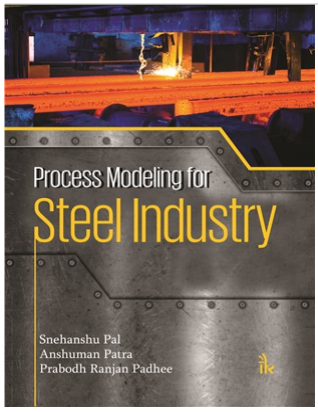
Book Information Sheet



Process Modeling for Steel Industry

Snehanshu Pal, Anshuman Patra & Prabodh Ranjan Padhee

2018	212 pp	Hardback	ISBN: 9789385909399	Price: 795.00

About the Book

This book contains a detailed account of modeling aspects of all the relevant concerns of steel industry. The text explores the Process Modeling Fundamentals, Basic Concepts of Numerical Heat Transfer and Fluid Flow, Fundamentals of Flow Reactors, Numerical Modeling of Different Processes in Steel Industry and Brief Working Guidance for CFD Software Package ANSYS Fluent. Most importantly, this book will help readers to formulate live problem-solving strategy in steel making industry.

Salient Features

Basic understanding of the continuum simulation methods related to steel industry.
Contains sections on numerical methods and use of computer software.
Process flowcharts, labelled diagrams, solved examples and step-wise mathematical derivations wherever relevant have been included.
Newer trends in the processes have been delineated appropriately.

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Introduction
Process Modeling Fundamentals
Basic Concepts of Numerical Heat Transfer and Fluid Flow
Fundamentals of Flow Reactors
Numerical Modeling of Different Processes in Steel Industry
Simulating and Solving Problems in ANSYS Software Package

About the Author

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