# Annual Report 2025-2026

## National Institute of Secondary Steel Technology

**Estd. by Ministry of Steel, GoI**

**PB92, Grand Trunk Rd**

**Mandi Gobindgarh, Punjab 147301, India**

# Content

# CHAPTER - 1

## HISTORICAL OVERVIEW

### NATIONAL INSTITUTE OF SECONDARY STEEL TECHNOLOGY (NISST)

In June 1987, a High-Powered Committee on the "Indian Steel Mission to Europe," led by the then Secretary (Steel), Government of India, undertook a visit to the steel industries of the European Economic Community (EEC) countries. Based on the recommendations of this Committee, the **National Institute of Secondary Steel Technology (NISST)** was established by the Ministry of Steel, Government of India, on 18th August 1987 as a Registered Society. The Institute was constituted under the Chairmanship of the then Development Commissioner of Iron & Steel, a position presently held by the Joint Secretary/Additional Secretary, Ministry of Steel. NISST commenced its operations with an initial corpus of ₹10.08 crore drawn from the erstwhile Billet Re-Rollers Fund (BRC Fund).

Apart from skilling the technical manpower through cluster training programmes in Indian iron and steel industries, the Institute also provides industrial services, testing facilities, consultancy services for operational efficiency, energy efficiency, quality improvement and reducing environmental impact. It is managed by a Board of Governors with representatives from Industrial Associations, Educational Institutions and Research Organisations apart from the Ministry of Steel. Presently, Shri Daya Nidhan Pandey, Joint Secretary, Ministry of Steel, Govt. of India, is Chairman of the Institute.

As a key institution under the Ministry of Steel, NISST operates in alignment with the National Steel Policy and national priorities for enhancing steel sector competitiveness through upskill the manpower working in the secondary steel sector. To widen outreach and ensure sector-wide impact, the Institute collaborates with steel associations, industry bodies, and relevant stakeholders within the steel ecosystem.

#### KEY ACTIVITIES OF NISST INCLUDE:

- **Training and Skill Development**: Conducting cluster based structured training programmes for Indian iron and steel sector workforce to improve their productivity and efficiency. Also providing need based customised in-house trainings.
- **Green Steel Certification**: Nodal agency for Measuring, Reporting and Verification (MRV) as well as for issuing greenness certificates and star ratings for steel as per Ministry of Steel vide Notification F. No. 1(6)-2024-ID-2, dated 23rd December 2024.
- **Industrial Consultancy**: Offering advisory support for performance enhancement, energy efficiency, process and quality improvement.
- **Energy Audits**: Energy efficiency improvement–related projects were undertaken by NISST, encompassing energy audits in the steel industry, mandatory energy audits and Measurement & Verification (M&V) audits of designated consumers, along with the implementation of energy efficiency improvement initiatives. (Accreditation from Bureau of Energy Efficiency, Ministry of Power, Government of India)

- **Safety Audits & Inspection**: Under the capacity of Competent Persons recognized by Director of Factories, Govt. of Punjab, UT of Daman & Diu and Dadra Nagar Haveli, Kerala, Chhattisgarh, Meghalaya and Puducherry, NISST has conducted safety inspections and safety audits for the steel industry in the state of Punjab, UT of Daman & Diu and Dadra Nagar Haveli. Various training programs in the areas of industrial safety are being conducted for a safe environment in the industry.
- **Steel Testing Laboratories**: Over the last one decade the NISST has been emerging as the main institution for providing testing facilities, conducting consultancy studies, energy audits and participating in various projects aimed at technological improvements in re-rolling industry. (NABL Accredited and BIS recognized Mechanical, Metallography and Chemical Labs). NISST holds BIS recognition for testing 62 categories of steel products. Few equipment was added/upgraded in last 5 years to keep the equipment/labs updated. Accordingly, the following labs are operational in NISST's Mandi Gobindgarh campus.
  - Mechanical Testing lab
  - Chemical testing lab
  - Metallography lab
  - Pollution testing lab
- **Research and Development**: R&D activities are focused on addressing the issues faced by the secondary steel sector in the areas of ironmaking, steelmaking, and reheating furnaces.".

## AREAS OF SECONDARY STEEL SECTOR UNDER THE PURVIEW OF THE INSTITUTE:

- **Steelmaking through**
  - **Electric Arc Furnace**
  - **Induction Furnace**

  } **route**
- **Ladle Refining**
- **Continuous Casting**
- **Reheating Furnace**
- **Rolling Mills (Hot & Cold)**
- **Direct Reduce Iron Units**
- **Quality Inspection and Testing**

## ACCREDITATIONS/RECOGNITIONS

- Empanelled as Accredited Energy Auditor with Bureau of Energy Efficiency, Ministry of Power, Govt. of India.
- Bureau of Energy efficiency (Ministry of Power)- Member of Iron and Steel Sector – Technical committee (PAT cycles), Sectoral Advisory Group for supporting BEE.
- Bureau of Indian Standards (Ministry of Consumer affairs) – Member of various Committees in MTD and CED
- Ministry of Steel –Parent Ministry – Member in nine task forces (Climate & Environment), Safety committee, Various Constituted committees
- Ministry of Environment, Forest and Climate Change – Member of High-Level Expert Committee and Expert Committee for Iron and Steel Sector

## IMPLEMENTATION OF RTI ACT. 2005

NISST has published information under section 4(1)(b) of the RTI Act, 2005 on its website www.nisst.org. Provisions of Right to Information Act, 2005 have been duly complied for processing the applications/requests received under RTI Act, 2005.

During the period from 01 April 2025 to 31 March 2026, a total of 01 application was received, and the same has been disposed of.

