1. Record Nr. UNINA9910785808003321 **Autore** Bhavikatti S. S Titolo Theory of plates and shells [[electronic resource] /] / S.S. Bhavikatti New Delhi,: New Age International, 2012 Pubbl/distr/stampa **ISBN** 81-224-3492-4 Descrizione fisica 1 online resource (313 p.) Soggetti Shells (Engineering) Plates (Engineering) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references. ""Cover ""; ""Preface ""; ""Contents ""; ""Chapter 1 Introduction to Plates Nota di contenuto ""; ""1.1 Coordinate Systems ""; ""1.2 Stresses on an Element ""; ""1.3 Types of Theories of Plates ""; ""1.3.1 Theory of Thin Plates with Small Deflections ""; ""1.3.2 Theory of Thin Plates with Large Deflections ""; ""1.3.3 Theory of Thick Plates ""; ""Questions ""; ""Chapter 2 Pure Bending of Plates ""; ""2.1 Slope in Slightly Bent Plate ""; ""2.2 Curvature of Slightly Bent Plate ""; ""2.3 Principal Curvature ""; ""2.4 Displacement--Strain Relations ""; ""2.5 Strains in Terms of w "" ""2.6 Strain-Stress Relations """"2.7 Expressions for Moments ""; ""2.8 Moment in any Direction ""; ""2.9 Principal Moments ""; ""Questions ""; ""Chapter 3 Small Deflections of Laterally Loaded Plates ""; ""3.1 Stress Resultants on a typical Plate Element "": ""3.2 Equations of Equilibrium ""; ""3.3 Expressions for Vertical Shears ""; ""3.4 Boundary Conditions ""; ""3.5 Corner Reaction ""; ""Questions ""; ""Chapter 4 Fourier Series of Loadings ""; ""4.1 Fourier Series of Loads on Beams ""; ""4.2 Fourier Series for UDL on Beams ""; ""4.3 Fourier Equivalent for UDL Over a Small Length "" ""4.4 Fourier Equivalent for a Concentrated Load """"4.5 Fourier Equivalent for Hydrostatic Load ""; ""4.6 Fourier Equivalent for Triangular Load with Peak Value at Mid-span ""; ""4.7 Double fourier series Expressions for Loads ""; ""4.8 Double Fourier form for UDL "";

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