

## Mathematical Methods for Elastic Plates



Filesize: 1.48 MB

### ***Reviews***

*An extremely wonderful publication with lucid and perfect reasons. It typically will not expense too much. You are going to like the way the blogger compose this publication.*  
(Prof. Maya Hand)

## MATHEMATICAL METHODS FOR ELASTIC PLATES



To read **Mathematical Methods for Elastic Plates** PDF, remember to click the button listed below and save the file or have accessibility to additional information that are in conjunction with MATHEMATICAL METHODS FOR ELASTIC PLATES ebook.

Springer London Ltd, United Kingdom, 2016. Paperback. Book Condition: New. 235 x 155 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.Mathematical models of deformation of elastic plates are used by applied mathematicians and engineers in connection with a wide range of practical applications, from microchip production to the construction of skyscrapers and aircraft. This book employs two important analytic techniques to solve the fundamental boundary value problems for the theory of plates with transverse shear deformation, which offers a more complete picture of the physical process of bending than Kirchhoff's classical one. The first method transfers the ellipticity of the governing system to the boundary, leading to singular integral equations on the contour of the domain. These equations, established on the basis of the properties of suitable layer potentials, are then solved in spaces of smooth (Holder continuous and Holder continuously differentiable) functions. The second technique rewrites the differential system in terms of complex variables and fully integrates it, expressing the solution as a combination of complex analytic potentials. The last chapter develops a generalized Fourier series method closely connected with the structure of the system, which can be used to compute approximate solutions. The numerical results generated as an illustration for the interior Dirichlet problem are accompanied by remarks regarding the efficiency and accuracy of the procedure. The presentation of the material is detailed and self-contained, making *Mathematical Methods for Elastic Plates* accessible to researchers and graduate students with a basic knowledge of advanced calculus. Softcover reprint of the original 1st ed. 2014.



[Read Mathematical Methods for Elastic Plates Online](#)

[Download PDF Mathematical Methods for Elastic Plates](#)

## Relevant eBooks



### [PDF] Mother Carey s Chickens

Access the link beneath to get "Mother Carey s Chickens" file.

[Save Document »](#)



### [PDF] Homespun Tales

Access the link beneath to get "Homespun Tales" file.

[Save Document »](#)



### [PDF] The Birds Christmas Carol

Access the link beneath to get "The Birds Christmas Carol" file.

[Save Document »](#)



### [PDF] The Flag-Raising

Access the link beneath to get "The Flag-Raising" file.

[Save Document »](#)



### [PDF] Mother Stories

Access the link beneath to get "Mother Stories" file.

[Save Document »](#)



### [PDF] Children s Handwriting Book of Alphabets and Numbers: Over 4,000 Tracing Units for the Beginning Writer

Access the link beneath to get "Children s Handwriting Book of Alphabets and Numbers: Over 4,000 Tracing Units for the Beginning Writer" file.

[Save Document »](#)