# CHAPTER-2

## NISST LABS AT GLANCE

### CHEMICAL ENERGY & ENVIRONMENTAL LABORATORY

<table>
<tr><th>CHEMICAL ANALYSIS OF IRON & STEEL</th><th>SPONGE IRON ANALYSIS</th></tr>
<tr><td rowspan="3">1. Basic 5 elements (i.e. C, Mn, Si, P & S) *<br>2. Nickel*<br>3. Chromium*<br>4. Tungsten<br>5. Molybdenum in steel*<br>6. Aluminum*<br>7. Copper*<br>8. Titanium*<br>9. Nitrogen*<br>10. Total Carbon in Cast iron<br>11. Silico - Manganese<br>12. Vanadium*<br>13. Boron<br>14. Calcium<br>15. Cobalt<br>16. Tin<br>17. Niobium</td><td>1. Sponge Iron<br>(Total Iron, Metallic iron, metallization)<br>2. Total Carbon in Sponge iron<br>3. Sulphur<br>4. Phosphorus</td></tr>
<tr><td>ANALYSIS OF GALVANIZED STEEL</td></tr>
<tr><td>1. Analysis of mass of zinc coating<br>2. Uniformity test<br>3. Adherence Test</td></tr>
<tr><td>FUEL ANALYSIS</td><td>AIR POLLUTION TESTING (STACK EMMISSIONS)</td></tr>
<tr><td>1. Moisture Content<br>2. Viscosity Pre-heat Temp.<br>3. Calorific Value (Coal or Oil)</td><td>1. CO<br>2. $CO_2$<br>3. $NO_x$<br>4. SPM<br>5. $SO_2$<br>6. Temperature<br>7. Velocity</td></tr>
<tr><td colspan="2">DIRECT READING SPECTROMETER TESTINGS<br>1. Elemental analysis of Steels & Cast Iron for 26 elements and Grade determination & Total Fe, Grade Determination/CE.</td></tr>
</table>

## MECHANICAL & NDT LABORATORY

| Test/Analysis | SAFETY INSPECTION |
|---|---|
| 1. Tensile/Compression Test by UTM (TS, YS, % Elongation) *<br>2. Nut/Bolt Test (Tensile Type)<br>3. Bend Test*<br>4. Re-bend Test*<br>5. Double Shear Test<br>6. Drift Expanding (for tubes)<br>7. Flattening (for tubes)<br>8. Hardness Rockwell/Brinell*<br>9. Impact Testing (Izod/Charpy) * (Room Temperature Zero and Sub Zero upto -40$^0$ C)<br>10. Erichson Cupping<br>11. Dynamic/Impact Hardness Test (SHORE)*<br>12. Ultra Sonic Test<br>13. Magna flux<br>14. Measurements of Tolerances / Dimensions /Thickness*<br>15. Weight per unit length*<br>16. Twist (for tubes)<br>17. Rib Test*<br>18. Surface inspection of Ingots*<br>19. Pullout test*<br>20. Compression test*<br>21. Surface roughness*<br>22. Strain ageing<br>23. N value*<br>24. R value*<br>25. Bake hardening<br>26. Y groove*<br>27. Camber<br>28. Rolling mass<br>29. Crown<br>30. Flattening*<br>31. Strain measurement*<br>32. Freedom from defect<br>33. Surface finish<br>34. Straightness workmanship<br>35. Pipe/tube ends<br>36. Hydrostatic test<br>37. Bend for strip 180$^0$*<br>38. Crushing<br>39. Bend of whole pipe 90$^0$*<br>40. Eccentricity<br>41. Fracture disc test<br>42. Crop test of bar<br>43. Cold shearability<br>44. Deflection<br>45. Shear strength<br>46. Ageing embrittlement<br>47. Fracture toughness | 1. Crane Testing<br>2. Chain Pulley Block<br>3. Chain Sling<br>4. Pressure vessel<br>5. Hydraulic testing of pressure vessel<br>6. Dangerous Machinery<br>7. Hydra Testing (Portable EOT)<br>8. Fork Lift<br>9. Lift |

**Note: (*) Marked tests conducted under NABL**

## ELECTRICAL LABORATORY

| Test/Analysis |
|---|
| **1.** Transformer Oil Testing |
| **2.** Earth Testing |

## TESTING OF DIFFERENT PRODUCTS UNDER BIS

| Sr No. | IS Number | Product |
|---|---|---|
| **01.** | IS 210 | Grey iron castings – Specification (First Revision) |
| **02.** | IS 277 | Galvanized steel strips and sheets (Plain and Corrugated) – Specification (Seventh Revision) |
| **03.** | IS 432 Part 1 | Mild Steel and Medium Tensile Steel Bars and Hard-Drawn Steel Wire for Concrete Reinforcement: Part 1 Mild Steel and Medium Tensile Steel Bars |
| **04.** | IS 432 Part 2 | Mild Steel and Medium Tensile Steel Bars and Hard-Drawn Steel Wire for Concrete Reinforcement: Part 2 Hard-Drawn Steel ire |
| **05.** | IS 513 Part 1 | Cold reduced carbon steel sheet and strip: Part 1 cold forming and drawing purpose (Sixth Revision) |
| **06.** | IS 513 Part 2 | Cold reduced carbon steel sheet and strip: Part 2 high tensile and multi – Phase steel (Sixth Revision) |
| **07.** | IS 963 | Specification for chrome molybdenum steel bars and rods for aircraft purposes |
| **08.** | IS 1029 | Specification for hot-rolled steel strip (Baling) (First Revision) |
| **09.** | IS 1038 | Specification For Steel Doors, Windows And Ventilators |
| **10.** | IS 1079 | Hot rolled carbon steel sheet, plate and strip – Specification (Seventh Revision) |
| **11.** | IS 1110 | Ferrosilicon – Specification (Fourth Revision) |
| **12.** | IS 1171 | Ferro Manganese |
| **13.** | IS 1341 | Steel Butt Hinges – Specification (Sixth Revision) |
| **14.** | IS 1470 | Silico Manganese |
| **15.** | IS 1566 | Specification for hard – Drawn steel wire fabric for concrete reinforcement (Second Revision) |
| **16.** | IS 1786 | High strength deformed steel bars and wires for concrete re – inforcement – Specification (Fourth Revision) |

