

Design for Bending, Torsion and Buckling (Paperback)

By Carl F Zorowski

Createspace Independent Publishing Platform, United States, 2017. Paperback. Condition: New. Language: English . Brand New Book ***** Print on Demand *****. Design Monograph V deals with predicting the internal stress states created by bending, torsion and buckling deformation behavior. In addition to presenting classical solution models applicable to simple geometries and loadings the content is expanded to cover more complex circumstances not always covered in standard texts on the subject. Chapter 1 of Design for Bending begins with the classic simple beam theory model that predicts a linear internal normal bending stress distribution that balances the bending moment at that location. However, it is only applicable to a beam whose cross section possesses an axis of symmetry. This model is generalized to apply to beams possessing any general cross section geometry with no restriction on how the loading is applied. In Chapter 2 advantage of the area properties about rotated axes in the cross-section permit a simplification of the general stress formulation. This leads to a convenient method of determining the neutral axis of bending and the location and magnitude of the maximum stress. Chapter 3 presents two numerical examples that demonstrate the application of this procedure to a specific right...



Reviews

This publication can be really worth a go through, and a lot better than other. It is actually writter in straightforward words and phrases instead of confusing. I discovered this pdf from my dad and i suggested this publication to learn. -- Jackeline Rippin

A high quality book and also the font employed was intriguing to read. I was able to comprehended every thing out of this created e book. You wont really feel monotony at whenever you want of the time (that's what catalogues are for concerning should you check with me). -- Prof. Johnson Cole Sr.