

# SSTS 2023 STEEL STRUCTURES & TECHNOLOGY SUMMI

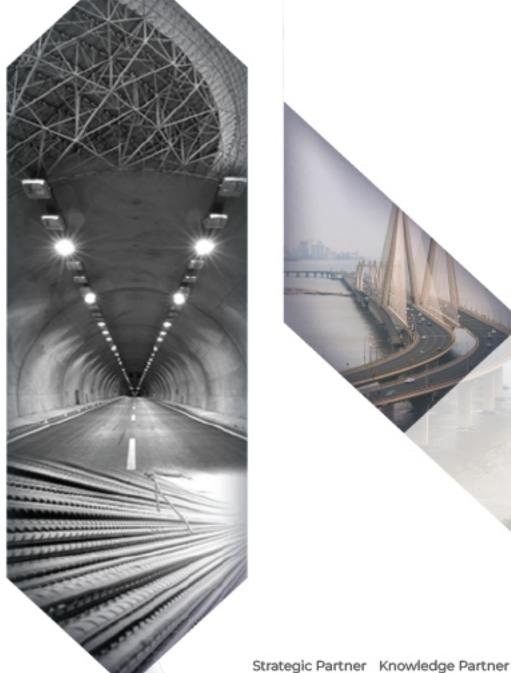
International Conference & Expo for Steel, Construction & Infrastructure Industry

#### 14 SEPTEMBER 2023

Bishwa Bangla Convention Centre, Kolkata

Theme: Advances in Steel Structures & Technology







Organised by







## STRUCTURING THE FUTURE

#### CORPORATE OFFICE:

DN36. PRIMARC TOWER, SALTLAKE SECTOR-V, BIDHANNAGAR, KOLKATA - 70009I, W.B. | TOLL FREE No.: 1800 570 1133

E-mail: sakis@shreesatyagroup.com

Works: Barjora. Dist. Bankura Namobandh, Sitarampur, Pin - 722 10I, W.B.

Visit: www.shreesatyagroup.com | www.satyasteel.co.in

RANGE OF PRODUCTS

• TMT BARS • ANGLES • FLAT BARS • SQUARE BARS • ROUND BARS



# SSTS 2023 STEEL STRUCTURES & TECHNOLOGY SUMMIT

International Conference & Expo for Steel, Construction & Infrastructure Industry

#### 14 SEPTEMBER 2023

Biswa Bangla Convention Centre, Kolkata

**ORGANISER** 



#### ARE THANKFUL TO ALL PARTICIPANTS

FOR THEIR OVERWHELMING SUPPORT

#### AND ARE GRATEFUL TO

#### **PARTNERS**

**EVENT PARTNER** 



**GOLD PARTNER** 



STRENGTH PARTNER



**BRONZE PARTNER** 

SUPPORTING ASSOCIATION





STRATEGIC PARTNER









MEDIA PARTNER



KNOWLEDGE PARTNER



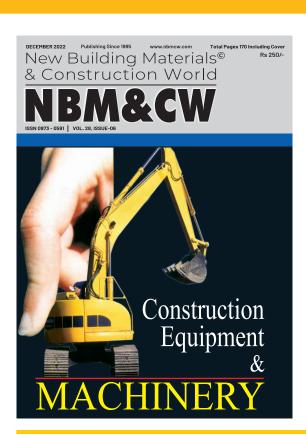




# Infra Development & Const. Equipment Magazine

Experience the power of effective advertising with the most promising and trusted trade publication in the Indian subcontinent.

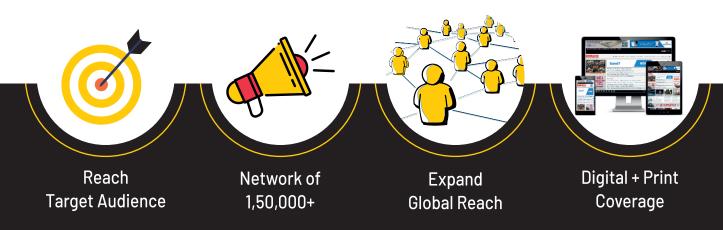
Construction
Equipment
Buyers Always
Refer to
NBM&CW.



#### **NBM Media**

Many Channels
Many Options for Advertisers





Contact us to book your space in our next issue and start getting enquiries from around the world.

## **CONTENTS**

S.No.	Particulars	Page No.
l.	Messages	05-15
II.	About Steel Structure and Technology Summit 2023	16–18
III.	Programme	19
IV.	Industry Article	20-26
V.	Speaker's Profile	27-35
VI.	Company Profile (Exhibitors)	36-39
VII.	Advertisements	40-44



India's premier magazine for Construction Industries



# Reach The Right Target Audience IN TIME Lvery Time!









#### all you need to do is follow us for everything

#### **Get Social With**







**us on Instagram**@constructiontechnologytoday



**us on Twitter**@ConstTechMedia



## KARAN Communications

15, First Floor, Dinubhai Estate, Trikampura Patiya, GIDC Estate, Vatva,

Ahmedabad - 382445, Gujarat INDIA. **Mobile :** +91-98250 94718, 97250 63918

**E-mail**: info@constructiontechnology.in | karancommunicationsct@gmail.com

Debashis Sen, IAS<sup>R</sup>
Managing Director,
6
Additional Chief Secretary







#### MESSAGE

I am happy to know that a celebration of Steel Structure & Technology Summit 2023 to be held at Biswa Bangla Convention Centre on 14<sup>th</sup> September 2023. This event would serve as a platform to not only recognize the achievements and advancements within the industry but also to foster collaboration, exchange ideas and ignite innovation.

I, as Chairman of New Town Kolkata Development Authority, welcome all delegates to New Town Kolkata. I extend my best wishes to all the organizers, and participants who have made this event possible. I invite you all to explore the only Smart City of Bengal and taste the finest delicacies of Bengal at the Biswa Bangla Gate, a remarkable steel structure.

Achashis Sen

Debashis Sen, IAS<sup>(R)</sup> Chairman, NKDA & MD, HIDCO

Dated Kolkata, 29<sup>th</sup> August, 2023

#### WEST BENGAL HOUSING INFRASTRUCTURE DEVELOPMENT CORPORATON LTD.

(A Govt. of West Bengal Undertaking)

"HIDCO BHABAN", Premises No. : 35-1111, Biswa Bangla Sarani, 3<sup>rd</sup> Rotary, New Town, Kolkata – 700156
Telephone: (033) 2324-6037/6038, Fax No. : (033) 2324-4833/3016/6009, email: wbhidcoltd@gmail.com / info@wbhidco.in

Website: www.wbhidcoltd.com CIN: U70101WB1999SGC089276

SHRI ARUN ARORA, Former GM, Eastern Railway & Kolkata Metro Railway



I extend my greetings to all on this noteworthy occasion of the Structural Steel Event. Structural steel represents innovation, resilience, and progress—a medium that architects, engineers, and builders employ to craft inspiring structures that stand the test of time, redefine skylines, and unite communities. This event embodies the commitment of countless individuals who strive to redefine the boundaries of what is achievable.

In this dynamic, ever-evolving realm, collaboration and the exchange of knowledge reign supreme. This event offers an invaluable platform for experts, visionaries, and enthusiasts to convene, share insights, and motivate each other to envision a future where structural steel remains pivotal in shaping a sustainable, interconnected, and vibrant world.

As we embark on the forthcoming discussions, presentations, and exhibitions, let us grasp this occasion to establish new bonds, gain perspectives, and chart a course for even loftier accomplishments in the domain of structural steel. Collectively, we can not only raise remarkable edifices but also illuminate a brighter path for the generations ahead.

My heartfelt appreciation goes out to the organizers, sponsors, speakers, and attendees whose contributions have paved the way for the triumph of this event. May these days be brimming with enlightening dialogues, enriching encounters, and a rejuvenated sense of purpose to diversify and expand the horizons of structural steel.

- Arun Arora

## SHRI ANIL KUMAR CHAUDHARY, Chair, Minerals & Metals Committee, PHDCCI



I am happy to note that the Minerals & Metals Committee of PHDCCI is supporting in organising STEEL STRUCTURE AND TECHNOLOGY SUMMIT – SSTS 2023 – scheduled on 14<sup>th</sup> Sept. 2023 at Bishwa Bangla Convention Centre, Kolkata . The Summit will deliberate on "Advances in Steel Structure and Technology".

Steel is an eco-friendly, non-hazardous, 100% recyclable material and offers wide variety of physical properties at most reasonable and affordable cost. Steel intensive construction offers multiple advantages over conventional construction methods such as lower life cycle cost, reduced construction time, enhanced environmental sustainability and reduced air pollution, more durable and safer buildings, roads and bridges along with higher aesthetic appeal, design flexibility, and higher carpet area without a significant rise in upfront cost. Thus, Steel needs to be promoted as a material of choice for construction by highlighting its uses and benefits.

India has seen significant technological developments in steel structures, contributing to improved construction efficiency, sustainability, and structural integrity. Some key technological advancements in this field in India include usage of High–Strength Steel Alloys offering enhanced load–bearing capacity, allowing for lighter and more durable structures, Advanced Welding Techniques reducing the risk of defects and improving structural integrity, Pre–Engineered Buildings (PEBs) allowing for rapid assembly on–site, Advanced Coatings and Corrosion Protection extending the lifespan of steel structures, making them more durable in India's diverse environmental conditions, Modular Construction Approach reducing construction timelines and minimizes disruptions and Building Information Modelling (BIM) and 3D Modelling enhancing collaboration among architects, engineers, and builders, reducing errors and optimizing the use of materials.