| Sr No. | IS Number | Product |
|---|---|---|
| 17. | IS 2039: Part 1 | Steel tubes for bicycle and cycle rickshaws – Specification (Second Revision) |
| 18. | IS 2039: Part 2 | Steel tubes for bicycle and cycle rickshaws – Specification (Second Revision) |
| 19. | IS 2039: Part 3 | Steel tubes for bicycle and cycle rickshaws – Specification (Second Revision) |
| 20. | IS 2062 | Hot rolled medium and high tensile structural steel – Specification (Seventh Revision) |
| 21. | IS 2255 | Specification for mild steel wire rod for the manufacture of machine screws (By Cold Heading Process) (Second Revision) |
| 22. | IS 2385 | Specification for hot – Rolled mild steel sheet and strip in coil form for cold – Reduced tinplate and cold – Reduced black plate (First Revision) |
| 23. | IS 2507 | Specification for cold – rolled steel strips for springs (First Revision) |
| 24. | IS 2830 | Carbon steel cast billet ingots, billets, blooms and slabs for re-rolling into steel for general structural purposes – Specification (Third Revision) |
| 25. | IS 2831 | Carbon steel cast billet ingots, billets, blooms and slabs for re-rolling into structural steel (Ordinary Quality) – Specification (Fourth Revision) |
| 26. | IS 2879 | Mild steel for metal arc welding electrodes – Specification (Third Revision) |
| 27. | IS 3039 | Specification for structural steel for construction of hulls of ships (Second Revision) |
| 28. | IS 3195 | Steel for the manufacture of volute and helical springs (For Railway Rolling Stock) – Specification (Third Revision) |
| 29. | IS 3502 | Steel chequered plates (Third Revision) |
| 30. | IS 4224 | Specification for steel wire for staples, pins and clips (First Revision) |
| 31. | IS 4368 | Specification for alloy steel billets, blooms and slabs for forging for general engineering purposes |
| 32. | IS 4397 | Cold – Rolled carbon steel strips for ball and roller bearing cages retainers – Specification (Second Revision) |
| 33. | IS 4398 | Carbon – Chromium steel for the manufacture of balls, rollers and bearing races – Specification (Second Revision) |
| 34. | IS 5489 | Specification for carburizing steels for use in bearing industry (First Revision) |
| 35. | IS 5522 | Stainless steel sheets and strips for utensils – Specification (Third Revision) |
| 36. | IS 5651 | Specification for steels for pneumatic tools (First Revision) |
| 37. | IS 5986 | Hot rolled steel sheet, plate and strip for forming and flanging purposes – Specification (Fourth Revision) |
| 38. | IS 6240 | Hot rolled steel plate (Up To 6 Mm) sheet and strip for the manufacture of low-pressure liquefiable gas cylinders (Fourth Revision) |
| 39. | IS 6902 | Specification for steel wire for spokes |
| 40. | IS 6967 | Specification for steels for electrically welded round link chains |

| Sr No. | IS Number | Product |
|---|---|---|
| 41. | IS 7174 | Carbon Steel tubes for use on board ships for working pressure 0.7 to 1.7n/mm$^2$ |
| 42. | IS 7283 | Hot – Rolled bars for the production of bright bars and machined parts for engineering applications specification (First Revision) |
| 43. | IS 7494 | Specification for steel for valves for internal combustion engines (First Revision) |
| 44. | IS 7887 | Mild steel wire rod for general engineering purposes – Specification (First Revision) |
| 45. | IS 7904 | High carbon steel wire rods – Specification (Second Revision) |
| 46. | IS 8036 | Mild Steel transformer cooling tubes |
| 47. | IS 8052 | Steel ingots, billets and blooms for the production of springs, rivets and screws for general engineering applications – Specification (Second Revision) |
| 48. | IS 8952 | Steel ingots, blooms and billets for production of mild steel wire rods for general engineering purposes – Specification (First Revision) |
| 49. | IS 9516 | Specification for heat resisting steels |
| 50. | IS 9550 | Bright steel bars – Specification (First Revision) |
| 51. | IS 9962 | Specification for steel wire for needles |
| 52. | IS 10748 | Hot – Rolled steel strip for welded tubes and pipes – Specification (Second Revision) |
| 53. | IS 11169: Part 1 | Specification for steels for cold heading/cold extrusion applications: Part 1 wrought carbon and low alloy steels |
| 54. | IS 11513 | Hot rolled carbon steel strip for cold rolling purposes – Specification (Second Revision) |
| 55. | IS 11587 | Specification for structural weather resistant steels |
| 56. | IS 12146 | Specification for carbon manganese steel forgings for pressure vessels |
| 57. | IS 14491 | Low carbon high strength cold rolled steel sheets and coils for cold forming – Specification |
| 58. | IS 15103 | Fire resistant steel – Specification |
| 59. | IS 15647 | Hot rolled steel narrow width strip for welded tubes and pipes |
| 60. | IS 15914 | High tensile strength flat rolled steel plate (Up To 6 Mm), sheet and strip for the manufacture of welded gas cylinder – Specification |
| 61. | IS 15997 | Low nickel austenitic stainless-steel sheet and strip for utensils and kitchen appliances – Specification |
| 62. | IS 9550 | Bright Steel Bars- Specification |

# CHAPTER-3

## ACTIVITIES CARRIED OUT DURING FY 2025-26

### Training Programme Conducted in FY 2025-26

| Sr No | Cluster | Location of Training | Units Name | Covered Subject |
|---|---|---|---|---|
| **1** | Raipur Cluster | Bilaspur, (Chhattisgarh) in 21st May 2025 | Vraj Iron | DRI (Sponge Iron) and Safety |
| **2** | Raipur Cluster | Raipur (Chhattisgarh) in 22nd May 2025 | Aarti Steel | DRI (Sponge Iron) and SMS and Safety |
| **3** | Hyderabad Cluster | Tirupati (Andhra Pradesh) on 18th and 19th June 2025 | Prakash Ferrous | SMS and Rolling mill |
| **4** | Raipur (Chhattisgarh) Cluster | Raipur on 1st and 2nd July 2025 | M/s Agarwal Channel Mills Pvt. Ltd M/s Shivam Structural Steel Pvt. Ltd M/s Sindh Ispat Pvt. Ltd M/s Laxmi Kirpa Ispat Pvt. Ltd | Shop Floor training on combustion study |
| **5** | Raipur Cluster | Raigarh (Chhattisgarh) 20th and 21st August 2025 | MSP Steel & Power Ltd. | DRI (Sponge Iron) and SMS (steel making) and Safety |
| **6** | Jharsuguda Cluster | Kamanda (Odisha), 27th & 28th August 2025 | Kamanda Steel | DRI (Sponge Iron) and SMS (steel making) and Safety |
| **7** | Guwahati Cluster | Niglok-Ngorlung,(Arunachal Pradesh) 18th & 19th September 2025 | Aether Alloys LLP | Ferro alloys and Energy Efficiency |

