

**The Institute for Steel Development & Growth (INSDAG)**  
**52/1A, Ballygunge Circular Road, Calcutta-700019**  
**Phone: (91) 33 4614045/47/666; FAX: 461 4048; E-mail: insdag@cal2.vsnl.net.in**

### Background

Steel is the backbone of all industries and the basic ingredient for growth and development of a country. Traditionally, the fortunes of the steel industry have been linked to the economic cycle of the country. Per capita consumption of steel speaks volumes about the relative position of the country on the development frontier.

In India the per capita consumption of steel stands at 29 kgs (including Alloy steel) in the year 2001 compared to more than 90 kgs in china. The world average is 121 kgs. The consumption of steel in construction segment is low in comparison to developed and developing countries. Moreover, steel is completely recyclable and thus environment -friendly. Hence, a large potential exists in furthering the usage of steel in various segments of industry.

With this view in mind and to improve the image of steel to the users, Ministry of Steel along with the major steel Producers of the nation have promoted and established the Institute for Steel Development & Growth (INSDAG) at Kolkata. The Institute is registered as a "Society" under Societies Registration Act of West Bengal, with its registered office at Ispat Bhavan, 40 Chowringhee Road, Kolkata 700 071. The Institute is a member-based nonprofit making organisation. As on, it has more than 550 members comprising organizations, institutions, associations, professionals and students.

### Management of the Institute

The Director General looks after the daily affairs of the Institute and Executive Council (EC) provides guidance and direction. Two other functional committees namely the Executive Committee of INSDAG (ECI) and Project Review Committee (PRC) respectively, provide administrative and technical guidance. The Institute has defined its mission, role, and functions and has evolved its short, medium and long term Activity Plans.

### Role of the Institute

The Institute primarily works towards the development of technology in steel usage and the market for the steel fraternity. Some of its roles are:

1. Creating awareness amongst potential users about affordability and benefits of steel.
2. Providing prompt advisory service on materials, construction practices, interpretation of codes, fire and corrosion protection, design guidance etc. and creating an environment for better usage of steel by acquiring and disseminating knowledge about the best practices.
3. Preparing handbooks, design guides, manuals to facilitate speedy and cost effective design and construction by professionals
4. Upgrading competence and skills of professionals by organizing refresher courses/training and offering better technical know-how, design aids and teaching aids.
5. Communicating the benefits of steel vis-a-vis other competing materials, through life cycle cost studies, where required, to decision makers and Govt. agencies.
6. Interacting with Bureau of Indian Standards, Indian Road Congress and Railways for expediting revision of steel related codes bringing in factors for improving efficiency and cost effectiveness.
7. Providing requisite thrust to increase steel consumption in rural areas.
8. Assisting in the development of ancillary industries, which boost the usage of steel and creating new market for steel usage.

### Initial Focus

INSDAG strives to expand the use of steel in the residential, commercial, infrastructure, industrial and rural segments of construction industry. However, in the coming years it will also cover automotive, power, rail and road transportation and irrigation segments. In doing so, INSDAG organizes a series of seminars and workshops which act as a platform for all connected to the steel supply chain - architects, consultants, structural engineers, steel producers, consultants, contractors, fabricators, hardware suppliers, government agencies, specifiers etc. These seminars and workshops are not only the forum for addressing the best practices in steel usage but also focus on identifying the constraints in the usage of steel and removing the impediments. INSDAG members are entitled to participate in these programmes at a discounted fee as per Institute rules.

