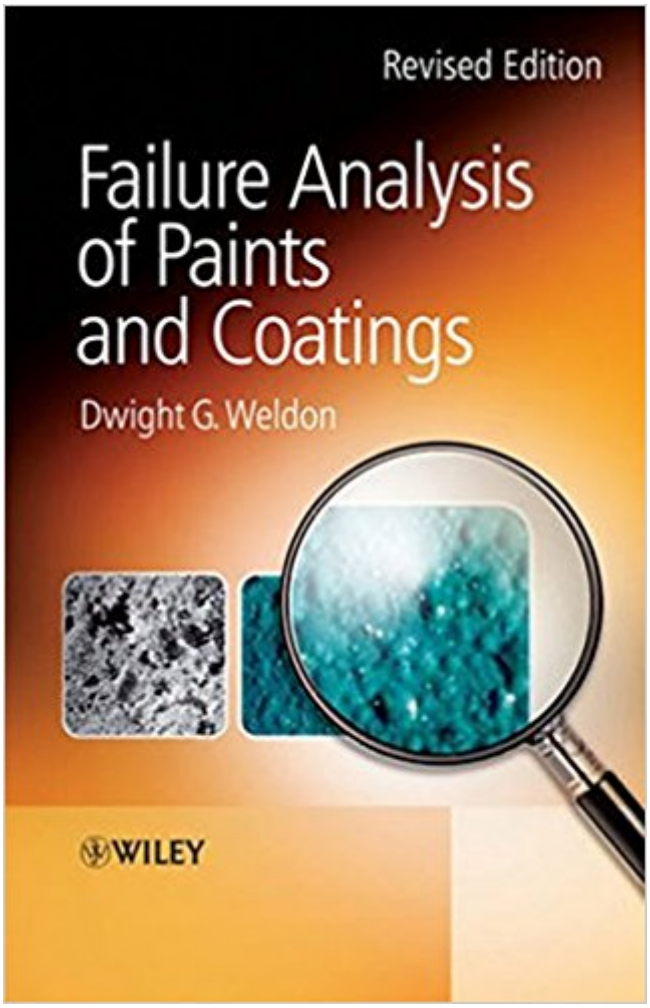
Failure Analysis Of Paints And Coatings



Synopsis

Entirely devoted to the failure analysis of coatings and paints Ã¢â ¬â œ an Ã¢â ¬Å“excellent reference to a select marketÃ¢â ¬Â•. Latest edition contains new material on surface preparation, transfer of salt to steel from contaminated abrasive, effect of peak density on coating performance, on galvanizing, silane-modified coatings, polyurea coatings, polyaspartics, and powder coatings and on dry spray. Balances scientific background and practical advice, giving both the theory and applications in a slim, easily readable form. Includes case studies of laboratory tests. Written by an author with over 25 years of experience in the paint and coatings industry.

Book Information

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Customer Reviews

"This publication is obviously unique in that it covers many...areas and provides answers to frequently asked questions..." (SAMPE Journal, November/December 2001)

Failure Analysis of Paints and Coatings is intended to provide the reader with an understanding of how to investigate, and solve, the premature failures of industrial coatings. The cracking, peeling, and blistering of coatings can result in widespread damage to the substrates which they are intended to protect, and can result in serious financial consequences. A sound knowledge of coatings chemistry, coupled with a firm understanding of the many field and laboratory techniques available for analyzing such problems, will aid the investigator in solving such failures. Beginning with a basic review of coatings technology and the chemistry of commonly encountered coatings

types, this book: looks at both the field and laboratory practices leading to the elucidation of failure mechanisms gives both theory and applications discusses both the advantages and limitations of various analytical techniques discusses the thought process involved in solving coating failures includes step by step examples of case studies Written by an analytical chemist and coatings consultant with eighteen years of experience solving coatings problems for a wide range of industries, this title will be essential reading for coatings chemists, corrosion engineers, paint technicians, and consultants in the paints and coatings industry. Praise for this book includes: "...an admirable job of filling a serious gap in the coatings literature...this excellent volume delivers more than is promised in the title." Ã¢â ¬â •Clifford Schoff, PPG Industries, Inc., Allison Park, PA, USA "It is well deserving of a place in the library of all paint chemists and formulators." Ã¢â ¬â •Clive H. Hare, Coating System Design, Inc., Lakeville, MA, USA

This is a terrific book, really explaining the physics of paint deterioration and the reasons for failure. It is comprehensive with detailed explanations on all paint failures. I really love the section on testing which explains what lab tests to perform and just what they can prove. For example, how do you prove that the paint was improperly mixed or cured? All explained here. Only negative is there are hardly any pictures! A mandatory companion to this is the Visual Comparison Manual by SSPC. A great and rare work.

I attended a class by the author at the ICE many years ago, and first bought this book for my staff in an earlier positition. Now am buying a second for my new office.I have since relied more on the author and his services than the book itself, but I was impressed by the careful and comprehensive manner of his investigations he showed in the case studies he presented. Coatings is a small market, and often doesn’t require or command the highest talent from us as scientists: I think Dwight is an exception to this tendency, and I trust that this excellence is found within his book.

I was fortunate to meet the author, Dwight Weldon recently and he even autographed my book! The book was a very useful tool in a arbitration proceeding regarding paint failure. It was great to hear live testimony from the author himself and he explained his theories and concepts in a way that was easy to understand and follow.

Nil

a very interesting book on paint and coating

Failure Analysis of Paints and Coatings Analysis and Deformulation of Polymeric Materials: Paints, Plastics, Adhesives, and Inks (Topics in Applied Chemistry) IEC 60812 Ed. 2.0 b:2006, Second Edition: Analysis techniques for system reliability - Procedure for failure mode and effects analysis (FMEA) The Art of Polymer Clay Creative Surface Effects: Techniques and Projects Featuring Transfers, Stamps, Stencils, Inks, Paints, Mediums, and More Annie Sloan Paints Everything: Step-by-step projects for your entire home, from walls, floors, and furniture, to curtains, blinds, pillows, and shades How to Paint with Oils & Acrylics: Mastering the Use of Oil and Acrylic Paints With Step-by-Step Techniques and Projects, in 200 Photographs Creative Cloth Doll Faces: Using Paints, Pastels, Fibers, Beading, Collage, and Sculpting Techniques Using Natural Finishes: Lime and Earth Based Plasters, Renders & Paints (Sustainable Building) Everybody Paints! The Lives and Art of the Wyeth Family Tribology of Polymeric Nanocomposites, Volume 55, Second Edition: Friction and Wear of Bulk Materials and Coatings (Tribology and Interface Engineering) The Anatomy of Color: The Story of Heritage Paints & Pigments The New Acrylics: Complete Guide to the New Generation of Acrylic Paints Studies in still life: An in-depth study of still life painting using tube oil paints John Pike Paints Watercolor Leaving China: An Artist Paints His World War II Childhood The Mechanics and Reliability of Films, Multilayers and Coatings Electrodeposition: The Materials Science of Coatings and Substrates (Materials Science and Process Technology) Coatings Tribology, Volume 56, Second Edition: Properties, Mechanisms, Techniques and Applications in Surface Engineering (Tribology and Interface Engineering) Functional Polymer Coatings: Principles, Methods, and Applications (Wiley Series on Polymer Engineering and Technology) Organic Coatings: Science and Technology