

Book review

Fitz's Atlas of Coating Defects 2

B. Fitzsimmons and T. Parry (eds). MPI Group, Farnham, UK, 2011, ISBN 0-9513940-2-9, £149-00, 279 pp.

Fitz's Atlas of Coating Defects 2 is a near-encyclopaedic collection of descriptions and photographs of the range of coatings defects. This second edition includes improved and additional photographs to better illustrate defects, as well as a new section with photomicrographs to assist in the microscopical assessment of coatings and defects. The *Atlas* is presented in loose-leaf form with a relatively site-proof cover to allow use in the field.

The *Atlas* includes sections on welding faults and surface preparation conditions, as well as the section on coatings defects themselves. This section, which forms the bulk of the *Atlas*, has been expanded to contain more than twice as many photographs as the first edition and the defects are conveniently presented from 'abrasion' to 'zinc salts'.

The new section on microscopy sits comfortably between the coating defects and marine fouling sections, the latter including new photographs to complement the classifications and descriptions of animal and plant fouling. Helpful appendices include coating compatibility and properties charts, breakdown scales, paint arithmetic and useful formulae, all of which add to the comprehensive nature of this book.

Fitz's Atlas 2 is a valuable tool in the field and the images are of excellent quality, although perhaps one or two in section 3, 'Surface conditions', could more clearly illustrate the feature in question. The images illustrating in excess of 80 defects described in section 4 are excellent and well chosen, with distinctions clearly made between, for example, the various types of blister observed in the field. The author is a practising expert in the field and this is evident in the photographs used, which include the author's own and contributions from both manufacturers and other experts.

The preface to this edition makes it clear that the *Atlas* is not intended to make all readers an 'instant expert' on coating failures, and should not be considered as such. The guidance therein to ensure that the services of experienced paint chemists and coating specialists are involved in the diagnosis of defects is appropriate. The objective of the book is to provide as comprehensive a guide as practicable to the surface and coatings defects typically observed in service, as well as some notes on probable causes, prevention and repair options. In this it is a success, although perhaps section 3 on 'Surface conditions' could benefit from expansion, as well as from improvements to some of the images.

All in all, *Fitz's Atlas 2* can be considered a valuable addition to the paint inspector's tool-kit, as well as providing valuable guidance to applicators and specifiers.

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