| Sr No | Cluster | Location of Training | Units Name | Covered Subject |
|---|---|---|---|---|
| **8** | Jaipur-Bhiwadi Cluster | , Alwar, (Rajasthan), 24th & 25th September 2025 | S B F Ispat | SMS (IF), CCM and Rolling Mill, Energy Efficiency |
| **9** | Bhavnagar, Gujarat Cluster | Bhavnagar, Gujarat 30th October 2025 | Sihor Steel Re-rolling Mill Association (SSRMA) | Reheating Furnace Operation and, Rolling Mill Fundamentals, defects in rolling process and their remedies |
| **10** | Keonjhar (Odisha) Cluster | Keonjhar (Odisha) 30th October 2025 | Hotel Shreekshetra International, Keonjhar (Odisha). | Operational and Energy Efficiency in DRI making through Rotary Kiln and Steel making through Induction Furnace |
| **11** | Mandigobindgarh (Punjab) Cluster | Mandigobindgarh (Punjab) 29 th & 30 th October 2025 | NISST (MGG) | Electrical Motors and its efficiency, IF efficiency calculations, Mechanical maintenance<br>On Scrap segregation, Steel Melting through IF route, Safety |
| **12** | Raipur (Chhattisgarh) Cluster | M/s Karni Kripa Power Private Limited, Mahasamund , Chhattisgarh 13th and 14th November 2025 | M/s Karni Kripa Power Private Limited, Mahasamund, Chhattisgarh | Raw material for Iron making, Sponge Iron making, |
| **13** | Indore (Madhya Pradesh) Cluster | Hotel Fairfield by Marriott, Indore 28th and 29th November 2025 | Indore Re-Rolling Mills and Area Surrounding Indore Steel Making units | Rolling Mills, Steel Making through Induction Furnace Route, CCM, Reheating Furnace, Safety |

| Sr No | Cluster | Location of Training | Units Name | Covered Subject |
|---|---|---|---|---|
| **14** | Lucknow (Uttar Pradesh) Cluster | Hotel Holiday-in,Airport, Lucknow 28th and 29th November 2025 | Lucknow and Surrounding Area Re-Rolling Mills | Reheating Furnace Operation and, Rolling Mill Fundamentals, Operational Safety of Reheating Furnace and Rolling Mills, Mechanical Maintenance and 5-S |
| **15** | Hindupur, (District-Sri Satya Sai), Andhra Pradesh | Samukha A/C Conventional Hall (KVR Function Hall), Naneppa Nagar, Hindupur, Sri Sathya Sai District, Andhra Pradesh, 19th December | Hindupur, Anathapur and Surrounding Area | Steel making Through IF route and Rolling Mill fundamental and Operational Safety |
| **16** | Coimbatore, Tamilnadu | Hotel Merlis, Near Airport, Coimbatore, 22nd December | Coimbatore | Steel making Through IF route and Rolling Mill fundamental and Operational Safety |
| **17** | Medak, Telangana | Vinayaka A/C Convention Opp. CWC Godwns, Ramayapet Road, Medak Town, Medak, Telangana, 20th January 2026 | Medak | Steel making Through IF route and Rolling Mill fundamental and Operational Safety |
| **18** | Durgapur, West Bengal | Hotel Peerless, Durgapur, 22nd January 2026 | Durgapur | DRI (Sponge Iron) making and Steel making Through IF route fundamental and Operational Safety |
| **19** | Kutch, Gujarat | MONO Steel India Limited, Anjar, Kutch, Gujarat, 29th and 30th January 2026 | Kutch, Gujarat | DRI (Sponge Iron) making, Steel making Through IF route and Rolling Mills fundamental and Operational Safety |

| Sr No | Cluster | Location of Training | Units Name | Covered Subject |
|---|---|---|---|---|
| **20** | Rourkela, Odisha | Central Park, Rourkela 19th February 2026 | Rourkela | DRI (Sponge Iron) making and Steel making Through IF route fundamental and Operational Safety |
| **21** | Jamshedpur, Jharkhand | Hotel Jeeva, Jamshedpur, 21st February | Jamshedpur | DRI (Sponge Iron) making and Steel making Through IF route fundamental and Operational Safety |
| **22** | Hosapete, Karnataka | Hotel Humpi International 14th March 2026 | Hosapete, | DRI (Sponge Iron) making and Steel making Through IF route fundamental and Operational Safety |
| **23** | Kashipur, Uttarakhand | Hotel Manor Kashipur 16th March | Kashipur | Operational Energy Efficiency in Steelmaking (Through the IF)" and Rolling Mill, Safe Working Practices for the Steel Industry |
| **Total Participants trained in FY 2025-26: 669+** | | | | |

Training on AutoCAD was successfully provided to students, and certificates were issued to all participants upon completion of the training.

## Few Glimpses of the Training Programmes conducted in FY 2025-26

**MSP Steel & Power Ltd Raipur (Cluster)**

**Hotel Shreekshetra International, Keonjhar (Odisha)**

**M/s Aether Alloys LLP (Niglok- Ngorlung, Arunachal Pradesh)**

**NISST Mandi Gobindgarh**

**Hotel Merlis, Coimbatore (Tamil Nadu)**

**Hotel Fairfield by Marriott, Indore (M.P).**

**Hotel Holiday-in, Kanpur and Unnao district of Uttar Pradesh**

**Karnikripa Power Private Limited, Raipur, Chhattisgarh**

**Peerless Hotel, Durgapur (West Bengal)**

**Hotel Jiva, Jamshedpur (Jharkhand)**

## ENERGY AUDITS:

| Sr No | Name of the Unit |
|---|---|
| 1 | M/s Rajdhani Casting (Mandi Gobindgarh) |
| 2 | M/s Parkash Ferrous Company, Kalahasti, Andhra Pradesh |
| 3 | M/s Aether Alloys, Arunachal Pradesh |
| 4 | M/s Karni Kripa Power Private Limited, Mahasamud, Chhattisgarh |
| 5 | M/s A-One Steel India Limited Gauribidanur, Karnataka. |

**Few Glimpses of Energy Audit conducted in FY 2025-26**



## COMBUSTION STUDY:

| Sr No | Name of the Unit |
|---|---|
| 1 | M/s Modi Steels, Mandi Gobindgarh |
| 2 | M/s Shivam Ispat (Raipur |
| 3 | M/s Sindh Ispat (Raipur) |
| 4 | M/s Agarwal Channels Pvt. Ltd. (Raipur) |
| 5 | M/s Agrasen Rerollers, Urla, Raipur |
| 6 | M/s Aman Ispat (Khanna) |
| 7 | M/s VAE VKN India Pvt.Ltd, Bahalgarh Sonepat |