## Main Activities

To facilitate improved interaction among different agencies involved, every year a number of publications are brought out and distributed to the members of INSDAG and concerned organisations. The Institute has published: Directory of Steel Supply Chain; Buyer's Manual for Purchasing Steel; Corrosion Protection of Structural steel (Buildings & Bridges); Handbooks on - Design of Composite Construction of Bridges/Flyovers, Car parks and Buildings; Reference Manual for Structural Engineers; Handbook on Structural Steel Detailing; Life Cycle Cost analysis of Bridges & Buildings; Survey of Rail Bridges; Welding Guide for Structural Steel and a number of reports / documents from SCI under a copyright arrangement. Institute is regularly organizing refresher courses on cost effective composite construction technology, cold-formed sections, earthquake resistant design and allied topics. It has also published promotional brochures on corrosion protection of steel, steel right choice, pre-engineered buildings, steel bridges etc.

## Advisory Services

Members can avail on-demand advisory services from INSDAG on: interpretation of standards; construction techniques; cost-benefit analysis; best practices; benchmarks; sources of supply; welding and corrosion protection etc. INSDAG has created advisory desk for prompt response and introduced e-advisory module on its website [www.steel-insdag.org](http://www.steel-insdag.org) for hosting steel related queries and obtaining replies from national experts in the fields.

## Regular Publications and Reference Documents

INSDAG has set up a library of books, design-aids for easy access to information by its members. INSDAG is publishing and circulating among its members the latest developments in the construction and other steel consuming sectors through its technical journal-Insdag's Steel in Construction and the newsletter-INSDAG News. The Institute is also providing its members, state of the art literature published by The Steel Construction Institute, UK through a copyright agreement for 42 very useful and expensive documents. These publications are being given to members to update their knowledge from time to time.

## Membership Categories

**Founding Member:** Large steel producing companies and the Govt. representatives, who conceived and promoted the institute, are the Founding Members. All organizations having integrated operation for iron and steel production from iron ore and its derivatives are its founding member.

**Primary Member:** Large organization such as producers of steel, fabricators, developers, builders, companies engaged in construction, designers, consultants, specifiers, architects, design institutes, educational & research institutes, interior decorators, engineering firms etc. can enroll themselves as primary members.

**Associate Members:** Firms, companies, undertakings, overseas firms interested in steel usage can become Associate Members. There are two types of Associate Membership viz. *Associate Members – A* :Larger organizations / firms with more than 15 employees and *Associate Members – B* :Registered SSI units / small establishments having a maximum strength of employees upto 15.

**Institutional Member:** All India or State local Professional Institutes / Organizations / Boards / Associations etc. dealing with collection and dissemination of information, research and development, process upgradation, exploration of new resources etc. are eligible for membership of the Institute.

**Individual Member:** Any professional having interest in steel application and in upgradation of knowledge can become individual member. Individual member may opt for annual or life, membership.

**Honorary Member:** Eminent Professionals connected with steel industry or those who have rendered distinguished service to the interests of the Institute can be elected as Honorary Member by the Executive Council.

**Student Member:** Student of Civil Engineering / Architecture / Mechanical / Metallurgical & other allied Engineering disciplines at under graduate / post graduation/ Ph.D level are eligible for Student Membership and one time subscription to be paid at every level (Graduation, Post Graduation & PhD).

**Annual /Life Subscription for INSDAG Membership**

(i)	<b>Founding Member:</b> (Companies with Gross Turnover/Income)	Annual /Life Subscription
	> Rs. 1000 Cr.	Rs. 10 lakhs
	> Rs. 700 Cr. Upto Rs.1000 Cr.	Rs. 7 Lakhs
	> Rs. 500 Cr. Upto Rs. 700 Cr.	Rs. 5 Lakhs
	> Rs. 200 Cr. Upto Rs. 500 Cr.	Rs. 2 Lakhs
	= Rs. 25 Cr. Upto Rs. 200 Cr.	Rs. 1 Lakh
	< Rs. 25 Cr.	Rs. 25,000
(ii)	<b>Primary Members :</b> (Organization with gross turnover)	
	= Rs. 25 Cr.	Rs. 1 lakh
	< Rs. 25 Cr.	Rs. 25,000
(iii)	<b>Associates—A</b> Indian Organizations ( Amore than 15 employee )	Rs. 10,000
(iv)	<b>Associates—B</b> Indian Organizations ( upto 15 employee or SSI regd.)	Rs. 5,000
(vi)	<b>Associate A &amp; B</b> - Overseas Organizations	\$ 2,000
(vii)	<b>Institutional Members</b>	Rs. 5,000
(viii)	<b>Individual Membership</b>	Rs. 600 (Annual)/Rs. 6000/( Life)
(ix)	<b>Individual Overseas Membership</b>	US\$ 100 (Annual)/US\$ 1000 (Life)
(x)	<b>Honorary Membership</b>	Approved by EC
(xi)	<b>Student Membership</b>	Rs. 200

