

1. Record Nr.	UNINA9910827791603321
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Titolo	Advances in rotary kiln sponge iron plant / / K.K. Prasad, Hem Shankar Ray
Pubbl/distr/stampa	New Delhi, : New Age International (P) Ltd., c2009
ISBN	1-282-38568-2 9786612385681 81-224-2892-4
Edizione	[1st ed.]
Descrizione fisica	1 online resource (186 p.)
Altri autori (Persone)	RayHem Shankar
Soggetti	Kilns, Rotary Iron, Sponge
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	<p>""Cover""; ""Preface to the First Edition""; ""Acknowledgement""; ""Glossary""; ""List of Figures""; ""List of Tables""; ""Contents""; ""Chapter 1. Introduction""; ""1.1 What is Spongs Iron and What is DRI?""; ""1.2 History of Modern Sponge Iron Making""; ""1.3 Iron Ore Reduction at a Glance ""; ""1.4 Multiple Role of a Rotary Kiln""; ""Chapter 2. Rotary Kiln Process of Making Sponge Iron""; ""2.1 Historical Background""; ""2.2 Important Features ""; ""2.3 Sponge iron Pilot of RDCIS SAIL ""; ""2.4 Features of a Rotary Kiln Sponge Iron Plant ""; ""2.5 The Indian Scene "" ""2.6 Why Should we Select a Rotary Kiln?""""2.6.1 Process Strengths""; ""2.6.2 Product Strengths""; ""2.6.3 Weaknesses of the Process""; ""2.6.4 Weaknesses of the Product""; ""Chapter 3. Thermodynamic Considerations:Feasibility of Reaction""; ""Chapter 4. Aerodynamics Inside a Sponge Iron Rotary Kiln""; ""4.1 Thumb Rules Used in Production of Sponge Iron""; ""4.2 Sources of Gas ""; ""4.3 Effects of Air Injection""; ""4.4 Limits to Gas Velocity""; ""4.5 Gas Flow Pattern""; ""4.6 CFD Analysis""; ""Chapter 5. Mathematical Modellingin Rotary Kiln Sponge Iron Making""; ""5.1 What is a Model?"" ""5.2 What is a Mathematical Model?""""5.3 How Can we Make a Useful Mathematical Model?""; ""5.4 Example of a Small Mathematical Model""; ""5.5 Roal of Coal in Rotary Kiln Sponge Iron Making Process""; ""5.6 Quantity of Protective Char""; ""5.7 Reduction of Iron Oxide""; ""5.8 Coal</p>

for Combustion"; "5.9 Waste Gas Temperature"; "5.10 Programming Based on Model"; "5.12 Segment-wise Modelling"; "5.13 Protection from the Model"; "5.14 Summary of the Modelling Process"; "Chapter 6. Physical Movement of Solids Inside a Rotary Kiln: Charge Movement and Coal Throwing/Slinging"
"6.1 Importance of Residence Time"; "6.2 Estimation of Gross Residence Time from Input and Output of Solids"; "6.3 Charge Movement: Cascading Flow of Granular Material"; "6.4 Mathematical Treatment of Charge Movement"; "6.5 Importance of Filling Degree"; "6.6 Techniques of Measuring Residence Time"; "6.7 Importance of Throwing Coal From Discharge End"; "6.8 Coal Throwing Philosophy"; "Chapter 7. Requirement, Generation and Transfer of Heat in a Sponge Iron Rotary Kiln"; "7.1 Material and Energy Balance in a Conventional Rotary Kiln Sponge Iron Making Process"
"7.2 Generation and Transfer of Heat"; "7.3 Mathematical Treatment of Heat Transfer"; "7.4 Segment-wise Air Requirement"; "Chapter 8. Reaction Kinetics"; "8.1 Factors Affecting Reaction Rates"; "8.2 Rate Law and Order of Reaction"; "8.3 Birth of the Rate Law or Law of Mass Action"; "8.4 Unimolecular Reaction and First Order Reaction"; "8.5 Decomposition of an Oxide"; "8.6 Temperature Dependence of Velocity Constant: The Arrhenius Equation"; "8.7 Experimental Determination of Activation Energy"; "8.8 Variation of Reaction Rate with Temperature"
"8.9 Role of Diffusion"