**Few Glimpses of Combustion Study conducted in FY 2025-26**





**SAFETY AUDITS:**

| Sr No | Name of the Unit |
|---|---|
| 1 | M/s Sunland Alloys, Khanvel Silvassa |
| 2 | M/s A Kumar Industries, Daman |
| 3 | M/s Amit Industries, Daman |
| 4 | M/s Sri Sai Trading Company, Daman |
| 5 | M/s Aarti Sponge & Power Ltd., Raipur, Chhattisgarh |
| 6 | M/s Vraj Iron and Steel Limited Bilaspur, Chhattisgarh |
| 7 | M/s Shivam Structural & Steel Pvt Ltd Raipur |
| 8 | M/s Agarwal Channel Mills Pvt. Ltd. Raipur |
| 9 | M/s Sindh Ispat Pvt. Ltd. Raipur |
| 10 | M/s Laxmi Kripa Ispat Pvt. Raipur |
| 11 | M/s Karni Kripa Power Private Limited, Mahasamud, Chhattisgarh |
| 12 | M/s Shyam Ingots unit-2, Naroli |
| 13 | M/s. Shree Khatu Shyam Alloys (Unit 1) |
| 14 | M/s. Shri Khatu Shyam Alloys (Unit 2) |
| 15 | M/s Shyam Ingots unit-1, Khadoli |
| 16 | M/s Shree Siddhi Ispat Corp.- Khadoli |
| 17 | M/s Balbir Metals & Power Private Limited, Sayli, Silvassa |
| 18 | M/s Balbir Rolling Mills Private Limited, Dapada, Silvassa |
| 19 | M/s Shri Vaishno Castings, Khadoli, Silvassa |
| 20 | M/s Shri Balaji Castings, Khadoli, Silvassa |
| 21 | M/s Sidhi Vinayak Steels, Khadoli, Silvassa |
| 22 | M/s Chatarbhuj Alloy Private Limited, Khadoli, |
| 23 | M/s M.I Alloys. |

**Few Glimpses of Safety Audit conducted in FY 2025-26**






**SAFETY INSPECTIONS:**

| Sr. No | Name of the Unit |
|---|---|
| 1 | M/s Ganga Mill, Khanna |
| 2 | M/s Ganga Mill, Khanna |
| 3 | M/s Rajbir Mill, Khanna |
| 4 | M/s Dhanraj Mill, Khanna |
| 5 | M/s Steelage Refractory, MGG |
| 6 | M/s Sanjay solvax, Khanna |
| 7 | M/s Satyam Agro Pvt Ltd, Khanna |
| 8 | M/s Gupta Steel Udyog, Khanna |

| Sr. No | Name of the Unit |
|---|---|
| 9 | M/s Vikas Industry Pvt Ltd, Khanna |
| 10 | M/s Shiv Shakti Casting Pvt. Ltd., MGG |
| 11 | M/s ANJ Metal Recycling Pvt. Ltd, MGG |
| 12 | M/s Bansal unit-1, Mandi Gobindgarh |
| 13 | M/s Bansal unit-2, Mandi Gobindgarh |
| 14 | M/s Ashok Steel, Mandi Gobindgarh |
| 15 | M/s Raj Shree Udyog, Mandi Gobindgarh |
| 16 | M/s Satyam Agro & Allied Industries, Khanna |
| 17 | M/s Satyam Roller Mill, Khanna |
| 18 | M/s Dev Industrial Corporation, Khanna |
| 19 | M/s Dev Steel Industries, Khanna |
| 20 | M/s Asian Steel, Khanna |
| 21 | M/s Lakshmi Steel Rolling, Khanna |
| 22 | M/s Madhuban Steel Rolling, Khanna |
| 23 | M/s Gill Hydra (Arjas Modern Steel), Mandi Gobindgarh |
| 24 | M/s Bansal Ispat Udyog. |
| 25 | M/s Khanna Feed Pvt. Ltd. |
| 26 | M/s A S Precision Pvt. Ltd. |
| 27 | M/s S R Ceramic Pvt. Ltd. |
| 28 | M/s Arti mill. |
| 29 | M/s Arti mill. |
| 30 | M/s Lord Ganesh mill. |
| 31 | M/s Verma mill. |
| 32 | M/s Verma mill. |
| 33 | M/s Kansal feed factory. |
| 34 | M/s Kansal Krushi Udyog. |
| 35 | M/s GS forging Pvt. Ltd. |
| 36 | M/s ANJ casting. |
| 37 | M/s AR Agro Pvt.Ltd |
| 38 | M/s Sharma Mill Pvt.Ltd |
| 39 | M/s Arpan Mill Pvt.Ltd |
| 40 | M/s SA Agrotech Pvt.Ltd |
| 41 | M/s Madhav Mill. Pvt.Ltd |
| 42 | M/s Bhagvati Mill. Pvt.Ltd |
| 43 | M/s Nav Durga Mill.Pvt.Ltd |
| 44 | M/S Ambay Mill, Khanna |
| 45 | M/S Ambay Mill, Khanna |
| 46 | M/S Aujla Mill, Khanna |
| 47 | M/S Guru Nanak Mill, Khanna |
| 48 | M/S Shree Ganpati & General Mill Khanna |
| 49 | M/S Jindal Mill, Khanna |
| 50 | M/S Ganga Roller Mill, Khanna |
| 51 | M/S Ganga Mill, Khanna |
| 52 | M/s Jindal Agro Industries, Khanna. |
| 53 | M/s Durga Mills, Khanna. |
| 54 | M/s Naveen Mills, Khanna. |
| 55 | M/s Shanker Steel Industries, MGG. |
| 56 | M/s Satyam Roller Mills, Khanna. |