**MEMBERS BENEFITS AND DISCOUNTS**

	<b>Founding</b>	<b>Primary</b>	<b>Associate-A</b>	<b>Associate-B</b>	<b>Institutional</b>	<b>Individual</b>	<b>Student</b>	<b>Honorary</b>
Advisory Service on Phone / fax / email etc	Free	Free	Free	Free	Free	Free	Free	Free
Library Information Service	Free	Free	Free	Free	Free	Free	Free	Free
INSDAG Publications: Steel in Construction & INSDAG News	Free – 5 copies each	Free 2/3 copies* each	Free – 1 copy each	Free – 1 copy each	Free – 1 copy each	Free – 1 copy each	Free – 1 copy each	Free – 1 copy each
Project Publications: Directories, Manuals, Design Aids, Handbooks, Conference Proceedings etc. Selected Copyright of SCI Publications	Free – 5 copies each. Discount on Addl. Copies 30%	Free-2/3 copies* each. Discount on Addl. copies 20%	Free – 1 copy each Discount on Addl. copies 10%	Free one copy each of 50% of published list (5-6) every year  Discount on Addl. copies/remaining copies 10%	Free – 1 copy each. Discount on Addl. copies 10%	Free – Any 2 Publications. Discount on Addl. copies 10%	Free-1 copy of INSDAG Guide for Structural Use of Steelwork in Building at enrollment and other publications at 20% discount.	
Technical Training / Seminars / Conferences / Workshops, etc.	Discount 20%	Discount 20%	Discount 20%	Discount 20%	Discount 20%	Discount 20%	Discount 20%	
Confidential Consultancy	Discount 30%	Discount 30%	Discount 20%	Discount 20%	Discount 20%	Discount 20%	--	
To be a member of Council of INSDAG	Permanent member	On election	On election	On election	On election	On election	--	

opies for members with Annual Subscription of Rs. 25,000/- and 3 copies for members with Annual Subscription of more than Rs.25, 000/-

## Application Form for Membership

Category of membership applied for .....

Name DR/ Mr / Mrs / Ms.....

Designation ( Indicate Year/semester in case of student member).....

Organisation (Indicate Institute's name in case of student member) .....

Address.....

.....

Phone.....Fax.....E-mail..... Website.....

### Nature of Business : ( Not applicable for Student member)

Architect

Consulting Engineer

Contractor

Local/Central Government

Component Manufacturer

Educational Institute

Engineering Design

General

Paint Manufacturer

Software /Steel Portals

Specialist Sub-Contractor

Steelwork Contractor

Trade Association/Research Institute/lab

Utility Company

Other (Please specify)

### Subjects of Interest (tick which is/are applicable)

Advanced Analysis

Bridges

Buildings

Cladding

Composite Construction

Connections – Welds and Bolts

Corrosion Protection

Environmental Issues

Explosions/Hazards

Fabrication & Erection

Fatigue

Fire Engineering

Health and Safety/Best Practice

Modular Construction/Light Gauge Steel

Offshore Engineering

Piling/Foundation

Refurbishment

Seismic Engineering

Special Structures

Stainless Steel

Tunneling

Vibration

Others (Please specify)

I am enclosing herewith Annual Subscription of Rs.....for the year .....by demand draft/Cheque  
No.....drawn in favour of "Institute for Steel Development & Growth" payable at  
Calcutta.

