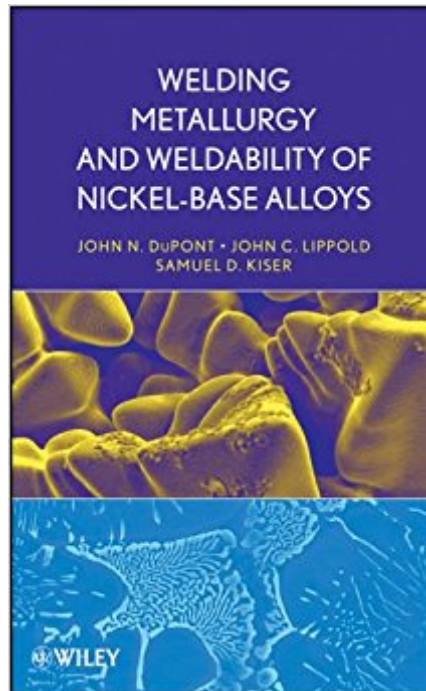


The book was found

# Welding Metallurgy And Weldability Of Nickel-Base Alloys



## Synopsis

The most up-to-date coverage of welding metallurgy aspects and weldability issues associated with Ni-base alloys *Welding Metallurgy and Weldability of Nickel-Base Alloys* describes the fundamental metallurgical principles that control the microstructure and properties of welded Ni-base alloys. It serves as a practical how-to guide that enables engineers to select the proper alloys, filler metals, heat treatments, and welding conditions to ensure that failures are avoided during fabrication and service. Chapter coverage includes: Alloying additions, phase diagrams, and phase stability Solid-solution strengthened Ni-base alloys Precipitation strengthened Ni-base alloys Oxide dispersion strengthened alloys and nickel aluminides Repair welding of Ni-base alloys Dissimilar welding Weldability testing High-chromium alloys used in nuclear power applications With its excellent balance between the fundamentals and practical problem solving, the book serves as an ideal reference for scientists, engineers, and technicians, as well as a textbook for undergraduate and graduate courses in welding metallurgy.

## Book Information

Hardcover: 456 pages

Publisher: Wiley; 1 edition (October 5, 2009)

Language: English

ISBN-10: 0470087145

ISBN-13: 978-0470087145

Product Dimensions: 6.4 x 1 x 9.6 inches

Shipping Weight: 1.6 pounds (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 stars 5 customer reviews

Best Sellers Rank: #578,150 in Books (See Top 100 in Books) #105 in [Books > Engineering & Transportation > Engineering > Mechanical > Welding](#) #135 in [Books > Engineering & Transportation > Engineering > Materials & Material Science > Metallurgy](#) #594 in [Books > Engineering & Transportation > Engineering > Materials & Material Science > Materials Science](#)

## Customer Reviews

The most up-to-date coverage of welding metallurgy aspects and weldability issues associated with Ni-base alloys *Welding Metallurgy and Weldability of Nickel-Base Alloys* describes the fundamental metallurgical principles that control the microstructure and properties of welded Ni-base alloys. It serves as a practical how-to guide that enables engineers to select the proper alloys, filler metals, heat treatments, and welding conditions to ensure that failures are avoided during fabrication and

service. Chapter coverage includes: Alloying additions, phase diagrams, and phase stability  
Solid-solution strengthened Ni-base alloys   Precipitation strengthened Ni-base alloys   Oxide  
dispersion strengthened alloys and nickel aluminides   Repair welding of Ni-base alloys   Dissimilar  
welding   Weldability testing   High-chromium alloys used in nuclear power applications   With its  
excellent balance between the fundamentals and practical problem solving, the book serves as an  
ideal reference for scientists, engineers, and technicians, as well as a textbook for undergraduate  
and graduate courses in welding metallurgy.