| Sr. No | Name of the Unit |
|---|---|
| 57 | M/s Satyam Agro & ALLIED Industries, Khanna. |
| 58 | M/s Ambica Mills, Khanna. |
| 59 | M/s Rajbir , Khanna. |
| 60 | M/s Modern Refractories, Khanna. |
| 61 | M/s Sohna General Mills. |
| 62 | M/s Shree Ganesh Mills. |
| 63 | M/s Vivek Re-Rolling Mills |
| 64 | M/S Modi steel Pvt. Ltd. |
| 65 | M/S Aggarwal industries. |
| 66 | M/S United Agro industries. |
| 67 | M/S Aggarwal Agro industries. |
| 68 | M/S Dhanraj General Mills. |
| 69 | M/S Nihan Agro industries. |
| 70 | M/S Shiva Agro industries. |
| 71 | M/S Karam steel industries Pvt. Ltd. |
| 72 | M/S Singla steel & allied industries. |
| 73 | M/S Karam steel corporation. |
| 74 | M/S Shri guru dev 1008 Maharaj. |
| 75 | M/S Rajan kamal & General Mills. |
| 76 | M/S Nagra General Mills. |
| 77 | M/S Krishna Agro industries. |
| 78 | M/S Kang board |
| 79 | M/s Shiv Shakti Casting Pvt. Ltd. |
| 80 | M/s Royal Ispat Udyog Pvt. Ltd. |
| 81 | M/s Bansal Udyog Pvt. Ltd. |

**TESTINGS:**

| Sr. No | Name of testing | No of test |
|---|---|---|
| 1 | Chemical | 834 |
| 2 | Metallography | 375 |
| 3 | Mechanical | 1072 |
| 4 | Safety Inspection | 290 |
| 5 | **Total** | **2571** |

# OTHER ACTIVITIES

## GREEN STEEL CERTIFICATION:

To facilitate decarbonisation of steel sector and overall containment of $CO_2$ emission in Iron & Steel Sector, NISST has been notified Nodal agency for Measuring, Reporting and Verification (MRV) as well as for issuing greenness certificates and star ratings for steel, vide Ministry Notification F. No. 1(6)-2024-ID-2, dated 23rd December 2024.

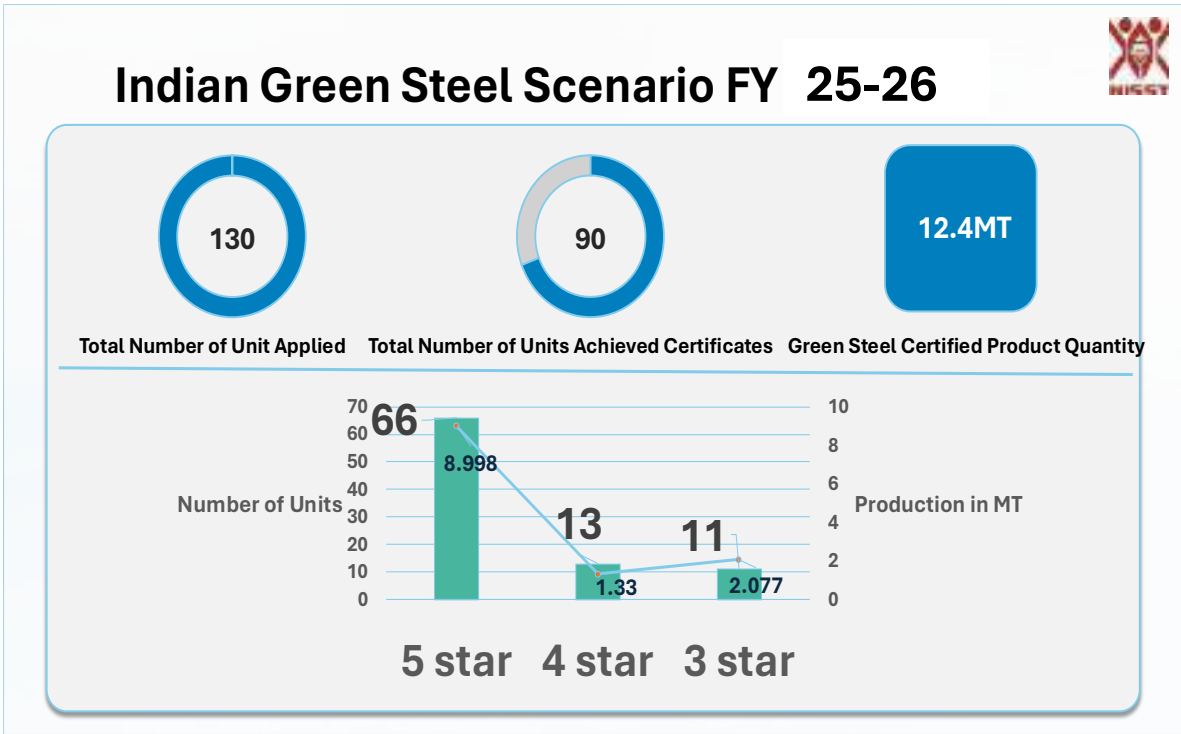
Work accomplished related to the activity are as below:

- ❑ As per the notification issued by Ministry of steel regarding Green Steel taxonomy NISST has developed Guidelines for Green Steel Certification.