Kindly enroll me as a member and issue me the receipt.

Approved /Disapproved

Signature

Membership no----

Date& Seal:

**Mailing address** : INSDAG ,Ispat Niketan,52/1 A, Ballygunge Circular Road , Kolkata-700 019 ,  
Tel :033-4614045/4047/4066/4076, Fax :033-461 4048,Email :insdag@cal2.vsnl.net.in

## Some of our Valued Member Organizations

### Founding Members

- ❖ Ministry of Steel
- ❖ Dev. Commissioner for Iron & Steel
- ❖ Steel Authority of India Ltd.
- ❖ Tata Iron & Steel Co. Ltd.
- ❖ Rashtriya Ispat Nigam Ltd
- ❖ Jindal Vijaynagar Steel Ltd.

### Primary Members

- ❖ Essar Steels Ltd.
- ❖ Joint Plant Committee
- ❖ M N Dastur & Co. Ltd.
- ❖ Tiger Steel Engineering
- ❖ Development Consultant Ltd.
- ❖ Consulting Engineering Services (I) Ltd.

### Associate Members—A

- ❖ Trade Arbed
- ❖ S E Railway
- ❖ STUP Consultants Ltd.
- ❖ Gammon (I) Ltd.
- ❖ L&T – ECC Division
- ❖ Lloyds Steel
- ❖ MECON
- ❖ Quadricon (P) Ltd.
- ❖ McNally Bharat Ltd.
- ❖ Corolla Marketing (P) Ltd.
- ❖ Shirish Patel & Associated Consultants
- ❖ Mackintosh Burn Ltd.
- ❖ National Hydroelectric Power Corpn. Ltd.
- ❖ Eastern Railway
- ❖ Vijay Rewal Associates
- ❖ Geodesic Techniques (P) Ltd.
- ❖ Steel Plus Limited
- ❖ Hooghly River Bridge Commissioners
- ❖ Pennar Industries Ltd.
- ❖ Kirby Buildings Ltd.
- ❖ Akzo Nobel Coatings (I) Ltd.
- ❖ Advani Orelinkon Ltd.
- ❖ CIDCO, Mumbai
- ❖ BBJ, Kolkata
- ❖ BEC Group of Companies

- ❖ Thakkarson Pvt Limited
- ❖ Ram Swarup group
- ❖ Bhusan Limited
- ❖ Ashirbad Construction
- ❖ Vardhman Precision Profiles & Tubes
- ❖ Fourcees Project service Pvt Ltd
- ❖ Ispat Ltd
- ❖ Hindustan Construction Co Ltd
- ❖ Usha Beltron Ltd
- ❖ Nagarjuna Construction Co Ltd

### Associate Members—B

- ❖ Polaris Engineering (I) Pvt Ltd.
- ❖ 3E Services
- ❖ Ahmedabad SteelCraft Ltd

### Institutional Members

- ❖ Steel Re-Rolling Mills Association of India
- ❖ Central Building Research Institute
- ❖ Steel Scenario
- ❖ Iron & Steel Review
- ❖ Steel & Metallurgy
- ❖ National Metallurgical Laboratory
- ❖ Streamline Computer Service (P) Ltd.
- ❖ L D College of Engineering
- ❖ Indian Stainless Steel dev. association
- ❖ R V R & J C College of Engineering
- ❖ Nirma Institute Of Technology
- ❖ Birla Institute of Technology, Mesra
- ❖ Steel Wire Manufacturers Association of India
- ❖ Crescent Engineering College
- ❖ Thiagarajar College of Engineering
- ❖ Building Technology Centre- Anna University
- ❖ Structural Engineering Research Centre,
- ❖ M.V. Subbarao Engineering College
- ❖ Bhalai Institute of Technology