I am sure that the Summit will help in bringing steel producers and end users in the infrastructure and construction sector on one platform paving the way for fruitful deliberations and building consensus for enhanced use of steel for construction.

I wish the Summit all the success.

- Anil Kumar Chaudhary





Saket Dalmia President, PHDCCI

#### **Message from President**

It is with great pleasure and enthusiasm that I extend my warmest greetings to all of you on the occasion of this remarkable event focused on structural steel.

Structural steel stands as a symbol of innovation, strength, and resilience in the world of construction and engineering. This event provides us with a unique opportunity to delve into the intricate world of steel structures, to explore their unparalleled contributions to modern architecture, and to celebrate the brilliant minds behind these awe-inspiring creations.

As we gather to share knowledge, insights, and experiences, let us be reminded of the indomitable spirit that propels our industry forward. The advancements in structural steel technology have not only revolutionized our skylines but have also built the foundations of progress and development. Each beam, each column, and each rivet narrates a story of dedication, craftsmanship, and unwavering dedication to pushing the boundaries of what is possible. May this event be a platform for fostering collaboration, igniting innovation, and fostering new connections that will further elevate the world of structural steel. Let us engage in meaningful conversations, absorb the wisdom of experts, and leave inspired to continue forging a future that is strong, safe, and splendid.

I extend my heartfelt gratitude to the organizers, sponsors, speakers, and participants who have come together to make this event a reality. Your collective efforts reflect a shared commitment to excellence, education, and the pursuit of excellence.

May this event be a resounding success, leaving an indelible mark on the path of progress in the realm of structural steel. I look forward to the insightful discussions, valuable networking, and the collective strides we will take towards shaping a world that stands tall, just like the magnificent steel structures we celebrate today.

Here's to a truly enlightening and inspiring event!

(Saket Dalmia)



"Voice of Industry & Trade"



PHD House, 4/2 Siri Institutional Area, August Kranti Marg, New Delhi - 110 016 (India) • Tel. : +91-11-2686 3801-04, 49545454, 49545400 Fax : +91-11-2685 5450, 49545451 • E-mail : phdcci@phdcci.in • Website : www.phdcci.in, CIN: U74899DL1951GAP001947

Connect with us:











## SHRI P K MISHRA, DIRECTOR GENERAL, INSDAG



It is a great pleasure to find a Seminar dealing with a topic which is rarely dealt with—STRUCTURAL ENGINEERING with Steel. The other part is the technology of steel making and its supplies.

In this era of robust demand for long span structures, smart structures with optimise and intelligent use of the material, quality output with time bound project schedules, advancement of Structural Engineering with Steel needs a thorough discussion and developments shared in the open forum for the benefit of technocrats. It will be further beneficial if the newer smart theories are discussed from basic levels. Special emphasis may be bestowed on topics like developing efficient joints, exploring steps to ease fabrication, evolve intelligent erection techniques, develop sophisticated but simple inspection systems, better logistics, upgraded Engineering knowledge, expose to various relevant codal provisions.

May our time together be marked by insightful conversations, meaningful connections, and a profound sense of purpose. Here's to a conference that not only enriches our minds but also strengthens the very foundations of our profession.

On behalf of the INSDAG, which is an institute delving into Structural Engineering with an aim in increasing the consumption of steel in the country developed by Ministry of Steel–Government of India and all major Steel producers, I extend my heartfelt gratitude to all participants, speakers, sponsors, and partners who have contributed to the realization of this remarkable gathering. Your presence and dedication are integral to the success of this conference.

- P K Mishra

# SHRI P S UPADHYAYA, Chairman Organising Committee — SSTS 2023 & Former Director NMDC Ltd.



It is with immense pleasure and anticipation that I extend my warmest goodwill to all those involved in organizing the Steel Structure & Technology Summit 2023. This remarkable endeavour stands as a testament to the innovation, dedication, and collaborative spirit that define our industry.

Steel Structures have long been the backbone of modern architecture, engineering, and construction. They exemplify strength, versatility, and sustainability, shaping the skylines of our cities and supporting the infrastructure that empowers our societies. This event serves as a platform to celebrate the accomplishments, share cutting-edge insights, and foster connections within the realm of steel structures.

To the organizers, your commitment and meticulous planning shine brightly as you bring together experts, professionals, and enthusiasts from diverse backgrounds. Your hard work ensures that this event will be a hub of knowledge exchange, where ideas converge, solutions emerge, and new horizons are explored.

To the participants, your presence at this event is a testament to your pursuit of excellence. Your contributions, discussions, and interactions will undoubtedly enrich the collective understanding of steel structures, paving the way for ground-breaking innovations and advancements.

As we gather to delve into the intricacies of steel design, fabrication, construction, and beyond, let us remember the vital role these structures play in shaping our world. Let us seize this opportunity to engage in meaningful conversations, forge lasting connections, and inspire each other to push the boundaries of possibility.

May this event be a resounding success, leaving a lasting impact on our industry and fuelling our shared commitment to shaping a future built on strength, resilience, and ingenuity.

I extend my sincerest wishes for a fruitful and enlightening SSTS 2023.

- P S Upadhyaya

# SHRI SUSHIM BANERJEE, CEO, (IISSSC), Former Director General, INSDAG



It is with great pleasure and anticipation that I extend my heartfelt goodwill to this remarkable Structural Steel Event. This occasion serves as a testament to our collective commitment and passion for pushing the boundaries of construction, design, and innovation.

In the realm of architectural marvels, structural steel stands tall as the backbone that supports our aspirations to create soaring skylines, intricate frameworks, and resilient infrastructures. It bridges the gap between imagination and realization, showcasing the harmonious marriage of science and artistry. As we convene to celebrate this event, we also honour the dedicated efforts of countless individuals who tirelessly work to shape our urban landscapes and bring monumental visions to life.

I am inspired by the way this event serves as a platform for knowledge exchange, where experts from various corners of the industry converge to share insights, best practices, and ground-breaking research. The fusion of ideas and experiences not only fuels our collective growth but also propels us toward an exciting future where challenges are met with ingenuity, and possibilities remain limitless.

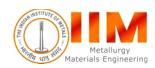
Let us seize this opportunity to forge new connections, engage in meaningful conversations, and gain fresh perspectives that will undoubtedly influence the trajectory of our field. As we navigate the intricate network of steel's potential, let us also remember the responsibility we bear to make sustainable choices that safeguard our environment for generations to come.

I extend my warmest wishes to every participant, speaker, organizer, and supporter who has contributed to the success of this event. May your interactions be fruitful, your discussions enlightening, and your experiences unforgettable. Let us continue to raise the bar of excellence in structural steel and continue to build a world that not only stands firm but also stands as a testament to human innovation and collaboration.

#### - Sushim Banerjee

#### THE INDIAN INSTITUTE OF METALS, KOLKATA CHAPTER

FLAT NO - 06,  $3^{RD}$  FLOOR, BLOCK - E-15, RAJDANGA NABAPALLY, KOLKATA-700 078





#### SHRI SUDIP KUMAR BASAK

#### Chairman

It is a great pleasure to learn that the remarkable Structural Steel Event – SSTS 2023 taking place on September 14, 2023 at BBCC, Kolkata will confluence all technocrats, policy makers and professionals in the realm of construction and engineering. This gathering marks an important milestone, as we come together to celebrate the enduring strength, versatility, and innovation that structural steel brings to our built environment. I, with grat hope and aspiration, extend my heartfelt goodwill to the success of the event.

Structural steel is more than just a material; it is a symbol of resilience and progress. It forms the very backbone of our cities, bridges, skyscrapers, and monumental structures that stand tall against the test of time and nature's forces. With each rivet and weld, we not only connect beams and columns, but we also forge connections between ideas, creativity, and the aspirations of generations to come.

In this dynamic era of technological advancements and sustainable practices, the role of structural steel has evolved to meet the demands of modern design and construction. From ground-breaking architectural achievements to eco-friendly initiatives, steel continues to lead the way in shaping our world for the better. As we gather to share knowledge, insights, and experiences, we contribute to a legacy that empowers future generations to build upon our achievements and push the boundaries of what is possible.

I commend the organizers, sponsors, exhibitors, and participants who have come together to make this event a reality. Your dedication to advancing the field of structural steel is truly commendable, and I have no doubt that your collective expertise will spark discussions that inspire ground-breaking ideas and collaborative solutions.

May this event serve as a catalyst for deeper connections, a platform for sharing ground-breaking research, and a source of inspiration for us all. Let us seize this opportunity to reflect on the incredible journey of structural steel, from its humble beginnings to its current role as a cornerstone of modern construction.

Sudip Kumar Basak

- SUDIP KUMAR BASAK





#### **Message from Executive Director**

It is with great pleasure and enthusiasm that I extend my warmest greetings to all of you on the occasion of this remarkable event focused on Structural Steel.

Structural steel stands as a symbol of innovation, strength, and resilience in the world of construction and engineering. This event provides us with a unique opportunity to delve into the intricate world of steel structures, to explore their unparalleled contributions to modern architecture, and to celebrate the brilliant minds behind these awe-inspiring creations.

As we gather to share knowledge, insights, and experiences, let us be reminded of the indomitable spirit that propels our industry forward. The advancements in structural steel technology have not only revolutionized our skylines but have also built the foundations of progress and development. Each beam, each column, and each rivet narrates a story of dedication, craftsmanship, and unwavering dedication to pushing the boundaries of what is possible.

May this event be a platform for fostering collaboration, igniting innovation, and fostering new connections that will further elevate the world of structural steel. Let us engage in meaningful conversations, absorb the wisdom of experts, and leave inspired to continue forging a future that is strong, safe, and splendid.

