

13th International Exhibition & Conference on
Minerals, Metals, Metallurgy & Materials



सत्यमेव जयते

CO-SPONSORED BY

Ministry of Steel

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Council of Scientific & Industrial Research (CSIR)

Ministry of External Affairs  ECONOMIC DIPLOMACY DIVISION

25-26-27 AUGUST, 2022

Pragati Maidan, New Delhi, India

Concurrent International Conference on

*“Resource Efficiency and Circular Economy
in Mineral & Metal Sectors in India”*

Organised by: The Indian Institute of Metals- Delhi Chapter

Post Show Report

Organiser

Joint Organiser

Supported By

Gold Partner

Co-Located Shows





Shri Jyotiraditya M. Scindia
Hon'ble Minister of Civil Aviation and Steel
Government of India

I am glad to know that The Indian Institute of Metals - Delhi Chapter and Hyve India Pvt. Ltd. is organizing MMMM 2022 international Conference and Exhibition during 25-27 August 2022 at Delhi.

Revolutionary changes have been brought in mineral and metal domain in the last few years in the country. Indian steel industry is brilliant example of transformation and turnaround with the joint efforts of government and industry, as it has come a long way by becoming 2nd largest steel producer in the world.

Steelmakers all over the world are evolving strategies for making the manufacturing process more environmentally friendly and circular. One option is enhancing scrap-based steelmaking which currently accounts for around 30% of global steel production, and can contribute in large reduction of green house gas emission in the steel sector. Presently steel sector is contributing 7-9 % of global emissions. Several policy initiatives have been taken in India to enhance scrap availability in the country.

Steelmakers, plant builders, environmentalists, consultants, artificial intelligence experts, all have to contribute for transforming the industry to be more circular, resource efficient, carbon-lean and environmentally responsible, With ever-plummeting costs of renewable energy generation, steelmakers must also plan to* harness the renewable energy for green steel production. India is endowed with some of the world's most abundant solar, wind and hydro resources. Total decarbonisation is a long journey, steelmakers can take short-term steps with incremental and stepwise sustainable approaches.

The global requirement of minerals and metals is growing. There is a great concern about future availability of these valuable resources. The theme of the International Conference, viz. Resource Efficiency and Circular Economy in Mineral & Metal Sectors is very topical and relevant in this context. I hope deliberation will be held on what is being done to make metal production as resource efficient as possible, and ensuring a rapid and global deployment of breakthrough technologies that can make metal production considerably greener and resource efficient than what is at present.

I wish the MMMM 2022 Conference and Exhibition all success.



(Jyotiraditya M. Scindia)



Shri. Arif Mohammed Khan

Hon'ble Lt. Governor, Kerala

I am happy to know that Hyve India Pvt. Ltd. And IIM-DC are organizing MMMM-2022 from 25th to 27th of August 2022, at Pragati Maidan, New Delhi, and that a Souvenir cum Show Catalogue will be published to mark the occasion.

It is commendable that MMMM which has the presence of leading companies in the Mining, Metals and Machinery Industries, is co-sponsored by the Ministries of Steel, Coal, External Affairs, Niti Aayog, Council of Scientific and Industrial Research (CSIR), Govt. of India and supported by World Metal Forum (WMF).

I convey my hearty greetings to everyone behind this venture and wish the Event as well as the publication all success.



Shri. Pinarayi Vijayan

The Hon'ble
Chief Minister of Kerala

I am glad to note that MMMM 2022, a Grand Business Carnival is being organized so that new knowledge, cutting edge technologies and latest innovations relating to minerals, metals, metallurgy, and materials can be showcased to the world.

I hope that it will serve as an avenue for various stakeholders to have meaningful interactions in such a way that infrastructure development in the country is benefitted.



Shri. KK Pahuja

President
Indian Stainless Steel
Development Association (ISSDA)

I am pleased to know that Hyve India Pvt Ltd along with the active support of World metal forum (WMF) is organizing the MMMM2022, and so located events on Mineral, Metal, Machinery, Manufacturing, and allied Industries during August 25-27, 2022, at Pragati Maidan, New Delhi, India.