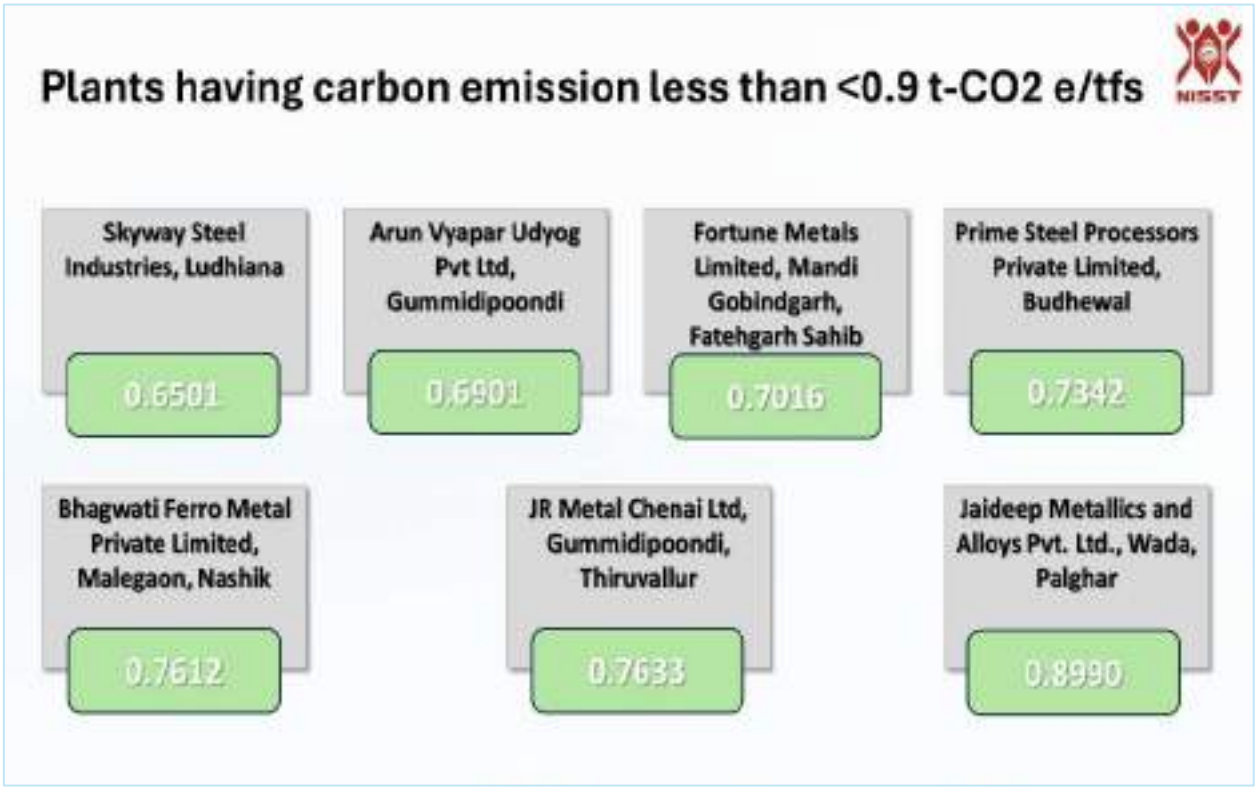
- ❑ Developed worksheet for calculation of $CO_2$ emission per tonne of finished steel after consultation with stakeholders.
- ❑ Empanelment of Green Steel Audit Firms and also fixed rates for green steel audits as per the directions of ministry.
- ❑ Executed registration and certification processes.
- ❑ Awarded First Green Steel Certificate in the month of Aug 2025.
- ❑ Awareness on Green Steel certification through various platforms.
- ❑ Developed Green Steel Portal.

**Status of Green Steel Certification as on 31.03.2026**

| Request Received in Month | Units Registered | Audit Conducted | Report Received | Certificate issued | Unit not qualified | Unit Refused for audit after registration |
|---|---|---|---|---|---|---|
| **Apr-Aug-25** | 56 | 54 | 53 | 48 | 5 | 3 |
| **Sep-25** | 11 | 11 | 11 | 10 | 1 | -- |
| **Oct-25** | 19 | 17 | 17 | 15 | 2 | 2 |
| **Nov-25** | 18 | 13 | 11 | 9 | 2 | 7 |
| **Dec-25** | 10 | 6 | 6 | 6 | 0 | 4 |
| **Jan-26** | 6 | 3 | 3 | 1 | 2 | 3 |
| **Feb-26** | 10 | 0 | 1 | 1 | 0 | 9 |
| **Total** | **130** | **107** | **102** | **90** | **12** | **28** |




Top 5 Green Steel Certified Plants
NISST
1st
Agni Steels Private Limited, Erode
0.4529 (t-CO2 e/tfs)
2nd
Meenakshi Udyog (I) Pvt. Ltd., Egmore, Chennai
0.5270 (t-CO2 e/tfs)
3rd
A One Steels India Limited, Gauribidanur
0.5853 (t-CO2 e/tfs)
4th
Renny Strips Limited, Ludhiana
0.6239 (t-CO2 e/tfs)
5th
ARS Steels and Alloys International Pvt Ltd, Gummidipoondi
0.6432(t-CO2 e/tfs)


Plants having carbon emission less than <0.9 t-CO2 e/tfs
NISST
Skyway Steel Industries, Ludhiana
0.6501
Arun Vyapar Udyog Pvt Ltd, Gummidipoondi
0.6901
Fortune Metals Limited, Mandi Gobindgarh, Fatehgarh Sahib
0.7016
Prime Steel Processors Private Limited, Budhewal
0.7342
Bhagwati Ferro Metal Private Limited, Malegaon, Nashik
0.7612
JR Metal Chenai Ltd, Gummidipoondi, Thiruvallur
0.7633
Jaideep Metallics and Alloys Pvt. Ltd., Wada, Palghar
0.8990

**GHG BASELINE STUDY:**

- NISST was appointed as the Technical Nodal Agency to oversee the conduct of the GHG studies of Iron and steel sector excluding DCs.
- Accordingly, the reports pertaining to **637** number of units were evaluated by NISST and the reports of **497** number of units were finalized and forwarded to JPC. While efforts were made by the agencies to execute the assigned work, the activities could not be completed within the stipulated timeframe.
- Subsequently, the entire scope of work relating to the conduct of the studies was entrusted to NISST. In pursuance of the same, NISST floated a tender through newspapers on 11.12.2025 for the **"Selection of Agencies for Measuring Baseline GHG Emissions of the Steel Plants in India."**
- The tender is being evaluated and Work Order issued to the following agencies as below:
  1. Green Tree Building Energy - South Zone.
  2. PTC India - West & Central Zone.
  3. TUV SUD - East Zone.
  4. Wire Consultancy – North-1 & North-2 Zones.

**Status of GHG Baseline reports of Mar 2026**

| Sr No | No of Units Allotted | Zone | Agency Name | Report received till Mar 2026 | Report evaluated till Mar 2026 |
|---|---|---|---|---|---|
| **1** | 290 | N1 | Wire consultancy | 27 | 26 |
| **2** | 223 | N2 | Wire consultancy | 44 | 30 |
| **3** | 255 | South Zone | Green Tree Building Energy | 0 | 0 |
| **4** | 433 | West Zone | PTC India | 12 | 12 |
| **5** | 357 | Central Zone | PTC India | 4 | 0 |
| **6** | 237 | East Zone | TUV SUD | 0 | 0 |

## CHINTAN SHIVIR 2026

As directed by Ministry of Steel, A 'Chintan Shivir' was organized on 16th February, 2026 at National Institute of Secondary Steel Technology (NISST), Mandi Gobindgarh, Punjab in order to initiating the deliberations on Green Steel Production in the country. The event was inaugurated by Shri Sandeep Poundrik, Secretary, Ministry of Steel. Additional Secretary & Financial Advisor, Joint Secretary and other officials of the Ministry of Steel, CPSEs, technical experts, Industry associations and representatives from secondary steel sector participated in the event.