I extend my heartfelt gratitude to the organizers, sponsors, speakers, and participants who have come together to make this event a reality. Your collective efforts reflect a shared commitment to excellence, education, and the pursuit of excellence.

May this event be a resounding success, leaving an indelible mark on the path of progress in the realm of structural steel. I look forward to the insightful discussions, valuable networking, and the collective strides we will take towards shaping a world that stands tall, just like the magnificent steel structures we celebrate today.

Here's to a truly enlightening and inspiring event!

(Dr Ranjeet Mehta)





#### Message from the President – IAStructE

I am happy to note that Business Media Links (BML) along with PHD Chamber of Commerce & Industry (PHDCCI) as Knowledge Partner and Institute for Steel Development & Growth (INSDAG) as Strategic Partner is organising 'SSTS 2023 - Steel Structures & Technology Summit' an International Conference & Expo on the theme "Advance in Steel Structures & Technology" on 14 September 2023 at Biswa Bangla Convention Centre, Rajarhat, Kolkata.

I am sure such focused events are helpful to link the steel, construction, and infrastructure industries together and provide a common business platform to showcase products, the latest developments, and targeted networking in structural steel and construction.

I am sure that exhibitors and trade visitors to this event will be immensely benefitted from this opportunity.

I wish the SSTS 2023 event a grand success.

Best wishes,

Prof. R. Pradeep Kumar President

Indian Association of Structural Engineers (IAStructE)

Tel:(011) 45794829; E-mail: iastructe@gmail.com; Web: www.iastructe.co.in

# SHRI YASHASWI SHROFF, Chairman, PHDCCI- WB Chapter & ED, Alcove Reality



It is with great pleasure and anticipation that we gather here at the Structural Engineering Event, a beacon of innovation, collaboration, and progress in our field. As we come together to exchange knowledge, ideas, and experiences, we are reminded of the profound impact that structural engineering has on shaping the world we inhabit.

In an era marked by rapid technological advancement and evolving global challenges, the role of structural engineers has never been more vital. It is through your dedication, expertise, and visionary thinking that we construct the foundations of resilient cities, sustainable infrastructure, and safe habitats for generations to come.

This conference serves as a remarkable platform for sharing the latest breakthroughs, best practices, and pioneering research that will undoubtedly steer the trajectory of our profession. The diverse perspectives represented here, spanning academia, industry, and government, promise to ignite fruitful discussions and foster cross-pollination of ideas that push the boundaries of what is achievable.

Let us seize this opportunity to celebrate the triumphs achieved thus far, acknowledge the challenges that lie ahead, and collaborate to chart a course towards a future where our designs harmonize seamlessly with the environment, prioritize safety above all, and stand as a testament to human ingenuity.

May these days of engagement be characterized not only by enriching dialogues and presentations, but also by the forging of lasting connections and the cultivation of lifelong friendships. Let us leave this conference with renewed enthusiasm, armed with fresh insights, and emboldened to contribute to a world where every structure we design is a masterpiece of engineering excellence.

I extend my deepest gratitude to the Organizers, Speakers, Sponsors, and all Participants for their unwavering commitment to advancing the frontiers of structural engineering. Together, we can and will shape a future that is both sturdy and inspiring.

Here's to a conference marked by inspiration, discovery, and progress. Thank you and enjoy the enlightening journey that lies ahead.

- Yashaswi Shroff

#### STEEL STRUCTURE & TECHNOLOGY SUMMIT

Theme - Advances in Steel Structures and Technology

#### **Industry Overview**

India, the fifth largest economy and world's 2nd largest producer of steel has reached its steel production at a historic level of 120 million tonnes per year now moving forward to achieve the target doubling the steel production to 300 million tonnes per annum by 2030.

Steel has played an important role in the development of the Indian economy. India's crude steel consumption rose from 22 million tons in 1990 to 142 million tons in 2020. According to the Ministry of Steel, the sector contributes around 2 per cent of the country's GDP and employs around 25 lakh people in steel/allied sectors. Evidently, the steel industry is important for the country because it has one of the highest economic linkages in overall GDP. Steel demand in India is expected to register a CAGR of 7–7.5% between 2022–2025. A major part of this development would be accelerated by Rs 111 crore National Infrastructure Pipeline Initiative of government through fiscal 2025. This growth is also driven by various other government–led initiatives in the affordable housing and infrastructure sector, coupled with robust growth in automotive and capital goods segments.[G1] The domestic steel industry has the potential to be a net exporter. This is possible if the government looks at rationalizing the cost structure, developing efficient logistics and infrastructure, and making funding available at cheaper rates.

Overall construction sector accounts for majority (greater than 80%) of the steel structures market in India, which is further classified in the following three segments:

**Industry** - Accounts for more than 50% of demand, primarily driven by steel industry.

**Infrastructure –** With an overall focus on development of infrastructure, a high demand for steel structures is seen within this segment.

**Buildings –** Steel structures (especially PEBs) have a strong presence in factory/ warehouse buildings segment. Future potential in high rise buildings could be significant, considering the fast pace of construction desired and scarcity of land in large metropolitan areas. INDUSTRY OVERVIEW With continued focus by the government towards development of core infrastructure such as power, airports, railways, etc.; early indications of revival in industrial sector and probable shift in preference from concrete towards steel structures in the buildings segment, the structural steel demand in India is likely to be robust over next few years.

#### **Summit Overview**

To address the opportunities and challenges associated with these sectors, BUSINESS MEDIA LINKS (BML), the organizers of the various national & International trade events is planning to organize the first of its kind SSTS 2023 – Steel Structures & Technology Summit, an international Conference & Exhibition on Steel Structure & Technology for Construction and Infrastructure Industry having the Theme "Advances in Steel Structures and Technology" on 14th Sep 2023 at BBCC, Kolkata.

The summit has been designed to share knowledge and inspire new technologies in the steel and allied industries in India.

SSTS 2023 aims to showcase and bring together Industry Stalwarts, eminent national and international speakers including policy-makers, scientists and technologists chairing/delivering Plenary & Keynote Addresses, Review and Forecast Papers, Poster presentations and Panel discussions from all levels to share knowledge and learning from around the world. It would be attended by CEOs, steel structure experts, steel structure technology providers and equipment manufacturers, environmentalists, researchers, and engineers associated with steel and its uses in the construction industry.

The theme for the conference "Advances in Steel Structures and Technology" is aptly selected to represent the emerging business dynamics of the industry which underlines the need for technical brilliance today more than ever before.

#### **Strategic Partner**



Institute for Steel Development & Growth (INSDAG) is a not-for-profit, member-based organization established by the Government of India (Ministry of Steel) and Major Steel Producers of the Country in the year 1996 as a "Society" under Societies Registrations Act of West Bengal 1961.

INSDAG is a One-Stop for your queries on use of Steel in Construction.

The Institute primarily works towards development of advanced and cost-effective design methodologies, technical and institutional marketing by expanding applications of steel in different segments of construction industry, up-gradation of technical skills and know-how, creation of awareness amongst potential users and students and communicating the benefits of steel vis-à-vis other competitive materials etc. INSDAG is also involved actively in formulation and revision of codes and standards for steel use in construction based on latest developments with Bureau of Indian Standards (BIS) and Indian Roads Congress (IRC).

#### **Knowledge Partner**



PHD Chamber of Commerce and Industry (PHDCCI) has been working as a catalyst for the promotion of Indian industry, trade and entrepreneurship for the past 117 years. It is a forward looking, proactive and dynamic PAN-India apex organization. As a partner in progress with industry and government, PHDCCI works at the grass roots level with strong national and international linkages for propelling progress, harmony and integrated development of the Indian economy.

PHDCCI, acting as the "Voice of Industry & Trade" reaching out to more than 1,50,000 large, medium and small industries, has forged ahead leveraging its legacy with the industry knowledge across multiple sectors to take Indian Economy to the next level.

At the global level, we have been working with the Embassies and High Commissions in India and overseas to bring in the International Best Practices and Business Opportunities.

#### **Organised By**



Business Media Links (BML) is a growth driven company conceptualize, creates and organise conferences, B2B meetings and exhibitions. With the highest level of services, the core team have over 3 decades of experience working in conference and exhibitions and worked on more than 100 trade shows across the world. BML has been successfully carrying off established trade conferences like COALLOG INDIA, National Coal Conclave & Exhibition etc.

We also offer third party exhibition & conference management, design and organization. Our experienced creative and production team plan and design your event from concept to delivery and creates platforms for industries and specialist markets connects to buyers and sellers to enhance economical trade & innovate.