Metals and Mining Sector plays an important role in the GDP of our country. Today our country needs to put in concerted efforts to enhance the growth of our GDP. A forum of Conference and Exhibitions of this nature can play a pivotal role to usher in rapid technological advancements in minerals and metals sector.

I am sure that the event will facilitate efforts towards modernization of our minerals, metals, metallurgy and metals sector.

I wish a grand success to the mega event.



Shri. Deepak Bhatnagar

Secretary General
Pellet Manufacturers
Association of India

I am pleased to know that Hyve India in association with numerous paper industry I am happy to know that Indian Institute of Metals, Delhi Chapter with the active support of World metal forum (WMF) along with Hyve India Pvt Ltd is organizing the MMMM 2022, and co located events on Mineral, Metal, Machinery, Manufacturing, and allied Industries During August 25 27, 2022, at Pragati Maidan, New Delhi, India.

It is indeed very encouraging to note that Ministries of Steel, Coal, Mines, MoEF, S&T and NITI Aayog are Co-sponsors. With the Blessings of Govt of India, I am sure the event will get the fillip for rapid growth of Industry.

The Minerals and Metal Sector is one of the significant sectors in our National Economy as it has consequences for multiple downstream industries, particularly in manufacturing and infrastructure, Nature has given us abundant mineral resources. Just to Illustrate, India has nearly 30 billion tonnes of Iron Ore deposits. The Indian Steel Industry has been growing over the years and in years to come more growth is expected. The Government of India has set an ambitious target of 300 million Tonnes of steel production capacity by 2030. With available mineral resources, technology, and manpower, I am confident that the above target would be achieved with the support of stakeholders of the minerals and metals sector. Iron Ore Pellets industry is the 5th largest in the world with a total capacity of 126 Million tones and plants spread in seven states of India. Pellets are a "Value-added green Raw material and help in sustainable development of mines, as they utilize iron ore fines, which cannot be used directly in Steel Making.

We hope that the deliberations of the conference and participation of stakeholders in the exhibition will provide a forum to facilitate the promotion of joint efforts and ventures for modernizing and enlarging our minerals, metals, metallurgy, and materials industry. On behalf of all pellet producers, who are members of 'Pellet Manufacturers Association in India *(PMA1), I extend my best wishes to the Organizers for a successful event.

I am delighted to note that Hyve India Pvt. Ltd. and The Indian Institute of Metals, Delhi Chapter, with the active support of World Metal Forum (WMF) are organizing Minerals, Metals, Metallurgy and Materials 2022 Expo during August 25-27, 2022, at Pragati Maidan, New Delhi, India.

Metals and Mining Sectors play an important role in the GDP of our country. Today our country needs to put in concerted efforts to enhance the growth of our GDP. Conference and Exhibition of this nature provide the much-needed platform to share technical expertise and learn about the latest developments taking place around the globe.

I am sure this programme will be of great benefit to the participants.

I wish this mega event a grand success.



Shri. Balkrishna Binani

Chairman
Indian Copper Development
Centre, Kolkata



Shri. Vivek Adukia

Chairman
Steel Re Rolling Mills
Association of India

I am happy to know that Hyve India Pvt. Ltd. along with IIM-DC, with the active support of World Metal Forum (WMF) is organizing the 13th edition of MMMM, and co located events on Mineral, Metal, Machinery, Manufacturing, and allied Industries during August 25-27, 2022, at Pragati Maidan, New Delhi, India. Though there have been lots of achievements and developments in the Indian metal industry, challenges never end. The Exhibition & International Conferences of MMMM 2022 at Pragati Maidan will provide a forum and platform for a comprehensive overview of new technological trends, intelligent solutions for future challenges and to form meaningful business partnerships amongst entrepreneurs, CEOs, Consultants, Government officials, Technology & Equipment suppliers & Engineers & professionals etc.

