

RECOGNITION AND AWARDS

SAIL

Continuing with its tradition, SAIL received several awards and recognitions during the year. The steel major bagged the National Award 2003 for Excellence in Cost Reduction, instituted by the premiere academic organisation, ICWAI. Earlier, SAIL pavilion was adjudged the second best in the World Mining Congress held at Pragati Maidan during 1 - 5 November 2003. Continuing with academics, a student from Bhilai, Shashank Shekhar Dwivedi, son of Mr P. Dwivedi AGM, Blast Furnace, BSP, created a history by topping in IIT joint entrance exam (JEE) 2003. Udyog Ratan Award, Manav Ratna Award, NDMC Gold Medal, Shram Yashaswi Puraskar and SMS-DEMAG Excellence Award-Gold Medal are some of the other awards that were bagged by SAIL employees in their individual capacities.



SCOPE Award for turnaround

Prime Minister's Shram Awards - 2003

During the year 2003, a team from Bhilai Steel Plant consisting of five employees bagged the prestigious Prime Minister's Shram Ratna Award - the highest award in this category. In addition to this, another team from Bhilai and one employee from Bokaro Steel Plant have bagged the Shram Vir award for the year 2003.



Special prize for getting first prize for three consecutive years 2003, 2003 & 2004

Vishwakarma Rashtriya Puraskar - 2003

SAIL employees figure prominently amongst the awardees of Vishwakarma Rashtriya Puraskar 2003. 26 employees from BSP and 1 employee from BSL have been selected for the Vishwakarma Awards-2002 and 2 employees of BSP have been selected for Vishwakarma Awards-2001.

NMDC LTD.

RECOGNITION AND AWARDS

1. On 4th June, 2004 received the IIIE Enterprise Excellence Award 2002-03 during the 7th CEOs Conference at Ramoji Film City, Hyderabad.
2. On 4th September, 2004 received the Merit Certificate for Excellence in the achievement of MOU targets for the year 2002-03 (MOU Award) from Dr. Manmohan Singh, Hon'ble Prime Minister of India.
3. On 25th November, 2004 received the Special Export Award for the year 2003-04 from CAPEXIL.

MOIL

MOIL is perhaps one of the few public sector enterprises in the country known for its continuous excellent performance. The Company has been getting national / regional recognition for its good work in almost all fields of activities. The following are some of the recognitions that the Company has received at the national level:

1. Prime Minister's Merit Certificate for excellent performance under MoU.
2. National Safety Award.
2. Rajbhasha Puraskar.
3. Misrilal Jain Environment Award from FIMI.

The Company also recognizes the talents within the Company and encourages its employees to actively participate and give suggestions for improvement in the performance of the Company.



Indira Gandhi Rajbhasha Award



World Quality Commitment Award

PROMOTION OF STEEL USAGE

DESIGN GUIDEBOOKS, HANDBOOKS, MANUALS AND REPORTS

During the year 2003-04, INSDAG brought out about 10 important guidebooks and manuals, which will not only enhance steel application in construction but will also help in adopting safe methods of construction and will improve safety of steel intensive structures.

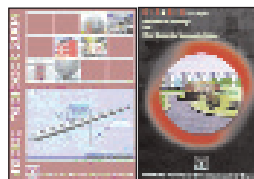
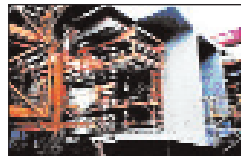
- *Use of Profiled Sheets (Plain)* as sacrificial deck shuttering material.
- Two (2) *Typical Innovative Designs of Rural Housing* were prepared. The first one is based on Square Hollow Section (SHS) & Ferro Cement panels as cladding and flooring material. Another design used Square Hollow Sections as columns and supports and galvanized steel sheets as roofing and external wall material. Internal walls are of bamboo mats and chicken mesh placed together and finished with plaster of cement and sand mortar.
- *Design of Rural Bridges and Culverts* with steel-concrete composite option.
- *Formwork and Scaffolding Design* modular design system using square, rectangular and circular hollow sections etc.
- *Design Guidebook of Light and Temporary Steel Structures* (Steel Intensive Puja Pandals & Platforms).
- Design studies on *Multistoried Residential Buildings with Steel-Concrete Composite Option*. Cost comparison with RCC option was done for G+3, G+6, G+15 and G+20 Storied Residential Buildings.
- *Typical Design of Bus Stands and Bus Terminuses* using variety of steel sections.
- A *Guidebook on Fire Protection of Steel Structure*.
- *An Album of entries in National Award Competitions for the Students of Architecture* for free distribution to architectural colleges.
- *The First Yearbook of INSDAG*.