#### **Programme**

### 8.30 – 9.30 Hrs- Registration INAUGURAL SESSION

	Welcome Speech	Shri P S Upadhyaya, Chairman, OC & Former Director, NMDC		
	Introduction of Theme	Shri Sushim Banerjee, CEO, (IISSSC), Former Director General, INSDAG		
	Key Note Speaker	Shri Bimlendra Jha, Managing Director, Jindal Steel & Power Ltd.		
9.30 -11.00 Hrs	Key Note Speaker	Shri Pradip Kumar Mishra, Director General, INSDAG		
	Guest of Honour	Shri Arun Arora , Former GM, Eastern Railway & Kolkata Metro Railway		
	Chief Guest	Shri Debasish Sen, IAS (Retd), MD, WBHIDCO		
	Vote of Thanks	Shri Yashaswi Shroff, Chairman, PHDCCI - West Bengal Chapter & ED, Alcove Reality		

#### 11.00 – 11.30 Hrs – Tea Break

SESSION: TECHNICAL SESSION - 1 'Innovation in Steel Structure'

	Chairman	Shri Sushim Banerjee, CEO, (IISSSC), Former Director General, INSDAG	
		Shri Raghav Beriwala, Director, Shyam Steel Industries	
11.30 -13.30 Hrs	Speakers	Shri Sushil Kumar Pradhan, CMO, Jindal Steel & Power Ltd.	
		Shri Satyajit Mohapatra, Head -Technical Marketing & Appl. Engg, Arcelor Mittal Nippon Steel	
		*Shri Rohit Kapur, Sr. GM - OEM , Sales & Business Development, Apollo Steel Pipes	
	Questions & Answers		

#### 13.30 – 14.30 Hrs – Networking Lunch

SESSION: TECHNICAL SESSION - 2 '

Advancement in Steel Structure in Construction & Infrastructure Industry'

	Chairman	Shri Sudip Kumar Basak, Chairman , The Indian Institute of Metals – Kolkata Chapter	
	Chairman, Basak Consultants& Associates		
Shri Suman Neogy , Chief Engineer, WBHIDCO		Shri Suman Neogy , Chief Engineer, WBHIDCO	
14.30 -16.30 Hrs	Dr. Ap arna Dey Ghosh, Professor, Civil Engineering, IIEST		
	Shri Dhananjay Dake , Founder, Construction Catalysers		
		Shri Nagarajan P., General Manager, Jindal Stainless Ltd.	
		Shri E Suresh Raj , Senior General Manager, Engineering, Tata Bluescope	
	Questions & Answer	rs	

#### 16.30- 17.00 Hrs - Tea Break

PANEL DISCUSSION:

	Moderator	Dr. Abhijit Dasgupta , Fromer Jt. M D, M.N. Dastur & Company (P). Ltd.
		Shri Anirban Sengupta, Jt VP & Chief Technical Officer, STUP Consultant
17.00 -18.15 Hrs		Shri Anjan Mitra , Architect
		Shri Manas Mohan Ghosh, Consultant, INSDAG
		Shri Yashaswi Shroff, Chairman, PHDCCI - West Bengal Chapter & ED, Alcove Reality

#### STEEL IN STRUCTURES - STATUS OF STANDARDS & REGULATIONS

M M Ghosh - Consultant-INSDAG

Catalyzing India's Growth: The Crucial Role of steel in the Infrastructure Sector

At the forefront of India's economic advancement stands the infrastructure sector, a driving force that propels the nation's holistic progress. With unwavering attention from the Government, this sector takes center stage in formulating policies that expedite the creation of top-tier infrastructure within predetermined timelines.

Encompassing a spectrum ranging from power to bridges, ports to airports, railways to irrigation, water supply to sanitation, roads to urban development, the infrastructure sector not only propels India's comprehensive development but also orchestrates the flourishing of interconnected industries like rural growth, employment generation, and logistical efficiency.

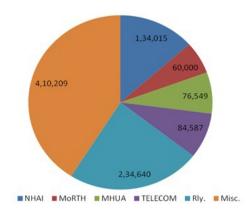
India's ambitious pursuit of attaining a US\$ 5 trillion economy by 2025 hinges significantly on infrastructural expansion. This sector's pivotal role is underscored by the inception of the National Infrastructure Pipeline (NIP) along with complementary initiatives such as 'Make in India' and the production-linked incentives (PLI) program, all poised to amplify the trajectory of infrastructural growth. The Prime Minister's visionary aspiration to elevate India to developed nation status by 2047 finds resonance in the NIP's staggering target of INR 110 trillion. As a testament to this commitment, the Central Government's capital expenditure is projected to scale INR 10 trillion by FY 2024.

A historical perspective unveils that over 80% of the nation's infrastructure investments have historically been directed towards the augmentation of transportation networks, power supply, and water management.

In essence, the infrastructure sector emerges not only as an enabler but as a cornerstone for India's journey towards unprecedented economic achievements.

Some of the recent government initiatives and investments in the infrastructure sector are as follows:

- In Union Budget 2022-23:
- The government has given a massive push to the infrastructure sector by allocating Rs.10 lakh crore (US\$ 130.57 billion) to enhance the infrastructure sector.
- The government allocated Rs.134,015 crore (US\$ 17.24 billion) to National Highways Authority of India (NHAI).
- The government announced an outlay of Rs.60,000 crore (US\$ 7.72 billion) for the Ministry of Road Transport and Highways.
- The government announced Rs.76,549 crore (US\$ 9.85 billion) to the Ministry of Housing and Urban Affairs.
- The government allocated Rs.84,587 crore (US\$ 10.87 billion) to the Department of Telecommunications to create and augment telecom infrastructure in the country.
- The total revenue expenditure by Railways is projected to be Rs. 234,640 crore (US\$ 30.48 billion)



Source: Govt of India Portal

• 100 PM-GatiShakti Cargo Terminals for multimodal logistics facilities will be developed over next three years.

• Focus was on the PM GatiShakti – National Master Plan for multimodal connectivity to economic zones. Everything, from roads to trains, from aviation to agriculture, as well as many ministries and departments, will be integrated under the PM GatiShakti National Master Plan.

### Preparedness of Standards developed under Bureau of Indian Standards (BIS), Indian Road Congress (IRC)

Harnessing the Surge in Demand: Collaborative Implementation Dynamics

As the surge in demand surges forward, the realization of this momentum hinges on a synchronized effort from all involved parties, encompassing both supply and demand domains. Facilitating this intricate interplay stands the pivotal role of codal provisions—a subtle yet indispensable conduit that lends seamlessness to this developmental journey. This role becomes most apparent and significant in instances where meticulously engineered products come to the fore.

In this orchestrated narrative, the amalgamation of tangible outcomes from stakeholders across the spectrum shapes the trajectory of actual implementation. On one end, the supply side with its concerted endeavours meets the burgeoning demand head-on, while on the other, the demand side fuels this process with its requirements and expectations.

Between these dynamic forces lie the codal provisions, operating as a silent architect of coherence. Their presence assumes paramount importance, akin to an invisible hand guiding the developmental process. This significance becomes acutely evident in instances where meticulously honed products, backed by technical expertise, take center stage.

In essence, the interdependence of supply and demand finds its harmonious bridge in the form of codal provisions. As they underpin the creation and deployment of technically sound products, they render a vital service that transcends their silent demeanour.

The importance of codes is well defined in the Indian Standards department (BIS) document itself, reproduced here which is as follows:

- Codes and Standards ensure the safety, Quality and reliability of products and services. They facilitate trade and protect our health and the health of our environment.
- It serves various purposes for businesses, for customers, for Government.

A review and the status of some handpicked codes and standards have been made which basically have influenced the more use of steel.

Codes	Title		Last
Codes	Huc	Revised	Revised
IS 800	General construction in steel — Code of practice (third revision)	1984	2007
IS 875 Part 3	Code Of Practice Design Loads (Other than Earthquake) for	1987	2015
	Buildings and Structures - Code of Practice: Wind Loads		
IS 1893 Part 1	Criteria for Earthquake Resistant Design of Structures: General	2002	2016
	Provisions and Buildings		
IS 808	Hot Rolled Steel Beams, Columns, Channels, and Angle	1989	2021
	Sections - Dimensions and Properties		
IS 2062	Hot Rolled Medium and High Tensile Structural Steel -	2006	2011
	Specification		
IS 1786	Specification for High Strength Deformed Steel Bars and Wires	2008	2019
	for Concrete Reinforcement (amended)		
IS 11384	Code of Practice for Composite Construction in Structural Steel	1984	2022
	and Concrete		
IRC 6	Standard Specifications and Code of Practice for Road Bridges:	2016	2017
	Loads and Stresses		
NBC	National Building Code	2008	2016
IRC 22	Standard Specifications and Code of Practice for Road Bridges:	2010	2015
	Steel Concrete Composite Construction		

#### The BIS code: IS 800-2007

This code has been a major revolution in structural steel design since 2007. It transformed the theory of designing from **Working Stress Method (WSM) to a much-developed Limit State Method (LSM).** This concept was a paradigm shift and Structural Design Engineers had to unlearn and then relearn the concept. It brought rationale in the designing system. In view of the developments and production of new varieties of medium and high tensile structural steel in the country, the scope and the standard of the code have been modified permitting the use of another variety of structural steel provided the relevant provisions of the standards are satisfied. Certain physical properties like **plastic moment of inertia, torsional cross section properties** have been added which are required in Limit State method of calculation.

#### The BIS code: IS 801

This code is undergoing revision currently. Incidentally It was revised last 45 years back and has been due for an update long time back. The code is Use of Cold Formed Light Gauge Steel Structural Members In General Building Construction. Here also the concept of designing is being changed, which again will be a huge deviation from the earlier theory. The pre-Engineered Building (PEB) sector using cold formed steel will be highly benefited with this development.

#### The BIS code: IS 875 Part 3 – 2015

This code which provides the guidelines for quantifying loads generated from the effects of wind on structures has been revised in 2015 has considered all the developments like identifying and factoring cyclone prone areas, revising Terrain Category, incorporating Terrain and Height Multiplier, revising Gust Factor method to name a few. The Wind Map of India was also updated.

#### The BIS code: IS 1893 Part 1 - 2016

This code quantifies external load developed due to tectonic movement of the earth's crust leading to earthquake which affects structure. Experiences from certain major earthquakes and the data generated thereafter have been included in the code. The values of Design spectra were modified, bases of various load combinations were streamlined, Temporary structures were brought in its fold, Importance factors were modified, provisions of Torsion were simplified. The earthquake map of India was revised, Zone 1 was eliminated.