I wish the 13th edition of MMMM a huge success, and convey my thanks to the organisers for their initiative.



Shri. Vinkesh Gulati

President
Federation of Automobile
Dealers Associations

I am glad to know that Hyve India in association with leading trade associations is organizing the HTF + CWE and co located events on Mineral, Metal, Machinery, Manufacturing, and allied Industries, in the month of August 2022 in New Delhi.

I am sure such type of focused B2B events are helpful to link together and provide a common business platform for manufacturing Industries to showcase the new technologies, machinery, products, and services, as well as knowledge exchange. On the other hand, the buyers will also get the opportunity to experience the new technology & latest trends of the industry in general and especially in Fastener technologies.

Best wishes for a successful event.



Dr. A Sakthivel

President
Federation of Indian Export
Organisations (FIEO)

It is heartening to know that Hyve India and Leading Trade Associations are organizing the HTF + CWE and Co Located Events on Minerals, Machinery, Manufacturing and Allied Industries from August 25-27 at Pragati Maidan, New Delhi.

I hope this event will also provide opportunities for networking, best sourcing, technology, and knowledge transfer along with joint ventures in targeted industries.

As the new methodologies are the need of the hour for augmenting the productivity and capacity in the manufacturing sector, I am sure that the exhibitors and trade visitors will be able to draw maximum advantage from this event.

I am sending my best wishes for the success of this event.



Shri. S G Mokashi

Hony. Secretary General
Chairman
Chemexil

I am delighted to know that Hyve India and many other trade associations are hosting the 20* edition of one of the largest exhibitions in India, HTF + CW and co located events on Mineral, Metal, Machinery, Manufacturing, and allied Industries during Aug 25-27, 2022 at Pragati Maidan, New Delhi, India,

Hope that such events will open new horizons for product showcasing and business interactions and address the needs of the manufacturing & metal industries. I am sure that

the participants from Delhi attending this event will draw the maximum advantage from this opportunity.

My best wishes to the organisation for a grand show.



Shri. Narinder Bhamra

President
Fastener Manufacturers
Association of India (Regd.),
Ludhiana

I am happy to know that Hyve India in association with leading trade associations is organizing the HTF and co located events on Mineral, Metal, Machinery, Manufacturing, and allied Industries during 25 – 27 August 2022 in New Delhi.

This exhibition will provide a meeting point for Power Tools, Fasteners certainly be providing opportunities for business networking, new product launches, technology interchange and more. Innovative tools & technologies will accelerate the manufacturing sector and thereby help the growth of the sector.

I am sure that such platform will be helping the Exhibitors & Business visitors to scale up their knowledge and business. I wish a great success to all participants and organizers of the event.



Shri. Rituraj Bos

Hony. Secretary General
The Indian Institute
of Welding

I am pleased to know that Hyve India Pvt Ltd along with the active support of World metal forum (WMF) is organizing the MMM2022, and so located events on Mineral, Metal, Machinery, Manufacturing, and allied Industries during August 25-27, 2022, at Pragati Maidan, New Delhi, India.

Metals and Mining Sector plays an important role in the GDP of our country. Today our country needs to put in concerted efforts to enhance the growth of our GDP. A forum of Conference and Exhibitions of this nature can play a pivotal role to usher in rapid technological advancements in minerals and metals sector.

I am sure that the event will facilitate efforts towards modernization of our minerals, metals, metallurgy and metals sector.

I wish a grand success to the mega event.



Shri. Saharsh Damani
CEO
Federation of Automobile
Dealers Associations

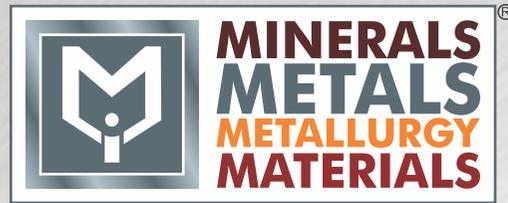
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This exhibition will provide a meeting point for the manufacturers & buyers of Power Tools, Fasteners, certainly be providing opportunities of business networking, new product launches, technology interchange and more. Innovative tools & technologies will accelerate the manufacturing sector and thereby help the growth of the sector.

