Wires, Tubes, Pipes, Steel Bars and S.S. Sheets Production with Ferrous Metal Casting & Processing

(Hot Rolled Bars, Hot Rolled Bars, Mild Steel Bars, Seamless Tube and Pipe, Laser Beam Welding, Friction Welding, Spot TIG, Hot Wire TIG, Hot Wire MIG, Machine Reamer, Hand Reamers, Hand Reamers)
Ferrous materials have made a major contribution to the development of modern technology; they span a tremendous range of properties and applications. Reflecting the industrial practices, the information provided here offers easy access to reliable processes involved in the manufacturing of Steel products like Steel Bars, Wires, Tubes, Pipes, Sheets etc. that proves to be the backbone of construction and automobile industries booming worldwide.
The work closes the gap in the treatment of steel and cast iron. Each chapter takes into account the gradual transitions between the two types of ferrous materials. It demonstrates that ferrous metal and steel are versatile and customizable materials which will continue to play a key role in the future and also covers the operations performed on ferrous metals for converting them into a commodity.
# Market Outlook

## Growth in Steel Consumption

<table>
<thead>
<tr>
<th>Country</th>
<th>2014 (in million tonne)</th>
<th>2015*</th>
<th>2016*</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>710.8</td>
<td>▼ 0.5</td>
<td>▼ 0.5</td>
</tr>
<tr>
<td>US</td>
<td>106.9</td>
<td>▼ 0.4</td>
<td>▲ 0.7</td>
</tr>
<tr>
<td>India</td>
<td>75.3</td>
<td>▲ 6.2</td>
<td>▲ 7.3</td>
</tr>
<tr>
<td>Japan</td>
<td>67.5</td>
<td>▼ 2.4</td>
<td>▲ 1.1</td>
</tr>
<tr>
<td>S Korea</td>
<td>55.4</td>
<td>▲ 2.7</td>
<td>▲ 2.0</td>
</tr>
<tr>
<td>Russia</td>
<td>43.1</td>
<td>▼ 6.7</td>
<td>▼ 1.6</td>
</tr>
</tbody>
</table>
India’s crude steel production grew by 7.4 per cent year-on-year to 95.6 Million Tonnes (MT) in 2016. Total production of crude steel during February 2017 grew by 8.5 per cent year-on-year to 8.08 MT.

India’s steel exports grew 150.0 per cent year-on-year to 0.75 MT in February 2017, while steel imports declined 46 per cent year-on-year to 0.49 MT. Total consumption of finished steel grew by 3.4 per cent year-on-year to 76.22 MT during April 2016-February 2017.
Consumption of Steel (in Million Tonnes)

FY08: 52.1
FY09: 52.4
FY10: 59.3
FY11: 66.4
FY12: 71
FY13: 73.5
FY14: 74.1
FY15: 76.99
FY16*: 58.94
In 2017, the world steel demand is expected to return to growth of 0.4 per cent to reach 1,494 MT.

The Indian steel industry to grow at a CAGR of almost 7% by 2020.
India’s Major Steel Import Markets

- China: 29
- South Korea: 27
- Japan: 21
- Russia: 4
- Other: 6
- Ukraine: 3
- Germany: 2
- Brazil: 1
- Belgium: 1
- Taiwan: 2
- Indonesia: 2
The global steel tubes market to grow at a CAGR of more than 6% by 2020.

Forecasts India’s steel use to go up to 80 MT in 2015 and further to 85.8 MT in 2016 from 75.3 MT in 2014, up 2.2% from the previous year.
1. CASTING OF FERROUS METALS

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• Permanent Mold Casting
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• Classification of Electrodes
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• Type 317L
• Type 317LM
• Type 317LMN
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• Martensitic Grades
  • Type 410
  • Type 410S
  • Type 414
  • Type 416
  • Type 420
  • Type 431
  • Type 440
• Ferritic Grades
• Type 430
• Type 405
• Type 409
• Type 434
• Type 436
• Type 442
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• Duplex Grades
• Precipitation Hardening Grades
• Superalloy Grades
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Niir Project Consultancy Services
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Email: npcs.ei@gmail.com, info@entrepreneurindia.co

Tel: +91-11-23843955, 23845654, 23845886, 8800733955

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- Cold Storage For Fruits & Vegetables
- Coal & Coal Byproduct
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- Essential Oils, Oils & Fats And Allied
- Engineering Goods
- Fibre Glass & Float Glass
- Fast Moving Consumer Goods
- Food, Bakery, Agro Processing
- Fruits & Vegetables Processing
- Ferro Alloys Based Projects
- Fertilizers & Biofertilizers
- Ginger & Ginger Based Projects
- Herbs And Medicinal Cultivation And Jatropha (Biofuel)
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- Hospital Based Projects
- Herbal Based Projects
- Inks, Stationery And Export Industries
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- Steel & Steel Products
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106-E, Kamla Nagar, Opp. Spark Mall,
New Delhi-110007, India.
Email: npcs.ei@gmail.com, info@entrepreneurindia.co
Tel: +91-11-23843955, 23845654, 23845886, 8800733955
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