

Dr. Samuel B. Batdorf

Problem	Figure	Reference	Edge Condition
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	1	2	Simply supported (u=0, v=0) Clamped (u=0, v=0) Clamped (u=0, v=0)
	2	2	Simply supported (u=0, v=0) Clamped (u=0, v=0) Clamped (u=0, v=0)
		(Leggett)	(Simply supported (u=v=0) Clamped (u=v=0)
9	3	3	Simply supported. Clamped.
	14	14	Simply supported
	5	4	Simply supported
1 + +	Not shown	5	Simply supported Clamped
	6(a)	6	Simply supported
	6(b)	6	Clamped.

From: S. B. Batdorf, "A simplified method of elastic-stability analysis for thin cylindrical shells. II – Modified equilibrium equation", NACA TN No. 1342, 1947

See:

http://coewww.rutgers.edu/aam/fellows/fellows.html http://www.asme.org/about-asme/honors-awards/achievement-awards/honorary-member

Selected Publications:

Hu, P.C., Lundquist, E.E. and Batdorf, S.B., "Effect of small deviations from flatness of effective width and buckling of plates in compression", NACA TN 1124, 1946

Batdorf, S. B., Stein, M. and Libove, C., "Critical Combinations of Longitudinal and Transverse Direct Stress for an Infinitely Long Flat Plate With Edges Elastically Restrained Against Rotation", NACA WR L-49, 1946

- Batdorf, S. B., "A simplified method of elastic-stability analysis for thin cylindrical shells, NACA Rep. 874, 1947
- S. B. Batdorf, "A simplified method of elastic-stability analysis for thin cylindrical shells. I Donnell's Equation", NACA TN No. 1341, 1947
- S. B. Batdorf, "A simplified method of elastic-stability analysis for thin cylindrical shells. II Modified equilibrium equation", NACA TN No. 1342, 1947, see also NACA Report 874, 1947
- S. B. Batdorf and M. Stein, "Critical combinations of shear and direct stress for simply-supported rectangular flat plates", NACA TN 1223, 1947
- Batdorf, S. B., Schildcrout, M., and Stein, M., "Critical Stress of Thin walled Cylinders in Axial Compression," NACA TN 1343, 1947.
- S. B. Batdorf, Manuel Stein, and Murry Schildcrout, "Critical stress of thin-walled cylinders in torsion", NACA Langley Memorial Aeronautical Laboratory, Technical Note No. 1344, June 1947, proxy Url: http://handle.dtic.mil/100.2/ADA801285
- Batdorf. S.B., Schildcrout, M., and Stein, M., Critical Stress of Thin-walled Cylinders in Axial Compression, N.A.C.A. Rep. No. 887, 1947
- S.B. Batdorf, M. Schildcrout and M. Stein, "Critical stress of long plates with transverse curvature", NACA TN-1346, 1947
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- S. B. Batdorf and Murry Schildcrout, "Critical axial-compressive stress of a curved rectangular panel with a central chordwise stiffener", NACA TN 1661, 1948
- Libov, Charles, and Batdorf, S. B., "A general small-deflection theory for flat sandwich plates", NACA Rep. 899, 1948
- Batdorf, S.B., "Theories of plastic buckling", J. Aero. Sci., Vol. 16, pp. 405-408, 1949
- S. B. Batdorf and B. Budiansky, "A mathematical theory of plasticity based on the concept of slip", NACA TN 1871, 1949