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The Organizer of



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Ministry of Steel
Ministry of Coal
Ministry of Environment, Forest & Climate Change
Ministry of Electronics & Information Technology
NITI Ayog
Council of Scientific & Industrial Research (CSIR)
Ministry of External Affairs (ECONOMIC DIPLOMACY DIVISION)

and CO-LOCATED SHOWS



25-27 AUGUST 2022, PRAGATI MAIDAN, NEW DELHI, INDIA

Wish to Thanks

Industry for their Support



All India Induction Furnaces Association



The Indian Institute of Metals-Delhi Chapter

Media for their Support





The **global steel market** is projected to cross over **USD 1.43 Trillion** by the end of 2030.

India is the world's second-largest producer of crude steel and has produced **120 million** tonne (MT) of crude steel during financial year ended March 31, 2022, the output was about **18 per cent** higher compared to the country's production in the preceding fiscal year which was **102 MT steel** in 2021.

The growth in the Indian steel sector has been driven by the domestic availability of raw materials such as iron ore and cost-effective labour. Consequently, the steel sector has been a major contributor to India's manufacturing output.

India's finished steel consumption is anticipated to increase to **230 MT** by 2030-31 from **133.596 MT** in FY22.

Government of India is aiming to scale the Steel production upto **300 Million** Tons and increase the per capita steel consumption upto **160 kgs** by 2030-31 as per National Steel Policy. The liberalization of industrial policy and other initiatives taken by the Government have given a definite impetus for entry, participation and growth of the private sector in the steel industry.

Indian Steel Industry is witnessing consolidation of players which will presents an opportunity for global players to enter the Indian Market, while the existing units are being modernized/expanded, a large number of new steel plants have also come up in different parts of the country based on modern, cost effective, state-of-the-art technologies

Huge scope for growth is offered by India's comparatively low per capita steel consumption and the expected rise in consumption due to increased infrastructure construction and the thriving automobile and railways sectors.

Under the Union Budget 2022-23, the government allocated **Rs. 47 crore (US\$ 6.2 million)** to the Ministry of Steel.



MMMM is, by far, the largest and the most prestigious event on Minerals, Metals, Metallurgy & Materials with presence of a large number of leading companies of Mining, Metals and Materials industries. The event has always received worldwide appreciation from all over the industry and proved to be the best international business platform in India. The event is being jointly organized by Indian Institute of Metals – Delhi Chapter (IIM-DC) and Hyve India Pvt. Ltd., the Indian subsidiary of Hyve Group PLC (UK).

MMMM 2022 was Co-sponsored by the Ministries of Steel, Coal, External Affairs, Niti Ayog, Council of Scientific & Industrial Research (CSIR), Government of India and supported by World Metal Forum (WMF). The show was collocated with 5 concurrent events: HTF - for Advanced Hand Tools, Power Tools and Fasteners, CWE - for Advanced Cutting and Welding Equipment & Technology, IMEX - for Latest Machine Tools CNC, Laser, Measuring & Testing Equipment, UMEX – for Economical Pre-owned machinery in the industry, TECHINDIA - for Engineering and Manufacturing.

A high level concurrent conference on **“Resource Efficiency and Circular Economy in Mineral & Metal Sectors in India”** organized by Indian Institute of Metals – Delhi Chapter (IIM-DC) was a conclave of Policy Makers, CEOs, Industry experts, Scientists, Academia and Engineers associated with Metals, Minerals, Metallurgical and Allied Industries.

The event was inaugurated by Shri Jyotiraditya M. Scindia; Hon'ble Minister of Civil Aviation and Steel, Government of India in the presence of other Government officials, Trade Bodies and eminent leaders from Metal, Manufacturing and allied Industry.



