

Book review

Self-Compacting Concrete

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Whittles, 2008. ISBN 978-1904445-30-2, £85, 312 pp.

Self-compacting concrete (SCC) has been used as a mainstream material for more than ten years, and before this there was a period of 10 to 15 years when its qualities were researched and, as a material, it was gradually introduced to industry.

Research into the properties and techniques of manufacture has therefore been carried out for 20 years. Now we have a product with a thoroughly researched background and, thanks to the authors of *Self-compacting concrete*, an excellent book which puts all of this experience in one place ready for industry to use.

The reviewer's experience of the development of SCC over this period is as a user in the precast concrete industry. In the last ten years we have gone from requiring almost constant contact with admixture suppliers as SCC mixes were developed to a position where in-house knowledge is sufficient to enable SCC to be mixed and placed with reliability in a risk-averse commercial environment.

The authors of this book acknowledge that the user has to acquire sufficient knowledge of the materials that are to be used to be able to make the necessary modifications that are required to give a uniform output as material change occurs. In writing this book, they have made this much easier than it was as they have

provided a logical explanation for those who must follow this process.

The book starts with a technical review of the materials and properties of SCC in order that the reader can understand the characteristics of the material so that it can be made and used with confidence. The differences between SCC and conventional vibrated mixes are explained and the reader can understand the reason for the development of each test of fresh SCC, how to make the test and what it is intended to confirm.

The description of the tests and the reasons why they should be carried out was simple to understand and the chapter that followed, which suggests which tests should be used for various applications, was particularly useful.

Magazine of Concrete Research is a research magazine and this book should certainly be on the shelves of anyone who wishes to research or work with the material, not just because of its coverage and clarity but because of the large number of references that are given after each chapter: by the reviewer's calculation, the 12 main chapters have 501. The reader can be assured that the authors have been thorough.

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