#### The BIS code: IS: 11384 - 2022

This standard deals with the design and construction of composite structures made up of structural steel and cast in–situ/precast concrete, joined together to act integrally. This standard is applicable to simply supported as well as continuous beams and slabs, and supporting column systems. The design provisions in this code are based on the limit states method of design.

#### The Indian Road Congress (IRC) code: IRC 6 – 2017

This code dealing with quantification of external loads and stresses developed on Bridges due to vehicular movements has incorporated all the new developments of vehicles and its loading aspects.

This is again a revolutionary revision.

Some of the codes of great importance, basically for designing has been reviewed and is been discussed here.

#### The Indian Road Congress (IRC) code: IRC: 22–2015

The scope of this code is it is applicable to simply supported as well as continuous bridges and supporting column systems, with Steel-Concrete Composite Construction. The code is based on Limit States Method of Design.

This code is restricted to steel-concrete composite construction where steel girders are used as primary members and cast-in-situ reinforced concrete and/or pre-cast concrete slab with necessary in-situ concrete as deck slab. Wherever appropriate, the provisions of this code may be applied to steel-concrete composite elements/components of other types of bridges.

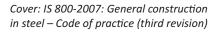
#### The Indian Road Congress (IRC) code: IRC: 24–2010

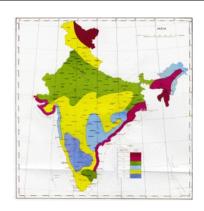
This Code deals mainly with the design of the structural steelwork of normal road bridges (e.g. beams, plate girders, open web girders).

Provisions of this Code generally apply to riveted, bolted and welded constructions using hot rolled steel sections only. Cold formed sections are not covered in the Code. The present version of the Code embodies application of limit state principles of design, which envisage that the structure will remain fit for use during its life with an acceptable level of reliability. The provisions of Limit State Method (LSM) of design in the IS 800–2007 have been generally followed in this Code with appropriate changes, where necessary. Generally steel bridge structures shall be designed by limit state method.

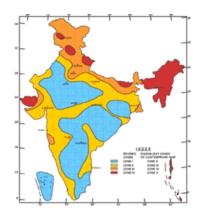
BIS	Earlier Revised	Title	For Revision	Reaffirmed
801	1975	Code of Practice for Use of Cold Formed Light Gauge Steel Structural Members In General Building Construction	****	
802	1978	Code of practice for use of structural steel in overhead transmission line towers: Part 2 Fabrication, galvanizing: Inspection and packing	****	****
803	1976	Code of Practice for design, fabrication and erection of vertical mild steel cylindrical welded oil storage tanks (first revision)		****
804	1973	Specification for rectangular pressed steel tanks (first revision)		****
805	1968	Code of practice for use of steel in gravity water tanks	****	
806	1968	Code of practice for use of steel tubes in general building construction (first revision)	****	****
2314	1986	Specification for steel sheet piling sections (first revision)		****
2713	1980	Specification for tubular steel poles for overhead power lines (second revision)	****	****
2750	1964	Specification For Steel Scaffolding	****	
4000	1992	High strength bolts in steel structures – Code of practice (first revision)		****
4014	1967	Code of Practice For Steel Tubular Scaffolding	****	
6533	1989	Design and construction of steel chimney – Code of practice	****	****
9178	1979	Criteria For Design of Steel Bins For Storage of Bulk Materials	****	



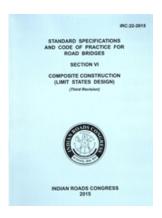




Wind Map: IS: 875 Part 3 – 2015: Code of Practice Design Loads (Other than Earthquake) for Buildings and Structures- Code of Practice: Wind Loads



Seismic Map: IS 1893 Part 1: 2016 Criteria for Earthquake Resistant Design of Structures General Provisions and Buildings



Cover: IRC 22 - 2016 Standard Specifications and Code of Practice for Road Bridges: Steel Concrete Composite Construction

#### Participation in Developments of Codes and Standards

Codes and standards are an important enabler in promotion of Steel. Since inception, INSDAG has been actively associated for development of various steel related Codes and Standards under BIS and IRC like IS 800, IS 801, IS 808, SP 6(2), IRC 22, IRC 24 etc. Being member of various committees of BIS & IRC like CED7, CED54, MTD4 and B5, regular interaction and deliberation on different codal provisions are regularly undertaken by INSDAG. Apart from basic codes and standards, INSDAG had prepared many handbooks to various codes for easy and fast understanding for the users. For propagation of steel usage in Bridges and Culverts in Rural and Semi Urban areas, INSDAG developed some standard Design and Installation Manuals for National Rural Infrastructure Development Agency (NRIDA) under Ministry of Rural Development for construction under Pradhan Mantri Gram Sadak Yojana (PMGSY).

After release of IS 800: 2007, INSDAG has long been pursuing the Engineering Colleges for inclusion of Structural Steel Design and Construction into their curricula. To facilitate such initiatives till date we had conducted 23 nos of 6 days Short Term Training Programmes (STTP) on Structural Steel covering almost all the concerned faculties of Engineering Colleges spread across India. Nowadays almost all premier institution teaching Civil Engineering and Architecture & Town Planning, adopted Structural Steel design with Limit State Method into their curricula.

#### INSDAG's involvement in various Projects for promotion of Steel

#### Restello at Kolkata

The HIG (High Income Group) Project is a B + G + 6 steel-framed and steel-concrete composite building. It comprises 12 apartments in duplex style. The project provides 25 covered car parks and 15 open car parks. The building was designed with both braced and framed structures to ensure stability and strength.



#### Indira Paryavaran Bhawan at New Delhi

The first on-site net-zero building in India is the Indira Paryavaran Bhawan, which is situated in New Delhi. Out of four blocks, one block (G+7) that houses an auditorium at the ground floor, was built with steel-concrete composite technology.



#### Handloom House at New Delhi

The corporate office of Ministry of Textiles, Govt of India on Janpath Road, New Delhi was fully constructed with Steel-Concrete Composite methodology.

#### Ispat Pragati Bhawan at Kolkata

INSDAG's own building at Kolkata is fully a steel made building.



#### CONCLUSION

The complete ecosystem of infrastructure and construction has high space of use of steel at places where steel is most suited and useful. Some of the important codes which may catalyse the infra development is already in place and some more have been identified for revision.

The Challenges and its solutions are well within reach and may be undertaken with proper initiative in a collective fashion. Only then will the target of 300 MTPA production will see a rational use and consumption. The nation is optimistic, and all stake holders look forward for achieving the same.

References: Online data from Public Domain/JPC Portal/World Steel Portal/BIS and IRC portal Acknowledgements: Shri Shiladitya Chanda, INSDAG. Shri P K Mishra- Director General



**SHRI DEBASHIS SEN** 

MD, HIDCO

Shri Debashis Sen joined the IAS in 1985. He got his Diploma in Public Administration from ENA, France.

Shri Sen has served in various capacities including District Magistrate for more than five years, Chief Electoral Officer for five years and Secretary, Urban Development Deptt for seven years.

He is presently posted as the Managing Director, WBHIDCO which is a government company that is developing New Town, Kolkata. He is also the Chairman of NKDA and Sector-V.



**SHRI ARUN ARORA**Former General Manager,
Eastern Railway & GM, Metro Railway, Kolkata

Shri Arun Arora, former GM, Eastern Railway superannuated in May 2023. He also held prestigious positions of GM, Metro Railway, Kolkata; Chairman, Kolkata Metro Rail Corporation Ltd.; Additional Member, Railway Board etc.. He was also Dy. Secretary (Steel & Mines) in 1997–2000.

Shri Arora is an alumnus of Premier institutions – IIT Delhi, SCRA & University of Queensland. He holds Bachelor's degrees in Mechanical & Production Engineering and has done MBA from University of Queensland, Australia. He has been decorated twice with National Railway Award for outstanding contribution to railway working.

He played a key role as Divisional Railway Manager, Delhi in launching India's fastest conventional Train Gatiman Express between Delhi and Agra during 2016. He also played a key role as Principal Chief Mechanical Engineer, Northern Railway in successful launch of First Vande Bharat Express between New Delhi and Varanasi during February 2019 & 2<sup>nd</sup> Vande Bharat Express between New Delhi and Katra during October 2019. To fight with Covid pandemic, Shri Arora spearheaded the design and conversion of conventional coaches as isolation coaches. Under his leadership, NR workshops fabricated lakhs of PPE kits during the lockdown.

He has an extensive exposure to developed railway systems in the world – Germany DB Railway, SNCF French Railway, Italian Railways & US Rail Roads. He had also been deputed for senior management leadership programs to Bocconi Business School, Italy and Tepper Business School of Carnegie Melon University, USA.

He was recognized over Indian Railway as a tough and focussed administrator who walks the talk and delivers successfully.



#### SHRI BIMLENDRA JHA

Managing Director, Jindal Steel & Power Ltd.

Mr Bimlendra Jha has served in the Steel industry for over 3 decades including his long association with Tata Steel. He has held multiple leadership positions including CEO of Tata Steel UK, Chairman of Tata Steel Europe Long Products, Executive Director on Board of Tata Steel Europe, and CEO and MD at Ambuja Cements Ltd

He has now joined Jindal Steel & Power Ltd as its MD in Aug 2022. Sh. Jha has vast experience in strategic portfolio restructuring, Theory of Constraints, supply chain transformation, market development, sales and brand management, innovation management, equipment manufacturing and Steel plant operations

He is also deeply passionate about Green Alternatives for the Industry and water conservation.



