

Structural concrete

by K. F. Antia

Published by The New Book Company Private Ltd, Bombay, 1967. 8 $\frac{1}{2}$ × 5 $\frac{3}{4}$ in. pp. 572. Rs. 35.

As the author points out in his preface, the title "Structural concrete" has been adopted to cover the fundamentals of design, technology and construction of plain, reinforced and prestressed concrete. Written primarily for use in India, the book is based on the Indian Standard Specifications and Codes of Practice, with reference to British and American Codes where relevant. It is intended for the guidance of the practising designer as well as for study purposes.

There are seven main sections: (1) Fundamentals of design; concrete technology; (2) Working-stress design; (3) Load-factor design; (4) Design of buildings, industrial structures and civil engineering structures; (5) Statically indeterminate structures; (6) Prestressed concrete; (7) Concrete construction and repairs.

Of wider scope than most of the comparable books dealing with concrete design and construction in general, the present volume aims at giving comprehensive information to enable the reader to deal competently with a wide range of design problems normally encountered. He is provided with the choice

between the working-stress and the load-factor design methods, presented as equivalent alternatives.

The author expresses himself concisely and with clarity. He covers a wide range. For instance, in dealing with bridge design, he deals adequately with the problem of load distribution and explains the distribution coefficient method, with a full range of graphs for determining the coefficients. A considerable number of instructive worked examples help to convey a clear understanding of the subject matter. The Indian Standards appear to be near enough to the British in spirit and substance to ensure that this book may be profitably studied by the British reader, too.

The theory of prestressed concrete is briefly but adequately treated. Indeed, the amount of 'theory' really essential to the designer is fairly limited anyway. However, there are many important practical and semi-practical aspects of the subject which cannot be suitably dealt with in the relatively limited scope afforded by one chapter of a general volume of this kind. For such information which, over and above the basic theory, is essential to the prestressed concrete designer if he is to undertake his task with competence and confidence, it will be necessary to consult other and more specialized literature.

C.V.A.