**Individual Members** - 150  
**Individual Member(Life)** - 48  
**Student members-** - 297

**List of Some Publications for members**

Sl. No.	INSDAG Regular Publications/Services	Price (Rs.)
1.	Insdag News – Four issues	20
2.	Steel in Construction – Tech Journal – 2 Issues	90
3.	E-advisory service thru <a href="http://www.steel-insdag.org">www.steel-insdag.org</a>	Free
4.	Advisory Help desk for all member organisations	Free
5.	Promotional Brochures	Free

Sl. No.	Pub. Ref.	INSDAG Project Publications	Price (Rs.)
1.	INS/001	Directory of Steel Supply Chain	685
2.	INS/002	Buyer's Manual for purchasing steel	350
3.	INS/002/CDROM	Buyer's Manual for purchasing steel on CD ROM	350
4.	INS/002/CD	Buyer's Manual for purchasing steel + CD ROM	550
5.	INS/005	Corrosion Protection of Structural Steel (Buildings/Bridges)	85
6.	INS/004	Hand Book on Composite Construction – Bridges & Flyovers	475
7.	INS/003	Reference Manual for Structural Engineers	450
8.	INS/016	Recent Case Studies – PEB & Frames	285
9.	INS/018	Welding Guide for Structural Steel	250
10.	INS/021	Handbook on Structural Steel Detailing	825
11.	INS/020	Survey of Important Rail Bridges	350
12.	INS/017	Life cycle cost assessment of a Typical Urban Flyover	600
13.	INS/019	Handbook on Composite Construction(Multilevel Car parks)	625
14.	Forthcoming	Guidebook for Mild Steel Doors and Windows	Dec 2002
15.	Forthcoming	Design of Composite Truss for Building	Dec 2002
16.	Forthcoming	Design of Steel Framed Commercial Building	Sept 2003
17.	Forthcoming	Design of Multistoried Framed Residential Buildings	Mar 2003
18.	Forthcoming	Paint Systems (for Extended Maintenance Free Life) of Steel Structures	Sept 2006
19.	Forthcoming	LCC on Reinforced Concrete Pavement	July 2003
20.	Forthcoming	Design Guidebook on Castelleted Composite Beam Design	Sept 2002

Sl. No.	Pub. Ref.	Copyright Publication –42 nos from SCI, UK	Price (Rs.)
1.	INS/006	Composite column design to Eurocode 4,K F Chung & R Narayanan	650
2.	INS/007	Building design using cold formed steel sections: An architect's guide, P J Trebilcock	730
3.	INS/008	Design of composite trusses, Skidmore Owings Merrill	525
4.	INS/009	Design of composite slabs and beams with steel decking, R M Lawson	770
5.	INS/010	Steelwork design guide to BS 5950: Part 1: 1990 Volume 2: Worked examples (Revised Edition)	670
6.	INS/011	Design of fabricated composite beams in buildings G W Owens	650
7.	INS/012	Commentary on BS 5400 : Part 3 : 2000 – Code of Practice for the design of steel bridges	625
8.	INS/013	Introduction to steelwork design to Bs 5059: Part 1	750
9.	INS/014	Architects' guide to stainless steel, N R Baddoo, R Burgan & R G Ogden	850
10.	INS/015	Building design using cold formed steel sections: Construction detailing and practice, P J Grubb & R M Lawson	700
11.	INS/026	The Fire resistance of composite floors with steel decking (Second Edition)	100
12.	INS/028	Steelwork design guide to BS 5950 – Vol. 4 – Essential data for designers	625
13.	INS/029	Design guide on the vibration of floors	280
14.	INS/030	Commentary on BS 5950 : Part 3 : Section 3.1 ' Composite beams'	650
15.	INS/031	Design guide for simply supported composite bridges	570
16.	INS/033	Design for structural fire safety: A Handbook for Architects and Engineers	260