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BOOK REVIEW

D. A. Bayliss and D. H. Deacon

Review of Steelwork Corrosion Control—Second Edition

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REFERENCE: Bayliss, D. A. and Deacon, D. H., *Review of Steelwork Corrosion Control*, 2nd ed., Routledge Spon Press, Taylor and Francis Group, London and New York, Copyright 2002, ISBN 0-415-26101-5.

This book is a thorough review of corrosion control methods for steel structures, with a major emphasis on painting. The contents include chapters on the corrosion of steel, surface preparation, paints and paint coatings, paint application, specialist coatings and applications, metal coatings, writing effective specifications, quality control of coating operations, designing for corrosion control, maintenance painting, control methods other than coatings, coating defects and failures, the selection of coating systems, protective systems for different situations, and testing of coatings.

The book is aimed at "engineers, architects, and others, for whom protection of steelwork is an important . . . part of their total professional activities," and meets this goal admirably. The authors are obviously very knowledgeable, and the book is well organized, clear, thorough, and readable. The greatest strength of the text lies in the thorough descriptions of surface preparation, paints, application, specification writing, and quality control. In these areas this book is unsurpassed in its thoroughness of coverage, and it would make an excellent reference for anyone involved in the coatings field. This book is not a reference manual, however. The organization is not suited for skimming or for finding a specific piece of information, since the book is mostly text with few visual clues and figures to provide visual reference points. The best way to use this book is to use the Table of Contents to find the chapters of interest, and then to simply read those chapters straight through.

Although all forms of corrosion control are implied by the title, and although there is a chapter on control methods other than coatings, the discussion in that chapter on cathodic protection and the use of inhibitors is cursory, and the reader should seek specific texts on these subjects if they desire detailed information. There is also insufficient coverage of ceramic and other specialty coatings. As promised by the title, the book contains no information on coating of any other material besides steel.

One aspect of the book that can be irritating to non-European readers is the Eurocentric approach to this subject. International standards developers besides ISO are not recognized as such, with pointed references to "NACE International *of America*" and "Steel Structures Painting Council *of America.*" The authors state that there are "no National or International Standards for appearance of cleaned surfaces," then mention some standards written by "SSPC and NACE International, USA." There is no mention of national or regional standards from countries other than the UK. Some ASTM International standards are referenced only in old revisions, such as ASTM D 1693-70 (the 1970 edition) and ASTM D 451-63 (the 1963 edition, although this standard was revised in 1991 and re-approved in 2002). Similarly, references to NACE International standards are not always carefully done, as in the reference to "RPO 1692," which should be "RP0169-92." ISO references are always meticulously correct, however. To further illustrate this point, under atmospheric corrosion testing only the European exposure rack angle of 45° is mentioned, even though the ISO specification for atmospheric testing recognizes two different rack angles because there is a huge amount of data generated in the USA at 30°.

Eurocentrism notwithstanding, this is an excellent book and it is highly recommended for those interested in coating steel structures to prevent corrosion.