#### SHRI PRADIP KUMAR MISHRA

Director General, Institute for Steel Development& Growth

Shri Pradip Kumar Mishra is the Director General of Institute for Steel Development & Growth (INSDAG), an institute promoted by Ministry of Steel, Gol and all major Steel Producers. He is overseeing all aspects of the Institute with a thrust on increasing the consumption of steel in the country.

Shri Mishra has more than 35 years of experience in the Sales and Marketing of Steel Industry and has a wide experience in Strategic initiatives in Sales and Marketing functions. Prior to this, Shri Mishra held senior management positions in two large public sector enterprisesSteel Authority of India Limited (SAIL a Maharatna Company) and National Aluminum Company Limited (NALCO, a Navaratna Company). He was a Board Member, then Director (Commercial) with additional charge of Director (Finance) of NALCO. Before that, he was the Executive Director (Marketing-Flat Products) in SAIL and Executive Director (Marketing - Special initiatives and Steel processing Units) of SAIL. He was a Board Member of SAIL-Bansal Pvt. Ltd (a JV with SAIL) for over three years. Shri Mishra is an MA in English from Utkal University, Bhubaneswar and joined SAIL as a Management Trainee in 1983. He was sent abroad on two occasions for Advanced Management Training Programme. He was awarded the prestigious Jawahar Award by SAIL management for his outstanding contribution to the company.



#### **SHRI P S UPADHYAYA**

Chairman, OC & Former Director, NMDC

Shri P S Upadhyay is a Mining Engineer with 50+ years of experience and served on Board level positions with a number of leading Coal, Steel, and Metal Mining Organizations.

Shri S Upadhyaya, is a mining graduate from Indian School of Mines. He has also done PGDCA from IMS, YMCA, New Delhi and Special Management Program from University of Delhi.

He Joined NMDC Ltd (a PSU under Ministry of Steel), in 1971 and worked on various positions and finally retired as Director (Technical) in 2008. In between, he worked in Engineers India Ltd from 1982–2002.

Post retirement Shri Upadhyaya worked with KSK Mineral Resources as Managing Director from 2008–2011. He is still serving and served as Consultants with Golder Associated Consulting India, Price water house Coopers (PWC), State Bank of India (SBI), Quality Council of India (QCI) etc.

His specific areas of interest include operation, consulting and project management in the coal and metal mines sector



**SHRI SUSHIM BANERJEE** 

CEO, (IISSSC), Former Director General, INSDAG

Shri Sushim Banerjee is a Post Graduate in Economics (Gold Medalist) from Presidency College and Kolkata University. He had obtained Post Graduate Diploma in Business Management from All India Management Association, New Delhi. Has also undergone training for Industrial Research at Fordham University, New York - May-July, 1988.

As ED (Commercial), SAIL, New Delhi, Shri Banerjee was associated with working out strategies and policies of the Marketing Organisation of the Company. He was also the Chief Risk Officer of SAIL and instituted the Enterprise Risk Management in plants and other units in SAIL.

Worked as Regional Manager (Long Products), Northern Region, New Delhi and was involved in marketing of Long Products and formulating of marketing strategies in Northern Region comprising of 6 States.

Also Worked on Demand Forecasting, sector wise analysis, international price comparison and industrial growth with special reference to Steel Industry as Deputy General Manager (Market Research) in Steel Authority of India Limited.

Worked as Director General, Institute for Steel Development & Growth (INSDAG) at Kolkata, an Institute set up by Ministry of Steel.

Shri Banerjee presently working as a CEO of Indian Iron and Steel Sector Skill Council (IISSSC) is an industry driven Non-profit Company to impart training assessment and certification of the people to meet the skill gap in Iron and Steel Sector in the country and mandated under National Skill Development Corporation (NSDC).



#### **SHRI YASHASWI SHROFF**

Chairperson, West Bengal State Chapter of PHDCCI & Alcove Realty

Yashaswi Shroff as a youngster did his schooling from Don Bosco, Kolkata & completed his two-year IB programme from The International School, Bangalore and his Bachelor of Commerce from St. Xavier's College, Kolkata. While at St. Xavier's he also took up a full-time job at Ernst & Young, in order to learn the tricks of the trade.

He has always aspired to be a part of the real estate industry and he found the necessary inspiration at home, having grown up in a family dealing in real estate since early 1980's. Highly knowledgeable and proficient in the real estate segment, as Executive Director of Alcove Realty he represents a strong foundation of ambition, excellence, growth and consistency in the rapidly evolving and demanding Indian real estate industry.

He is also the Head of the National Committee on New Construction Technology of the CREDAI Youth Wing – The Confederation of Real Estate Developers' Associations of India and also the Zonal Secretary of the Eastern Zone CREDAI Youth Wing. He is also the chairperson of the West Bengal state chapter of PHDCCI. PHD Chamber of Commerce and Industry has been working as a catalyst for the promotion of Indian industry, trade and entrepreneurship for the past 117 years. It is a forward looking, proactive and dynamic PAN-India apex organization. His credibility has won him awards like –

- The 40 under 40 Realty plus award in 2022
- Young achiever of the year, 2022 from Economic Times.



**SHRI RAGHAV BERIWALA**Director, Shyam Steel Industries

Raghav Beriwala, a prominent name in the list of Indian industrialists, is the Director of Shyam Steel Industries Ltd. and the Founder of Zhuzoor Infratech Pvt.Ltd.—the leading construction marketplace in India.

An emerging entrepreneur driven by creativity, Raghav Beriwala possesses

profound knowledge and a demonstrated history of working in sectors like infrastructure, metal, and mining. His passion for innovation and love towards technology empowered the creation of Shyam Future Tech — the IT venture of Shyam Steel Industries. His dedication and excellence in creating consumer–centric Business Strategies have enabled Zhuzoor Infratech Pvt. Ltd & Shyam Future Tech Pvt. Ltd. to become the leading brands in their respective sectors.



#### SHRI SATYAJIT MOHAPATRA

Head-Technical Marketing & Appl. Engg, Arcelor Mittal Nippon Steel

Mr. Satyajit Mohapatra, at present heading the Technical Marketing & Application Engineering department at AM/NS India, has an experience of more than 28 years in various integrated steel plants including Tata Steel, Ispat Industries and Dolvi, now a part of JSW.

Mr. Mohapatra received his B.E in Metallurgical Engineering from MNIT Jaipur in 1994, completed his Post Graduate Diploma in Steel Technology in 2005 from IIT Kharagpur and has undergone various certification courses such as the prestigious 'Leadership Pipeline Connect' from ArcelorMittal University affiliated to Duke University.

His professional interests include – Development & commercialization of steel and formulate business strategies for various application segments such as Automotive, Appliances, Plates, Coated & Organic coated.

Mr. Mohapatra has been a speaker / Panel member in various National & International conferences promoting the usage of high strength steels in automotive applications. He is an active member in the government institutional bodies like INSDAG, ISA & JPC.



#### **SHRI SUDIP KUMAR BASAK**

Chairman, Indian Institute of Metals, Kolkata Chapter Chairman, Basak Consultants & Associates

Sudip Kumar Basak, a Metallurgical Engineer from Jadavpur University, after a short stint in research on Mineral Engineering in IIT(ISM), Dhanbad started his career in SAIL, Rourkela Steel Plant in 1980. He has a rich experience in the field of Research & Control, Production Planning, Raw Materials, Iron Making,

Logistics Management and contributed in turn around and implementation of Projects & Modernisations of RSP as an Internal Resource Person. He then headed SAIL's Central Coal Supplies Organisation. Later on he was elevated to the position of Chief Executive of Collieries Division as Executive Director and represented SAIL in the board of S & T Mining Co. Pvt. Ltd (a JV of SAIL & Tata Steel) as Director and then Chairman also for a short stint.

He acquired M.Tech and MBA and a specialised diploma in Logistics Management. He is now actively associated with professinonal bodies, industry associations, journals and societies asLife Fellow/Member/Office Bearer/Editor like IE(I),IIM,AIMA,QCFI, Coal Insights, Steel Insights etc and founded 'Friends of Coal', a professional body of scientists and technologists. He authored/presented more than twenty papers in reputed journals/national seminars in last five years.

He is now engaged in doctoral research in Management and advising industries independently as the founder Chairman of Basak Consultants & Associates. He is presently Chairman of Indian Institute of Metals, Kolkata Chapter.



**DR. APARNA DEY GHOSH**Professor, Civil Engineering, IIEST

Prof. Aparna (Dey) Ghosh from IIEST, Shibpur, is a gold medallist from Jadavpur University (1993), has stood first in M.Tech Structural Engineering from IIT Kanpur (1996) and obtained her Ph.D. from Jadavpur University (2004). She works in structural vibration control, earthquake engineering and microbial concrete.

She has over a hundred research publications and has also worked at Development Consultants Pvt. Ltd. and at M.N. Dastur & Co. (P) Ltd. She has had research projects with DST, BARC and collaborated with Trinity College Dublin. She has won the BECAA Alumni Young Faculty Research Award 2004–05, Dept. of Atomic Energy, Govt. of India, Research Award 2005 and Railway Board's 1st Prize 2016



**SHRI NAGARAJAN P.**General Manager,
Jindal Stainless Ltd.

Mr. Nagarajan P is General Manager & Head- Sales Development at Jindal Stainless Limited. He is M Tech Metallurgy from IIT -BHU and graduated from NIT Jamshedpur.

He has more than 18 years of experience developing various stainless steel grades and aligning Stainless grades to suitable applications in the industry. His work includes various research & developments and also has two patents in his name. He has a vast experience in hollowware, petrochemicals, engineering, Railways & Metro rolling stock industry and now working on infrastructure applications.

