COURSE OUTLINE

Types of steel; History of modern steelmaking; Status of steelmaking in India and world Steel production and consumption, Steelmaking fundamentals: Solution thermodynamics; Role of slag in steelmaking, properties of slag;

Steelmaking reactions such as oxidation of carbon, silicon, manganese, iron, phosphorous and chromium, Numerical problems; Role of refractory, Physico-chemical properties of refractory, Emerging trends in refractory;

Steelmaking practice; Basic oxygen steelmaking; Electric Steelmaking; Developments in steelmaking practice; Principles and practices of deoxidation and degassing and emerging ladle metallurgy processes;

Clean steel; Solidification and Casting processes; Ingot and continuous casting; Final finishing operations like heat treatment and deformation processing;

Modelling of steelmaking; Future of steelmaking in India.

COURSE DETAIL

<table>
<thead>
<tr>
<th>Module No</th>
<th>Lectures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Steelmaking Fundamentals</td>
</tr>
<tr>
<td></td>
<td>1. Types of steels, History of modern steelmaking and Indian scenario</td>
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<tr>
<td></td>
<td>2. Steelmaking Fundamentals: Solution thermodynamics</td>
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<td>3. Steelmaking Fundamentals: Role of slag in steelmaking</td>
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<td></td>
<td>4. Physico-chemical properties of slag</td>
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<tr>
<td></td>
<td>5. Oxidation reactions: Iron and silicon</td>
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<td></td>
<td>6. Decarburization and Manganese oxidation</td>
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<td>7. Dephosphorization reaction</td>
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<td>8. Oxidation and reduction of chromium</td>
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<td></td>
<td>9. Refractory in steelmaking</td>
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<td></td>
<td>10. Modern Trends in refractory</td>
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<tr>
<td>2</td>
<td>Modern Steelmaking Practice</td>
</tr>
<tr>
<td></td>
<td>11. Introduction to practices, pretreatment of hot metal, Basic Oxygen furnace: Design and Operation</td>
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<tr>
<td></td>
<td>12. Fundamentals of Converter steelmaking technology</td>
</tr>
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<td>13. Feed materials and practice, Combined blown steelmaking</td>
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<td></td>
<td>14. Modern trends in BOF Technology</td>
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<td>15. Steelmaking in electric arc furnace; design and operation</td>
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<td>16. Development in Electric Furnace steelmaking</td>
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<td>17.</td>
<td>DRI in electric steelmaking</td>
</tr>
<tr>
<td>18.</td>
<td>Alloy Steelmaking</td>
</tr>
<tr>
<td>19.</td>
<td>Novel steelmaking technologies: CONARC and EOF</td>
</tr>
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<td>20.</td>
<td>Process control and automation</td>
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<td>3</td>
<td><strong>Ladle Metallurgy</strong></td>
</tr>
<tr>
<td>21.</td>
<td>Evolution of ladle treatments and requirements</td>
</tr>
<tr>
<td>22.</td>
<td>Synthetic slag practice</td>
</tr>
<tr>
<td>23.</td>
<td>Principles of deoxidation</td>
</tr>
<tr>
<td>24.</td>
<td>Deoxidation practice</td>
</tr>
<tr>
<td>25.</td>
<td>Principles of degassing</td>
</tr>
<tr>
<td>26.</td>
<td>Degassing technologies</td>
</tr>
<tr>
<td>27.</td>
<td>Clean steel : Impact of inclusions on steel properties</td>
</tr>
<tr>
<td>28.</td>
<td>Sources of inclusions in steel and their control</td>
</tr>
<tr>
<td>29.</td>
<td>Inclusion engineering</td>
</tr>
<tr>
<td>30.</td>
<td>Numerical problems and exercises</td>
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<tr>
<td>4</td>
<td><strong>Solidification and casting and finishing operations</strong></td>
</tr>
<tr>
<td>31.</td>
<td>Principles of solidification of steel</td>
</tr>
<tr>
<td>32.</td>
<td>Ingot casting</td>
</tr>
<tr>
<td>33.</td>
<td>Continuous casting</td>
</tr>
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<td>34.</td>
<td>Developments in Continuous casting technology</td>
</tr>
<tr>
<td>35.</td>
<td>Final finishing operation: Surface treatments</td>
</tr>
<tr>
<td>36.</td>
<td>Final finishing operation: Heat treatment</td>
</tr>
<tr>
<td>37.</td>
<td>Final finishing operation: Deformation processing</td>
</tr>
<tr>
<td>38.</td>
<td>Modelling of steelmaking processes</td>
</tr>
<tr>
<td>39.</td>
<td>Few case studies and discussions</td>
</tr>
<tr>
<td>40.</td>
<td>Future of steelmaking India</td>
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</tbody>
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