Samuelson, Sigge Eggwertz, 1992, ISBN: 185166954X, Pages: 303, Elsevier Applied Science

SUMMARY: The Shell Stability Handbook is a handbook for calculation of the carrying capacity of shell structures with respect to buckling. The aim has been to develop a branch independent handbook which gives conservative estimates of the carrying capacity. The safety factors which should be used in a certain case must be taken from the applicable code for the considered structure, e.g. pressure vessel codes, steel structure codes etc. Initiator behind the handbook is Professor Lars A. Samuelson who already in the seventies during his time at the Aeronautical Research Institute of Sweden felt a strong need for such a handbook. The development of the handbook, which also included substantial research in the field of shell stability, started in 1982. The first Swedish edition was published in 1990.

Journal Articles, etc.:

Samuelson, L. Å.: An Experimental Investigation of Creep Buckling of Circular Cylindrical Shells Subject to Axial Compression. Aeronautical Research Institute of Sweden (FFA), Report No. 98, 1964.

Samuelson, L. Å.: A Theoretical Investigation of Creep Deformation and Buckling of a Circular Cylindrical Shell under Axial Compression and Internal Pressure. Aeronautical Research Institute of Sweden (FFA). Report Nr. 100, 1964

Samuelson, Å.: The Aeronautical Research Institute of Sweden, Rep. No. 108, Stockholm, 1967.

Lars Åke Samuelson, "Experimental Investigation of Creep Buckling of Circular Cylindrical Shells Under Axial Compression and Bending", Journal of Manufacturing Science and Engineering, Vol. 90, No. 4, pp. 589-595, November 1968

Samuelson, L.A., "Creep Buckling of a Circular Shell", AIAA Journal, Vol. 7, No. I, pp. 42-49, Jan. 1969

Lars Åke Samuelson, "Creep buckling of a cylindrical shell under non-uniform external loads", *International Journal of Solids and Structures*, Vol. 6, No. 1, January 1970, pp. 91-116

Samuelson, Å., Vestergren, P.: *Analysis of Axially Loaded Stringer Stiffened Circular Cylinders*. FFA TN HU-2134, 1979.

L. A. Samuelson, "Practical analysis methods for design of circular cylinders with longitudinal stiffeners and subjected to axial compression," in *Buckling of Shells. A State-of-the-Art Colloquium*. Universität Stuttgart. Institut für Baustatik, 1982, pp. 20.1–20.24.

Samuelson, L. A., Vandepitte, D. and Paridaens, R., "The background to the ECCS recommendations for buckling of stringer stiffened cylinders", *Proc. of Int. Coll. on Buckling of Plate and Shell Structures*, Ghent, pp 513-522, 1987.

Samuelson, L. A. (1987). *Design of Cylindrical Shells Subjected to Local Loads in Combination with Axial or Radial Pressure*. *Proc. Int. Colloquium on the Stability of Plate and Shell Structures*, Gent, Belgium, ECCS:pp. 589-596.

Samuelson, L. A. (1990). *Effect of Local Loads on the Stability of Shells Subjected to Uniform Pressure Distribution*. *Proc. IUTAM Symposium on Contact Loading and Local Effects in Thin-Walled Plated and Shell Structures*, Prague, Preliminary Report 1990:pp. 34-38.

S. F. Eggwertz and L. Å. Samuelson, "Buckling strength of spherical shells", *Journal of Constructional Steel Research*, Vol. 17, No. 3, 1990, pp. 195-216

Sigge Eggwertz and Lars Å. Samuelson, "Design of shell structures with openings subjected to buckling", *Journal of Constructional Steel Research*, Vol.18, No. 2, 1991, pp. 155-163

Eggwertz, S., Samuelson, L. A., 1991. *Buckling of shells with local reinforcements*. In: *Buckling of Shell Structures, on Land, in the Sea and in the Air*, J. F. Jullien (Ed.), Elsevier Applied Science, London and New York, p. 401–408

Lars A. Samuelson, "The ECCS Recommendations on shell stability, Design Philosophy and Practical Applications" in *Buckling of shell structures, on land, in the sea, and in the air*, edited by J. F. Jullien, Elsevier Applied Science Publishing Co., Inc., New York, 1991