He is a lifetime member of IIM, Hisar Chapter



SHRI E SURESH RAJ

Senior General Manager, Engineering, TATA BlueScope Steel Pvt. Ltd,

Responsible for Design and Detail Engineering for LYSAGHT and EZYBUILD Business. Suresh is a Mechanical Engineer with 34 years of dynamic Experience in the field of Pre-Engineered Buildings, Light Gauge Steel Frames, Roofing and Walling Solution, Composite Slab Design and Solar Module mounting Solutions, Bulk Material Handling System, Design of Pollution Control System.

Prior to TATA BlueScope Steel he worked with Zamil Steel, Saudi Arabia and Vietnam. He represents TATA BlueScope Steel in many Technical Seminars and conferences. Visited China, Malaysia and Sri Lanka for technical seminars and conferences. Associated with the reputed and established institutes like IIT-Madras and IIT-Hyderabad for continuous research towards innovations and new product developments.

Suresh serves as a Sub Committee member in revising Indian Standard Code IS 801– Code of practice for use of Cold formed light gauge steel structural members in general building construction. He also holds the additional responsibility of Ethics co–Ordinator for South region and Safety and admin for Chennai Sales and Engineering office.



**SHRI MANAS MOHAN GHOSH** 

Consultant, INSDAG

MANAS MOHON GHOSH Educational Qualification Bachelor's in Civil Engineering from Jadavpur University, Kolkata in 1986. Master's in Business Administration (MBA) in Finance from Jadavpur University in 1991 in their 3 years evening course. Professional Details Simon Carves India Limited (a premier Turnkey Contractors and Engineering Consultancy firm) in the Structural Engineering design department.

(1986–1991) Nicco Corporation Limited (Project division) in Structural Engineering Department. (1991–1993) Tata Korf Engineering Services Limited (a company promoted by Tata Steel) in Structural Engineering Department (1993–2002) Institute For Steel Development & Growth (INSDAG) (an R & D unit under the Ministry of Steel, Government of India) (2002 – March 2022) – Superannuated Institute For Steel Development & Growth (INSDAG) (an R & D unit under the Ministry of Steel, Government of India) (May 2022 – Till Date) – As Consultant at INSDAG – Structural Steel Design and project execution. Professional membership Member of The Institute of Engineers (India). Chartered Engineer Fellow of Indian Institute of Structural Engineers (IASTRUCTE), New Delhi.



**DR. ABHIJIT DASGUPTA**Former Jt. MD, M.N. Dastur & Company (P) Ltd

Dr. Dasgupta has done is Bachelor of Civil Engineering from Jadavpur University and M.Tech (Structural Engineering), IIT, Kanpur. He has also done his Ph.D (Civil Engineering) from Jadavpur University. He has about Fifty years of experience in providing consulting engineering services for projects in the field of steel, power, cement, other heavy industrial projects, infrastructures, in India and abroad.

Dr. Dasgupta is author of more than sixty articles in national/international Journals/ Conference/seminars.

Received many Professional Awards Including

- Life Time Achievement Award 2018 from Consulting Engineers Association of India (CEAI)
- Eminent Engineer award from The Institution of Engineers (India) in the year 2012, 2018 and Eminent Civil Engineer award in the year 2016
- Project Management Excellency award from Construction Project Management Committee of China Construction Industry Association



**SHRI SUSHIL KUMAR PRADHAN**Chief Marketing Officer, Jindal Steel & Power

Mr. Pradhan holds an MBA from Xavier Institute of Management and has done his graduation in Metallurgical Engineering from National Institute of Technology, Raipur in Year 1995. He commenced his career as a Graduate Engineer Trainee at SAIL, joined JSP in 2012 and has over 27 years of experience in the Steel industry.

He has a rich experience in developing business in Flat as well as long products and has lead Business vertical for Flat products, Rails and Special structures prior to his current role.

In his present capacities, Mr. Pradhan is responsible for the overall Sales & Marketing function of the group, including Sales, Business development & transformation, Branding & Product Application.



### SHRI DHANANJAY DAKE

Creative Director, Construction Catalysers Pvt. Ltd.

Dhananjay is an architectural engineer. A mechanical engineer by training, he specializes in new age architectural engineering. His work experience ranges from designing, manufacturing and installing structures.

He is currently working towards creating service integral structures and efficient synergy of the five elements. Dhananjay established Construction Catalysers Pvt. Ltd. in 1988 a design and build consortium for new age architectural engineering. The company has completed more than 250 projects since its inception all over India and abroad. His work involves eco sensitive solutions spanning across art works to bridges to public buildings to airports



**SHRI SUMAN NEOGY**Chief Engineer, WBHIDCO

Shri Neogy is currently working as Chief Engineer in The West Bengal Housing Infrastructure Development Corporation (WBHIDCO), a public sector undertaking of West Bengal. Previously he was General Manager, WBHIDCO responsible for the creating one of the masterpiece of India, New Town Ecopark.

He is nominee Director with many state PSUs. He is also working as Superintendent Engineer with West Bengal Irrigation Department. He has completed his Civil Engineering from Indian Institute of Engineering Science and Technology, Shibpur.

#### **BIDAAL TECHNOLOGY**

Roopen Comforts, 3rd Main Rd, NGR Layout, Roopena Agrahara Bommanahalli, Bengaluru, Karnataka 560068

T: 7030052040

E: kalash@bidaal.com W: www.bidaal.com

Contact Person: Kalash Nibjiya



Established in India in 2020 by IIT kharagpur graduates, Bidaal developed the advanced niche AI-IoT products for increasing the safety and productivity of industrial operations.

Our aim is the digitalization of industry through our innovative Industrial 4.0 tools. We leverage industrial IoT, robotics, artificial intelligence, and data analytics to develop products that help the industry to increase its safety, reduce operations delays, visualize operational activities and ease compliance management.

### DIAMANT TRIUMPH METALLPLASTIC PVT. LTD.

65/6, A.P.Complex, 2nd Floor, Sarjapur Main Road, Agara, Bangalore – 560102

T: 9513444539

E: info@triumphbiz.in

W: www.diamanttriumph.com

Contact Person: Shatakshi, Head-Sales and Marketing



DIAMANT Triumph Metallplastic Pvt. Ltd. (DTM) an Indo-German specialty materials company providing high quality polymer technology to help customers build, align, repair, and protect their structures and assets. Diamant Triumph's renowned high strength quick setting metal grout for 100% gap compensation between steel – steel connections shall be on display. The grout has been widely tested and approved for use in structures on land and in marine environments including railway systems, marine transportation, and diverse structural connections.

#### SHYAM STEEL INDUSTRIES LIMITED

Premises no. 3/319, DH 6/11, Action Area – 1D, New Town, Kolkata – 700156

M: +91-7003177741/9051093684

E: mbpa@shyamsteel.com W: www.shyamsteel.com

Contact Person : Mousumi Sarkar, Executive Assistant to Director



Shyam Steel Group is a Kolkata based large conglomerate, operating on Pan India basis with 70+ years of legacy in TMT bar manufacturing. Shyam Steel has been primarily focused on high quality TMT bar manufacturing and gradually developed diversified business portfolio including Shyam Future Tech (Information Technology & Software), ZHuzoor Infratech (B2B marketplace for construction materials), Shyam Infra Nirman (Infrastructure & construction), Shyam Steel Fabrications Private Limited (Metal Beam Crash Barrier and Fabrication Unit), Macaw Paints (Decorative & Protective Coatings), Budleaf Tea (FMCG Business) etc. Shyam Steel has always maintained a perfect blend of technology and manufacturing to optimize production and offer high quality products and services to the end customers across various business segments.

### **JINDAL STEEL & POWER**

Plot No. 2, Sector – 32, Gurugram T: 9818009466 / 9007914231

E: vinodsharma@jindalsteel.com, anand.prakash@jindalsteel.com

W: www.jindalsteelpower.com

Contact Person Mr. Vinod Sharma / Mr. Anand Prakash



Jindal Steel & Power (JSP) is an Indian industrial powerhouse with a dominant presence in steel, mining and infrastructure sectors. With more than three-decade-long illustrious history, JSP is continuously innovating, and scaling its capacity utilisations and efficiencies towards creating a self-reliant India. Led by Mr Naveen Jindal, the company produces best-in-class, cost-effective steel through backward and forward integration. It is undertaking ambitious expansion plans, and aims to be known as one of the most efficient, innovative, steel-makers in the world.

JSP's business operations span across the states of Odisha, Chhattisgarh and Jharkhand in India and across multiple global destinations including Australia and Africa.

JSP has a steel-making capacity of 9.6 MTPA. JSP's captive iron ore mines at Tensa & Kasia in Odisha, have a production capacity of 3.11 MTPA and 7.5 MTPA respectively. JSP has a unique & diverse product portfolio that caters to markets across the steel value chain.

JSP has been operating within a well-defined ESG framework under which it plans to be one of the lowest Co2 emitting steel companies in the world within this decade. JSP is the first and only steel maker in India to have commissioned a Coal Gasification Plant (CGP) in 2014 which helps in eco-friendly steel production with lower carbon footprint. JSP is working aggressively to become carbon net zero at an accelerated pace.

JSP has been rated as the second-highest value creator in the world between the Years 2005–2009 by the Boston Consulting Group, and has also figured in the Forbes Asia list of Fab 50 companies and Economic Times Sustainable Organisations 2022 list recently.

The company is guided by its core philosophy of nation building and endeavours to strengthen India's industrial base by aiding infrastructural development, and through sustainable development initiatives. It deploys its resources to improve infrastructure, education, health, water, sanitation, and environment etc around its areas of operations, towards improving the quality of life of the communities.

