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| Autore | Hübel Hartwig |
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| Note generali | Description based upon print version of record. |
| Nota di bibliografia | Includes bibliographical references at the end of each chapters and index. |
| Nota di contenuto | Introduction to plastic behavior of materials and structures -- Behavior of structures subjected to variable loading -- STPZ for monotonic loading -- STPZ for cyclic loading -- STPZ in case of temperature dependent material properties -- Overlay-Model -- STPZ in case of multilinear hardening -- Limit analysis with the STPZ. |
| Sommario/riassunto | The present book provides a new method to estimate elastic-plastic strains via a series of linear elastic analyses. For a life prediction of structures subjected to variable loads, frequently encountered in mechanical and civil engineering, the cyclically accumulated deformation and the elastic plastic strain ranges are required. The Simplified Theory of Plastic Zones (STPZ) is a direct method which provides the estimates of these and all other mechanical quantities in the state of elastic and plastic shakedown. The STPZ is described in detail, with emphasis on the fact that not only scientists but engineers working in applied fields and advanced students are able to get an idea |

of the possibilities and limitations of the STPZ. Numerous illustrations and examples are provided to support the reader's understanding.