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| Autore | Chen Wai-Fah <1936, > |
| Titolo | Understanding structural engineering : from theory to practice / / Wai-Fah Chen, Salah El-Din E. El-Metwally |
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| ISBN | 1-5231-3441-0 0-429-15165-9 1-4398-2711-7 |
| Descrizione fisica | 1 online resource (266 p.) |
| Altri autori (Persone) | El-MetwallySalah El-Din E |
| Disciplina | 624.1 |
| Soggetti | Structural engineering Electronic books. |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
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| Note generali | Description based upon print version of record. |
| Nota di bibliografia | Includes bibliographical references. |
| Nota di contenuto | Front Cover; Contents; Preface; Authors; Chapter 1: From Science to Engineering; The Era of Elasticity; Chapter 3: The Era of Plasticity; Chapter 4: The Era of Finite Element; Chapter 5: Strut-and-Tie Model for Design of Structural Concrete Discontinuity Regions; Chapter 6: Toward Advanced Analysis for Steel Frame Design; Chapter 7: The Era of Model-Based Simulation; Back Cover |
| Sommario/riassunto | From science to engineering and from theory to practice, it illustrates different breakthroughs, traced back to their origin and placed into perspective. First, the text presents the fundamental laws of mechanics, the theory of elasticity, and the development of the generalized stress-generalized strain concept. Next, it details the era of plasticity. The finite element method comes as an offspring of the generalized stress generalized strain concept. Finally, the authors explore the era of computer simulation to offer a glimpse into the future-- |