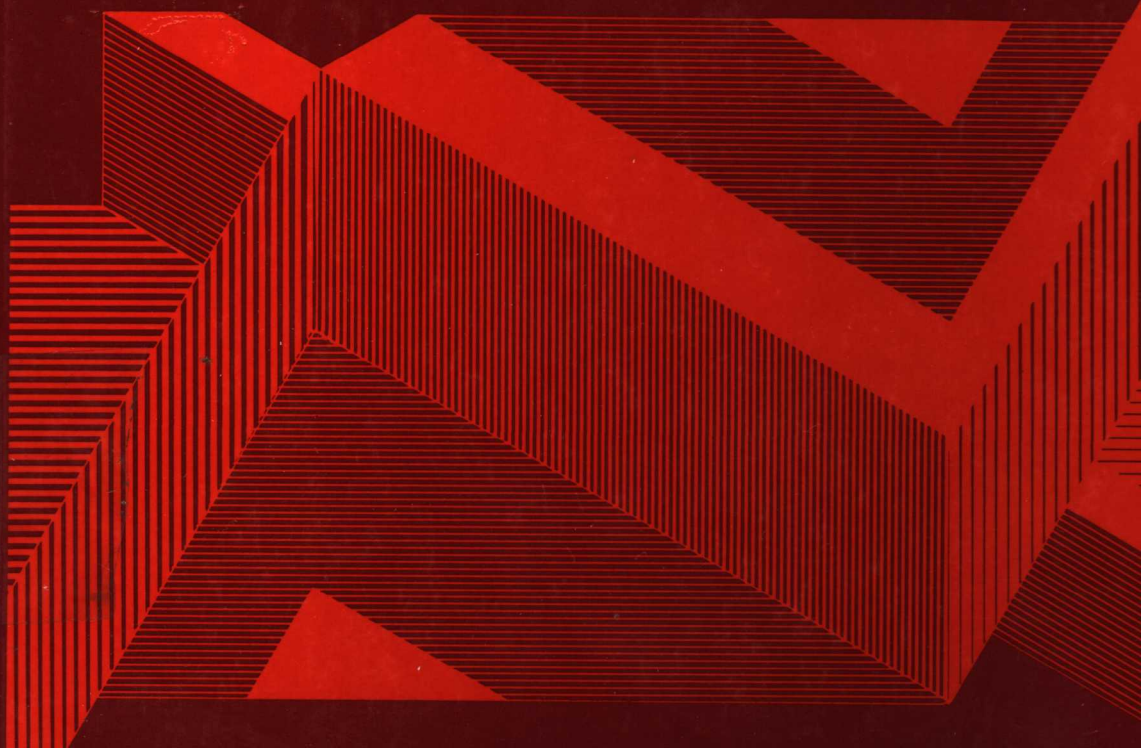


THIRD EDITION

JELEN'S COST AND OPTIMIZATION ENGINEERING

KENNETH K. HUMPHREYS



JELEN'S COST AND OPTIMIZATION ENGINEERING

Third Edition

Edited by

Kenneth K. Humphreys, PE CCE

Executive Director

American Association of Cost Engineers

Sponsored by the American Association of Cost Engineers

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DEDICATED TO DR. Frederic C. Jelen, and the late Drs. James H. Black and Aaron Rose who were in great measure responsible for the three editions of this book. Their contributions to the cost engineering profession will be a lasting example for many future generations of cost estimators, cost and schedule control professionals and project managers to emulate.

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JELEN'S COST AND OPTIMIZATION ENGINEERING

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PREFACE

Cost engineering encompasses all aspects of cost estimating, cost and schedule control, and project management as they apply to engineering work. The cost engineering profession continues to expand in its complexity and importance and has changed significantly since the first edition of this book in 1970.

The third edition has been substantially expanded over its predecessors and incorporates much new material on planning and scheduling, progress control, productivity management, value engineering, and numerous other topics which in 1970 were only beginning to gain attention in the profession. Most of the material from the second edition has been retained, and expanded upon in the third edition.

Dr. Frederic C. Jelen, who edited the first and second editions of the book, has retired, and Dr. James H. Black, who co-edited the second edition and who in fact originally conceived the idea to develop this book in the late 1960s, is deceased. Dr. Aaron Rose began the task of preparing the present edition for the American Association of Cost Engineers, but due to failing health was unable to complete the task and I was asked to assume the job of editor.

For those who use this book and find it to be of value, the credit belongs to Drs. Jelen, Black, and Rose, and to the many contributing authors. However, if the book is found to be lacking in any way, the responsibility is that of the present editor.

Acknowledgment is given to the American Association of Cost Engineers for continuing its sponsorship of the book and to the many sources noted in the text who have given permission to use copyrighted material.

Appreciation is also extended to the Kennedy-Western University, Agoura Hills, California, for their agreement to accept my efforts in preparing this book as meeting the dissertation requirements of their doctoral program in engineering.

Special acknowledgment is given to the Education Board of the American Association of Cost Engineers and its members who were responsible for the preparation of much of the new material appearing in this edition.

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Finally, acknowledgment is given to Marcel Dekker, Inc. for its permission to my undertaking the task of editing this book despite the fact that I am contractually committed to them as an editor and contributing author of a competing series of textbooks.

Kenneth K. Humphreys

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