

Many solutions to linear plate problems are discussed in Chapter 4. Comparisons to published results are carried out in order to verify the computer algorithms. An explanation of shear locking is included.

Solutions of plates undergoing large displacements and moderate rotations are contained in Chapter 5 and the solution algorithm is presented. Results from the modified von Karman type strain displacement relations are compared to linear assumptions.

Chapter 6 is devoted to linear cylindrical shell applications, including many well-known test cases. Verification of the shell element is made. Thick laminated pressure vessels are studied.

The solution to several nonlinear cylindrical shell panel problems is reviewed in Chapter 7. Deep laminated panels undergoing large rotations are studied. The methods of solution are the displacement and load control Newton-Raphson technique and the constant arc length method.

Both cylindrical shell and plate bifurcation solutions are provided in Chapter 8.

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