A total of 58 participants from various Industries and Associations attended the Chintan Shivir.

**Few Glimpses of Chintan Shivir 2026**




MINISTRY OF
STEEL


MINISTRY OF
STEEL


भारत स्टील


GREEN STEEL PRODUCTION


WATER GAS REDUCTION PROCESS


Hydrogen Rotary Kilns for Ironmaking in India
Chintan Shivir of Ministry of Steel


Green Steel from the Ground Up


Mr. M. K. Gupta
Managing Director of Star Wire (India) Limited


Mr. M. K. Gupta
Managing Director of Star Wire (India) Limited


Green Steel Production in India:
Perspective of the Recycling &
Secondary Steel Sector

# CHAPTER-4

## RECEIPT & PAYMENT STATEMENT

| *Details of Receipts & Payments*<br><br>**F.Y. 2025 - 26** | |
|---|---|
| **Receipts** | (Rupees in Lakhs) |
| Technical Services | 336.06 |
| Interest Income | 35.23 |
| Revenue Grant from JPC | 501.50 |
| Special Grant for Strengthening of NISST from JPC | 55.00 |
| Special Grant from JPC B/F from previous year | 58.58 |
| Total | 986.37 |
| **Payments** | |
| Refurbishment of NISST Building | 201.41 |
| Other Capital Expenditure | 42.93 |
| Salary & Emp. Related Expenses | 538.47 |
| Office Running Exp. | 59.17 |
| Travelling | 13.01 |
| Expenses on training in clusters & other tech. activities | 28.48 |
| Expenditure against grant for strengthening of NISST | 112.92 |
| Total | 996.39 |

# CHAPTER-5

## MANPOWER DETAILS

**LIST OF REGULAR EMPLOYEES AS ON 31.03.2026**

| Sl No. | NAME S/Shri | Designation | Gender |
|---|---|---|---|
| 1. | Parmjeet Singh | Director | **Male** |
| 2. | Sandeep Pal Singh | Sr. Deputy Director (Technical) | **Male** |
| 3. | Bimal Kumar Bansal | Sr. Deputy Director (F&A) / (P&A) | **Male** |
| 4. | Brijesh Kumar Batish | Section Officer (E&PC) | **Male** |
| 5. | Alok Kumar Jha | Section Officer (Computer) | **Male** |
| 6. | Milind N Tupkar | Section Officer (F&A) | **Male** |
| 7. | Kuldeep Singh | Section Officer (Electrical) | **Male** |
| 8. | Vimal Kumar | Office Superintendent (P&A) | **Male** |
| 9. | Hari Bahadur | Sr. Lab cum Office Attendant | **Male** |
| 10. | Vikas Kumar | Lab Assistant | **Male** |
| 11. | Mrs. Renu Bala Roy | Sr. Assistant | **Female** |
| | **Male = 10 & Female = 01 = 11 Total employees** | | |

**CONTRACTUAL EMPLOYEES AS ON 31.03.2026**

| S.No. | Name of the employee S/Shri/Ms | Designation | Gender |
|---|---|---|---|
| **01** | Rahul Sharma | Manager (Energy) | **Male** |
| **02** | Bikas Kumar Chandrakar | Manager (Energy) | **Male** |
| **03** | Vaibhav Singh Thakur | Manager (Energy) | **Male** |
| **04** | Ashok Verma | Technical Manager (Mechanical) | **Male** |
| **05** | Vipin Kumar | Technical Manager (Metallurgy) | **Male** |
| **06** | Koustav Paul | Technical Manager (Elect. & Electronics) | **Male** |
| **07** | Shivam Bhardwaj | Technical Assistant to Director | **Male** |
| **08** | Duregesh Notial | Dy. Quality Manager | **Male** |
| **09** | Sunil Kumar | Technical Assistant | **Male** |
| **10** | Paramveer Sharma | Technical Assistant | **Male** |
| **11** | Jujhar Singh | Technical Assistant | **Male** |
| **12** | Ravi Kumar | Technician | **Male** |
| **13** | Munish Kumar | Technical Assistant (Electrical) | **Male** |
| **14** | Chirag Ghawri | Assistant | **Male** |
| **15** | Akhilesh Kumar | Lab. Technician | **Male** |
| **16** | Amandeep Singh | Lab Attendant (Chemical Lab) | **Male** |
| **17** | Virender Singh Patwal | Consultant (F&A) | **Male** |
| **18** | Sachin Kumar | Assistant (F&A) | **Male** |
| **19** | Hitesh Kumar | Gardener | **Male** |
| **20** | Meetu Nihalani | HR Manager | **Female** |
| | **Male = 19 & Female = 01 = 20 Total employees** | | |

## LIST OF BOARD MEMBERS

| Sr No | BOARD MEMBER NAME | DESIGNATION |
|---|---|---|
| **1** | Mr. Daya Nidhan Pandey (IAS) | Chairman, NISST & Joint Secretary, Ministry of Steel |
| **2** | Mr. Raj Kumar | Joint Director, Ministry of Steel |
| **3** | Mr. Shalabh Sharma | Executive Secretary, Joint Plant Committee |
| **4** | Dr. Jagannath Pal | Chief Scientist, National Metallurgical Laboratory |
| **5** | Mr. Deependra Kashiva | Director General, Sponge Iron Manufacturers Association (SIMA) |
| **6** | Mr. D. Ravi Kumar | Professor, Department of Mechanical Engineering |
| **7** | Dr. Anil Dhawan | Director General,Alloy Steel Producers Association of India (ASPA) |
| **8** | Mr. Yogesh Mandhani | President, All India Induction Furnace Association (AIIFA) |
| **9** | Mr. Sushil Kumar | General Secretary, All India Steel Re-Rollers Association (AISRA) |
| **10** | Mr. Rajesh Kumar Vijayavergia | Former Executive Director (Operation), SAIL |
| **11** | Mr. Parmjeet Singh | Director, NISST |
| **12** | Mr. Sandeep Pal Singh | Senior Deputy Director (Technical), NISST |