### TATA BLUESCOPE STEEL PVT LTD

Floor No. 9 & 10, Kalpataru Infinia, Wakdewadi, Final Plot No. 21, Sub Plot No. 3, At CTS No. 15/1 Shivajinagar, Pune — 411003 T:+91-9823724426



E:Saumyajit.baidya@tatabluescopesteel.com

W: www.tatabluescopesteel.com

Contact Person: Saumyajit Baidya, Senior Manager – Marketing

Tata BlueScope Steel is a leader player in colour coated roofing and cladding solutions. It is an equal joint venture between Tata Steel & BlueScope Steel. It is a market leader in the field of coated steel coils, steel building solutions and related building products. The Company operates in SAARC region with a Pan-India presence through its strategically located manufacturing facilities.

Tata BlueScope Steel offers most advanced technologies and sustainable solutions within the construction fraternity. The JV has brought along some iconic brands such as ZINCALUME® steel and COLORBOND® steel—aesthetically superior colour coated steel along with LYSAGHT® range of roof & wall cladding profiles and structural products, especially catering to the B2B markets. In addition, the division also provides value added services in form of Roof Diagnostics, AMC and Construction Services with Best-in-Class Safety practices.

The retail distribution of roof and wall cladding sheets is done under DURASHINE® brand. The flagship brand was nominated several times as Asia's Most Promising Brand and Asia's Most Trusted Brand by KPMG India survey. Most recently DURASHINE® was accorded with "Brand of the Decade" award by BARC Asia. DURASHINE® practically finds its presence in every corner of our country in residential, commercial, and institutional sectors with more than 4000 touch points.

The company has state-of-the-art manufacturing facilities at Jamshedpur, Pune, Sriperumbudur and Bhiwadi. Tata BlueScope Steel's vision is to Deliver Excellence through Sustainable Coated Steel Solutions to all our Stakeholders.

The company consistently works towards "Touching Lives Everywhere, in Every way."

### JINDAL STAINLESS

Plot No. 2, Sector – 32, Gurugram T: 9818009466 / 9007914231

E: vinodsharma@jindalsteel.com, anand.prakash@jindalsteel.com

W: www.jindalsteelpower.com

Contact Person Mr. Vinod Sharma / Mr. Anand Prakash

Founded by Shri OP Jindal in 1970, Jindal Stainless is among the leading stainless steel manufacturing companies in India and ranks among the top 10 stainless steel manufacturers in the world. The Company has an annual melt capacity of 1.9 MT and an annual turnover of US \$4.2 billion (as of March'22). It has two stainless steel manufacturing complexes in India, in the states of Haryana and Odisha, with an overseas unit in Indonesia. The Indonesian unit serves in markets of South–East Asia and nearby regions. The Company has a country–wide network of 10 sales offices in India with 12 global offices across the world.

Jindal Stainless continues to be inspired by a vision for innovation and enriching lives. The magnitude of its operations determines its brand credibility. The Company boasts of an excellent workforce, value-driven business operations, customer centricity, adoption of one of the best safety practices in the stainless steel industry, and a commitment for social responsibility.



#### SBEG CONSULTANTS PRIVATE LIMITED

4th Floor, DN- 36, Primarc Tower, Sector- V, Salt Lake City, Kolkata- 700 091, West Bengal.

T: 9088866400

E: Vikramjeet.singh@shreesatyagroup.com

W: www.satyasteel.co.in

Contact Person: VIKRAMJEET SINGH



Today Shreesatya Group is a leading Organization in Eastern India with interests in Iron & Steel. Coal Mining & Trading. We are manufacturing Sponge iron with a capacity of 1.5Lac TPA. We are manufacturing Billets in 2 (two) numbers of plants with a capacity of 2.5Lac TPA. We are also manufacturing Hot Rolled Medium & High Tensile Structural Steel with a capacity of 1.2Lac TPA. Additionally we are manufacturing High Strength Deformed (TMT) Bars at 2(two) numbers of plants with a capacity of 3.0Lac TPA. Moreover Shreesatya Group also obtained a Cool Block with a reserve of 2.9 million tonnes of High Quality Coal from Govt. of India. Coal Mining suites the best into Mining as it is one of the major Raw Material for our existing Business. Establishing DRI SMS & 3(three) Rolling Mills is the expansion and a strategic move towards backward integration, allowing the organization to produce structural Steels & TMT Bars from its own source and have complete control over the quality of materials used in steel production process.

# **READ**

# **ADVERTISE**



SUBSCRIBE

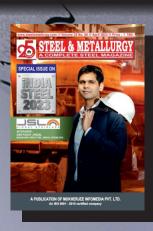




# STEEL & METALLURGY

COMPLETE STEEL MAGAZINE





STEEL & METALLURGY

#1A, Shakti, 166 Rajdanga Nabapally EM Bypass Rashbehari Connector Kolkata 700 107, INDIA

Telephone: +91-33-4061 4092

Telefax: +91-33-2441 5700 / 4780

Email: info@steelmetallurgy.com

Website: www.steelmetallurgy.com

# Get

# IRON & STEEL REVIEW

A GLOBAL PUBLICATION ON STEEL & HEAVY ENGINEERING

# Digital Copy



Special offer for online Subscription



SCAN THE QR CODE TO DOWNLOAD NOW

# ISR INFOMEDIA PVT. LTD.

Ph: +91-6292241782/6292241783/033-2463 8088 https://in.linkedin.com/company/isr-infomedia E-mail: contact@isrinfomedia.in, Website: www.isrinfomedia.com

# See You Again

at

2<sup>nd</sup> Edition

# SSTS 2024 STEEL STRUCTURES & TECHNOLOGY SUMMIT

International Conference & Expo for Steel, Construction & Infrastructure Industry

AUGUST, 2024, KOLKATA

**ORGANISER** 



For Details, Contact sk@ssts.in / gayatri@ssts.in www.ssts.com





STAINLESS STEEL FOR BRIDGES, TUNNELS & ROADS

# **OLUTIONS**



ATLEAST 2X LIFE



NEGLIGIBLE MAINTENANCE



SAFER



Coil & Sheets





Chequered Sheets



Cable Trays





INDIA'S NO.1 STAINLESS STEEL BRAND



















Visit: www.jindalstainless.com to know more or write to us at infinity@jindalstainless.com Contact for Advisory: Mr. Nagarajan P, +91 81307 57806





# Let us co-create a Greener Future with Steel Building Solutions



Leaders in Colour Coated Steel Roof & Wall Cladding Solutions





## A CONSTRUCTION LASTS LONG ONLY WHEN IT IS FLEXI-STRONG

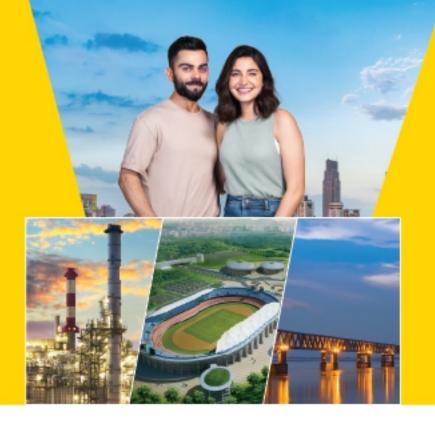
Shyam Steel Flexi-Strong TMT Rebar, is the ideal choice for construction. It has the perfect balance of strength and flexibility that will protect your structure for generations to come. Choose Shyam Steel because only Flexi-Strong can last truly long.

Follow Shyam Steel India @ 😝 💿 🔾 🗅 🗅





@www.shyamsteel.com | @ enquiry@shyamsteel.com





# A NEW-AGE CONSTRUCTION MARKETPLACE

Shyam Steel, with 70 years of legacy, is a leading TMT Rebar manufacturer. Notably, ZHuzoor, a new-age construction marketplace under its umbrella is revolutionizing the sector by ensuring quality, competitive pricing, and accessibility. Our strengths lie in robust manufacturing, efficient supply chains, favourable financing, extensive supplier networks, and advanced digitalisation.









### INSIGHT INTO SHYAM FUTURE TECH

An IT venture from the Shvam Steel Group, Shvam Future Tech LLP is certified by ISO 27001:2013 & 9001:2015. It is a digitally enabled solution for every scale that assists in automation with dynamic and customised business software. SFT specialises in crafting tailored ERP systems, CRM solutions, mobile applications, websites and other digital tools. This development process remains a constant across the spectrum of business endeavours.

Follow Shyam Future Tech LLP ( ) ( ) ( ) ( ) ( )











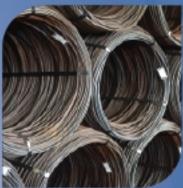




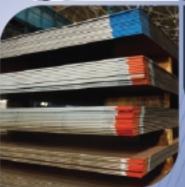


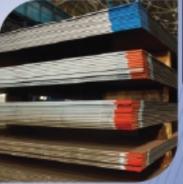
**JSP PRODUCTS THAT ARE POWERING** INDIA'S INFRASTRUCTURE REVOLUTION

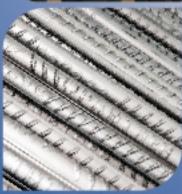












TMT REBAR

CHANNELS

RAILS

BEAMS

WELDED WIRE MESH

**PLATES** 

WIRE ROD

ANGLES

SHEET PILE

TRACKSHOE

HR COILS

**CUT AND BEND** 

REBAR

PRE FABRICATED

STRUCTURE

SPEED FLOOR

BINDING WIRE

A PRODUCT OF JINDAL STEEL & POWER







