

Preface to the Third Edition


Many developments and clarifications in the theory of creep and its applications to engineering problems, which have occurred since the publication of the second edition in 2005, are reflected in numerous additions and emendations in the present edition. Many improvements have been made throughout, e.g. by elimination and rearrangement as well as necessary additions.

Session 4.1 has been extended to the primary creep behaviour of austenitic steel including own experimental data, where both the strain- and time-hardening-theory have been taken into account in more detail.

Typical creep curves for metals, polymers, and ceramics have been discussed in a new Chapter 14.

Some new publications have been discussed in the text and added to the list of References.

Furthermore, the navigation system on the CD on the inside back cover of the book has been checked and improved.

Again, for users, executing the MAPLE worksheets interactively, the programs are indicated in the text by data names like  11_3.mws, for instance. For a better overview, a MAPLE navigation worksheet (*index.mws*) with a direct access to all application examples and algorithms, is also included on the compact disk CD-ROM.

Finally, I would like to express my appreciation to my Assistant, Dipl.-Ing. Uwe NAVRATH, for preparing the camera-ready manuscript in \LaTeX . His competence and skill have been indispensable for me.

Thanks are due to Springer-Verlag, in particular to Mrs. Carmen WOLF and Dr. Christoph BAUMANN for their readiness to publish the third edition of this monograph and for their agreeable cooperation.

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Josef Betten



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Betten, J.

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