Book review

DESIGN GUIDE FOR STEEL RAILWAY BRIDGES

David Iles. The Steel Construction Institute, 2004.

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The recent increased activity in the repair, renewal and indeed the opening of new lines on the UK railway network has resulted in the long-overdue resurgence of railway bridge construction. Therefore all those involved in the procurement of new railway bridges, particularly the design engineer, will welcome the publication of this book.

The book provides guidance on the design of new or replacement steel and composite railway bridges in the small- to medium-span range, and explains the particular requirements of the railway authorities and how they relate to the current design standards for bridges.

All the fundamental topics are discussed, clearly and concisely, including the particularly important matters of clearance, loading, fatigue, deformation performance and construction requirements. There is a chapter devoted to standard forms of

superstructure construction, which describes the parameters to be considered when selecting the preferred option. The subsequent chapter presents a series of details, in particular the all-important arrangement of joints and connections, which relate to the previously described forms of construction. The standard cross-sections and bridge details are illustrated with simple and clearly drawn diagrams.

Finally, the appendices contain a practical worked example of a superstructure design, with references to the relevant clauses in BS 5400, to illustrate the application of the standards and the advice of the previous chapters.

The imminent introduction of the Eurocodes may mean that some of the information contained in the book will be superseded; however, the principles will remain the same.

Overall, this publication will be of interest to railway engineers at all levels of expertise and a welcome addition to the library.

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