INSDAG has initiated work on the following projects after obtaining approval of the Project Review Committee:

- Design of Steel-concrete composite Box Girder Bridges for Railways - the project is in its final stage
- Design of Pressed Steel and Aquaplate Water Tanks - the project is in progress
- Design Handbook for Cold-Formed Steel Sections
- Steel Structures in Rural Applications - Panchayat Meeting Hall
- Continuous Composite Construction for Bridges
- Guidebook for Steel Sheet Pile & Bearing Pile Sections
- Guidebook on Fabrication and Erection of Steel Structures
- Design Guidebook of Profiled Sheets with Embossment (For Composite Construction) - both Shallow and Deep Types
- Paint Systems for Extended Maintenance Free Life of Steel Structures
- Steel Intensive Dhaba

MARKETING AND TECHNICAL STEEL PROMOTION

INSDAG made sustained efforts in popularising the use of steel in various segments through innovative "design based projects" and aggressive marketing initiatives to convince the decision-makers. Some of the important achievements during the year, which will have substan-



tial steel consumption in important projects, are listed below:

- After continuous persuasion, meeting with decision-makers, presentation before Aviation Secretary and AAI and answering their technical queries, Airport Authority of India has finally opted for steel intensive construction in most of their expansion / modernization programmes of terminal buildings of airports. Expansion programmes of about 20 airports are in process. This will consume substantial quantities of steel.
- Based on the advise of expert committee and persuasion of INSDAG, Konkan Railway authorities have decided to construct all 8 bridges with steel on Jammu Baramulla route although some of these bridges will be in the most difficult terrains. The Konkan Railway is thinking for steel based structure for their Skybus projects too.
- After presentations and discussion with Border Road Organization, they were convinced on benefits of steel bridges. They have completed several bridges with steel and many more are under construction.
- Sulabh International was convinced about design of steel intensive toilet blocks and sent two architectural drawings. Design of cost effective steel intensive community toilets has been worked out by INSDAG.
- A technical presentation was delivered by INSDAG to Delhi Metro Rail Corporation (DMRC). DMRC showed interest in steel-concrete composite design. They have made good use of steel in their station buildings and decided for steel based construction in some bridges.
- Presentation was made before India Trade Promotion Organization (ITPO) at Pragati Bhawan, New Delhi in presence of Joint Secretary (Steel). ITPO was convinced and decided to construct all steel based structures for exhibition centers, shopping plazas, food courts, car parks, etc. in their expansion project. Similar trend is likely to continue for the proposed Permanent Fair Ground at Kolkata. INSDAG is in touch with those authorities.
- With the imitative of Tata Steel rural houses with steel were built in Orissa, Jharkhand and Sikkim. INSDAG is trying hard for adoption of its rural housing design by State Government and NGOs. It is also working on the idea of a full steel demonstration village.

EDUCATION / TRAINING OF TEACHING FACULTY AND PROFESSIONALS ON STEEL DESIGN TECHNOLOGIES

In view of the importance of disseminating knowledge on cost effective steel design technologies for working professionals and faculties of engineering colleges **Refresher Courses** and **Short Term Training Programme (STTP)** were conducted.

During the year, in association with Indian Society for Technical Education (ISTE) and concerned engineering colleges, two (2) STTP (for the University Faculties) were conducted at VNIT, Nagpur and B & B Institute of Technology, V V Nagar, Gujarat. More than 50 faculty members were exposed to the advanced teaching materials.

14 Refresher Courses were organized during the year. The courses were organized at L&T, Power; INSDAG, Kolkata; INSTRUCT, Bangalore; L&T, Chennai; Jamshedpur (with Steel & Metallurgy); Mumbai; Coimbatore and other places. Revision of code IS: 800 were widely covered in several Refresher Courses. More than 400 professionals were trained.

CODES & STANDARDS

- Draft of the LSM version of the Code IRC-22 has been given the final shape.
- The revision of IS:800 (LSM) Code has been completed and final draft submitted to BIS for their necessary action. BIS is in the process of receiving comments from a wide section of users before release of the revised version.
- Revision of National Building Code is in progress. INSDAG is preparing the draft of Section - 6 / Part - 6 which deals with steel construction.

NATIONAL LEVEL STUDENT COMPETITIONS

To create awareness among the Students of Architecture and Civil Structural Engineering about the uniqueness of steel as a medium of expression of their innovative ideas and as a material of construction, which can provide cost effective designs of structures, competitions were held at zonal and central level for those students.

The theme of competition for the *Architecture award* during the year 2003-04 was "A World Class International Cricket Stadium at Raipur in the State of Chhattisgarh". In the final round five entries were selected for award by the Central Award Committee.

Accordingly prizes with a Scroll of Honour were given to winning entries.

For National Competition for Best Innovative Structural Steel Design in *Civil Engineering* the theme for the year 2003-04 was "Eye Catching G+4 Steel Intensive Shopping Mall Viaduct Structures". Award competitions received wide response. Jury members appreciated the quality of entry. The selected entries were awarded.

The theme for *Architecture Award* for the year 2004-05 is "International Airport Terminal Building at Visakhapatnam, Andhra Pradesh" and that for Civil / Structural competition is "Design of an Elegant Steel Railway Bridge".

In order to provide impetus to the professionals INSDAG is organizing a competition for them. The subject is unrestricted, but any live project executed by them, primarily made of steel with a project cost of minimum Rupees Five Crores can be considered.

MEMBERSHIP AND ADVISORY SERVICES

- During the year INSDAG registered tremendous growth in its membership. 30% growth in membership was achieved. The membership figure on March 31, 2004 is 1101(F-6; P-6; AA-33; AB-22; INST-28; INDVL - 94; INDV - 112; STD - 800). The growth came from various segments like architects. Structural engineers, designers, fabricators and academic institutions.
- On an average 15 queries / month through e-advisory module and 30 queries / month through e-mails were addressed during the year. The queries were mainly focused on cold-formed sections, bolting, connection design, fire resistance, product information, bridge design, composite beams, corrosion protection, etc.
- INSDAG's Website was widened further. Promotors links have been provided in the website. Bi-monthly E-News Letter is attracting lot of visitors. There has been substantial increase in the queries via the E-advisory mode.

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