Popov

Corrosion Engineering

Principles and Solved Problems

Corrosion Engineering: Principles and Solved Problems, Second Edition gives a comprehensive overview and introduction to the field through an extensive, theoretical description of the principles of corrosion theory, passivity and corrosion prevention strategies, and design of corrosion protection systems. The second edition has been thoroughly updated with new knowledge and includes solved corrosion case studies, corrosion analysis and solved corrosion problems to help the reader to understand the corrosion fundamental principles from thermodynamics and electrochemical kinetics, the mechanism that triggers the corrosion processes at the metal interface and how to control or inhibit the corrosion rates. A key goal of the updated book is to help the next generation of engineers and scientists: (i) understand the theory of hydrogen embrittlement and stress corrosion cracking as well as hydrogen damage prevention strategies, (ii) design models for developing hydrogen damage-resistant alloys, and (iii) prevent damage of different industrial components due to the presence and localization of hydrogen in metals. To accomplish these objectives, the book offers case studies of hydrogen permeation, hydrogen embrittlement, mechanical properties of alloys, and hydrogen damage control.

Auf Anfrage

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9780443220111
Medium: Buch
ISBN: 978-0-443-22011-1
Verlag: Elsevier Science & Technology
Erscheinungstermin: 20.11.2024
Sprache(n): Englisch
Auflage: 2. Auflage 2024
Produktform: Gebunden
Format (B x H): 191 x 235 mm

Kundenservice Verlag Dr. Otto Schmidt KG
Neumannstraße 10, 40235 Düsseldorf | kundenservice@otto-schmidt.de | 0221-93738-997 (Inland)