



Book Review

This book is needed on the bookshelf of every person involved in the sales, manufacture, research, evaluation, and use of stainless steels, regardless of whether the person is an engineer, a scientist, a salesperson, a financial analyst, or the corporation president.

As the title implies, the book describes corrosion characteristics in all the major and minor groups of stainless steels, namely, in austenitic, ferritic, martensitic, duplex, and precipitation hardenable steels. Several chapters are spent on those special forms of corrosion that are investigated in the greatest detail in stainless steels, namely, pitting corrosion, crevice corrosion, and stress corrosion cracking. The influences of thermal treatment (heat affected zone cases), composition, and microstructure on corrosion are given good coverage. Corrosive environments include high temperature oxidation, sulfidation as well as acids, alkalis, various different petroleum plant environments, and even hu-

Title: Corrosion of Stainless Steel,
2nd Edition
Author: A. John Sedriks,
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man body fluids (stainless steels are commonly used prosthetic materials).

The book is complete with a good description of the electrochemical principles needed to understand pitting corrosion, grain boundary corrosion, and other forms of localized chemical attack. It was a stroke of good judgment on the part of the author to recognize, but not detail, liquid metal corrosion because this phenomenon, although important to stainless steel usage in the nuclear power plant

area, has already been exhaustively reviewed in the references given in the book.

References are numerous and thorough.

The book should be a good textbook for an advanced undergraduate course on corrosion of stainless steels. Alternatively, it is an excellent book for anyone involved in any way with stainless steels.