John N. DuPont, PhD, is the R.D. Stout Distinguished Professor in the Materials Science and  
Engineering Department at Lehigh University and Associate Director of the Energy Research  
Center. A Fellow of both the American Welding Society and ASM International, Dr. DuPont has won  
numerous awards for his research and teaching, including the Charles H. Jennings Memorial  
Award., the William Spraragen Memorial Award, the Masubuchi Award., the Lehigh Teaching  
Excellence Award, and the McKay-Helm award. He and his students have published over 200  
articles in the area of solidification, high-temperature corrosion, and welding metallurgy. John C.  
Lippold, PhD, is a Professor in the Welding Engineering Program and leader of the Welding and  
Joining Metallurgy Group at The Ohio State University. A Fellow of both the American Welding  
Society and ASM International, Dr. Lippold has received numerous awards for his research and  
teaching, including the Charles H. Jennings Memorial Award, the William Spraragen Memorial  
Award, the McKay-Helm Award, the James F. Lincoln Gold Medal, the Comfort A. Adams Lecture  
Award, the Plummer Memorial Education Lecture Award, and the IIW Jaeger Lecture Award.  
Together with his students and colleagues, he has published over 250 articles on welding  
metallurgy and weldability of structural materials. Samuel D. Kiser is Director of Technology for the  
Special Metals Welding Products Co., formerly INCO. He is a professional welding engineer, a  
Fellow of the American Welding Society, and holds more than ten patents for nickel alloy welding  
products. Sam is the recipient of the A.F. Davis Silver Medal and the Samuel Wylie Miller Memorial  
Medal Awards, and has published more than eighty articles and lectured extensively at AWS  
meetings to audiences around the world.

Dr. Lippold comes thru again - excellent reference book.

If you are familiar with the concepts of metallurgy this book will be a breeze to read. If you aren't  
familiar it probably still won't leave you behind."If there is an overall message from the panel, it is

that metallurgy is dedicated to advancing into the future and will not be deterred." - GD Smith,  
Future Trends in Key Nickel Alloy Markets. JOM Sep 2006

If you weld,are involved with nickel welding alloys or products in any way, you need this book!  
These authors are noted authorities on the subject and explain the subject in easy to understand terminology. Pair this with "Metallurgy for the Non-Metallurgist" and you will be set!

Great resource

like his old book for weldment of SS, the author's book is quite useful and containing many new achievements in this field.this is a very good handbook for material engineers.

[Download to continue reading...](#)

Welding Metallurgy and Weldability of Nickel-Base Alloys Welding Metallurgy and Weldability of Stainless Steels Extractive Metallurgy of Nickel, Cobalt and Platinum Group Metals Extractive Metallurgy of Tin (Process metallurgy) Welding Metallurgy Clinical Physiology of Acid-Base and Electrolyte Disorders (Clinical Physiology of Acid Base & Electrolyte Disorders) Softball Base Running Drills: easy guide to perfect your base running today! (Fastpitch Softball Drills) How to Make Melt & Pour Soap Base from Scratch: A Beginner's Guide to Melt & Pour Soap Base Manufacturing Handbook of Structural Welding, Processes, materials and methods used in the welding of major structures, pipelines and process plants. The Welding Business Owner's Hand Book: How to Start, Establish and Grow a Welding or Manufacturing Business Welding Licensing Exam Study Guide (McGraw-Hill's Welding Licensing Exam Study Guide) The Physics of Welding: International Institute of Welding (Materials Science & Technology Monographs) Advances in Wrought Magnesium Alloys: Fundamentals of Processing, Properties and Applications (Woodhead Publishing Series in Metals and Surface Engineering) Properties of Aluminum Alloys: Tensile, Creep, and Fatigue Data at High and Low Temperatures (#09813G) The Surface Treatment and Finishing of Aluminum and Its Alloys (06727G) 2 Vol set. Lead and Lead Alloys: Properties and Technology (German Edition) Mechanisms of Diffusional Phase Transformations in Metals and Alloys Phase Transformations in Metals and Alloys, Third Edition (Revised Reprint) Additive Manufacturing of Titanium Alloys: State of the Art, Challenges and Opportunities Fundamentals of Creep in Metals and Alloys, Third Edition

Contact Us

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)