

# **The Complete Technology Book on Hot Rolling of Steel (2nd Edition)**

**Author:-** NIIR Board of Consultants & Engineers

**Format:** paperback

**Code:** NI147

**Pages:** 480

**Price:** Rs.1975US\$ 200

**Publisher:** NIIR PROJECT CONSULTANCY SERVICES

Usually ships within **5** days

The Complete Technology Book on Hot Rolling of Steel" is an essential guide for professionals working in the steel industry, particularly those involved in the rolling processes. Hot rolling is a key procedure in steel manufacturing where the metal is heated above its recrystallization temperature and then passed through rollers to achieve the desired shape and thickness. The Hot rolled steel refers to steel that has been rolled or formed at high temperatures, typically over 1,700°F (927°C). At these temperatures, the steel becomes more malleable, making it easier to shape and form into various products. The hot rolling process is one of the most common methods used in the production of steel.

The global steel market size was estimated at USD 1,469.04 billion and is projected to grow at a CAGR of 5.3%. The global steel market is anticipated to be driven by rising investments in construction activities. Infrastructure and construction extensively require massive amounts of steel to enhance the aesthetic appeal and corrosion resistance of the structure. Steel products offer high strength and are 100% recyclable, which makes them applicable in residential, commercial, and infrastructural applications. Growing investments in construction sector is anticipated to augment market growth.

In this Book several chapters focus on the specific processes within hot rolling, such as the hot strip mill, which is central to producing hot-rolled steel plates and coils. These sections provide insights into the manufacturing of steel plates, coils, and bars, which are essential products in construction, automotive, and various industrial applications.

The book covers a wide range of topics connected to hot strip mill, Hot Rolled Steel Plates Manufacturing, Hot Rolled Coils Production, Hot Rolled Steel Bars Production, Railway Track (Railroad Tracks) Manufacturing, TMT Bars Manufacturing, Rolling, Steelmaking Refractories, Overview of Steelmaking Processes and their Development, Structural Changes in Steel during Hot Rolling, Steel Heating for Hot Rolling, Thermomechanical Treatment Combined with Rolling, Oxygen Steelmaking Processes, Alternative Oxygen Steelmaking Processes, Refining of Stainless Steels. It also includes contact information for machinery suppliers, as well as images of equipment.

A complete guide on Hot Rolling of Steel manufacture and entrepreneurship. This book serves as a one-stop shop for everything you need to know about the Steel manufacturing, which is ripe with opportunity for manufacturers, merchants, and entrepreneurs. This is the only book

that covers Production of Hot Rolling of Steel in depth. From concept through equipment procurement, it is a veritable feast of how-to information.

## **Table of Contents**

- 1 Introduction
- 2 How to Start Hot Rolling of Steel Making Business
- 3 Hot Strip Mill
- 4 Hot Rolled Steel Plates Manufacturing
- 5 Hot Rolled Coils Production
- 6 Hot Rolled Steel Bars Production
- 7 Railway Track (Railroad tracks) Manufacturing
- 8 TMT Bars Manufacturing
- 9 Rolling
- 10 Steelmaking Refractories
- 11 Overview of Steelmaking Processes and their Development
- 12 Structural Changes in Steel During Hot Rolling
- 13 Steel Heating for Hot Rolling
- 14 Thermomechanical Treatment Combined with Rolling
- 15 Oxygen Steelmaking Processes
- 16 Alternative Oxygen Steelmaking Processes
- 17 Refining of Stainless Steels
- 18 BIS Standards
- 19 Plant Layout Description for Hot Rolling of Steel
- 20 Plant Layout and Process Flow Chart & Diagram

## **About NIIR**

**NIIR PROJECT CONSULTANCY SERVICES (NPCS)** is a reliable name in the industrial world for offering integrated technical consultancy services. NPCS is manned by engineers, planners, specialists, financial experts, economic analysts and design specialists with extensive experience in the related industries.

Our various services are: Detailed Project Report, Business Plan for Manufacturing Plant, Start-up Ideas, Business Ideas for Entrepreneurs, Start up Business Opportunities, entrepreneurship projects, Successful Business Plan, Industry Trends, Market Research, Manufacturing Process, Machinery, Raw Materials, project report, Cost and Revenue, Pre-feasibility study for Profitable Manufacturing Business, Project Identification, Project Feasibility and Market Study, Identification of Profitable Industrial Project Opportunities, Business Opportunities, Investment Opportunities for Most Profitable Business in India, Manufacturing Business Ideas, Preparation of Project Profile, Pre-Investment and Pre-Feasibility Study, Market Research Study, Preparation of Techno-Economic Feasibility Report, Identification and Section of Plant, Process, Equipment, General Guidance, Startup Help, Technical and Commercial Counseling for setting up new industrial project and Most Profitable Small Scale Business.

NPCS also publishes various process technology, technical, reference, self employment and startup books, directory, business and industry database, bankable detailed project report, market research report on various industries, small scale industry and profit making business. Besides being used by manufacturers, industrialists and entrepreneurs, our publications are also used by professionals including project engineers, information services bureau, consultants and project consultancy firms as one of the input in their research.

Our Detailed Project report aims at providing all the critical data required by any entrepreneur

ving to venture into Project. While expanding a current business or while venturing into new business, entrepreneurs are often faced with the dilemma of zeroing in on a suitable product/line.

---

**NIIR PROJECT CONSULTANCY SERVICES**, 106-E, Kamla Nagar, New Delhi-110007, India.  
**Email:** [npcs.india@gmail.com](mailto:npcs.india@gmail.com) **Website:** [NIIR.org](http://NIIR.org)

Wed, 18 Jun 2025 08:32:18 +0000