Exhibitor Profile

Metal Manufacturer and Suppliers

- Aluminium
- Copper
- Pipes and Tubes
- Steel and Steel Structures
- Stainless Steel
- Zinc
- Wire
- Lead

Minerals

- Mineral Developments Corporations
- Minerals Exploration Technology
- State Governments
- Handling & Processing
- Transportation and Logistics

Machinery & Technology for Mineral Mining & Processing

- Communication System & Technology
- Conveyor Belting & Components
- Drilling and Crushing
- Earth Moving Equipment and accessories
- Environment & Geology and Mining Related Services
- Fans and Dust Collectors
- Locomotives, Lubricants & Greases
- Mines Safety Equipment
- Process Control Systems
- Rock Drilling Equipment

Metallurgical Equipment's & Technology

- Foundry Machinery & Technology
- Welding Equipment & Technology
- Rolling Mill equipments

Machinery & Technology for Steel & Metal Manufacturing

- Automation & Instrumentations
- Energy Conservation
- Engineering and Design
- Environment protection
- Filtration & Separation
- Induction Furnace and Heat Treatment
- Nano-Technologies
- Palletisation

- Project Management & Consultation
- Pumps & Valves
- Quality control
- Refractories
- Safety Equipment & Technology
- Scientific Research & Development
- Scrap Collecting and Recycling
- Sheet metal, tube, section (ferrous and nonferrous)
- Sintering
- Smelting and Refining
- Software technology

Metal Working Machinery & Technology

- Bearing & Shafts
- Cutting, Shaping, Bending & Welding
- Extrusion
- Finished products, components, assemblies
- Flexible sheet metal working
- Forging, Casting equipment and accessories
- Forming
- Foundry Engineering
- Furnace and Heat Treatment
- Gears, Motors & Compressors
- Joining, fastening
- Lapping
- Laser Cladding
- Lubricants
- Machine Tools and Dies
- Polishing
- Spray Painting Systems
- Surface Treatment & Corrosion Technology
- Tube / Section processing
- Vibrator De-burring Machines & Consumables

Material Handling Solutions

- Cranes & Lifting Equipment
- Hoists & Aerial Work Platform
- Industrial Trucks, Forklifts & Accessories
- Innovative Logistics Solutions
- Loading & Unloading Equipment
- Robotic Systems & Automation
- Warehouse Technology & Systems



Visitor Profile

Buying and Sourcing Mineral Processing

- Mineral Development Corporation
- Mineral Processing Units
- Public Sector Enterprises
- MSME and Private companies
- State Government Departments & agencies
- Contractors
- Scientific Research & Development Institutions

Steel and Metal Manufacturers

- Metal producing companies
- Alloy manufacturers
- Material testing agencies
- Ferrous and Non-ferrous metal production plants and units
- Foundry Engineering Units

Buying and Sourcing of Metal & Metal Working Machinery:

- Aerospace & Defense
- Automobile Industry
- Casting, Forgings and Foundry
- Component Manufacturers
- Consulting Service providers
- Electrical & Electronics Industry
- EPC Companies
- Fabricators
- Iron and Steel Production
- Non-Ferrous Metals Production
- OEMs
- Power Transmission and Distribution
- Railways
- Rolling Mills
- Sheet Metal Fabricators
- Sheet Metal Products, Components Manufacturers
- Shipbuilding and Ship Repair Industry
- Steel & Aluminum Construction
- Tube and Pipe Sector
- Water Supplier Sector

THE INAUGURATION



Shri Jyotiraditya M. Scindia

Hon'ble Minister of Civil Aviation and Steel, Government of India formally inaugurated the event in presence of other leaders of steel & allied Industries.

Shri Atul Bhatt
CMD, RINL

Dr. S K Jha
CMD, MIDHANI

Shri Amarendu Prakash
Director I/c, Bokaro Steel
Plant, SAIL

Mr. Ulrich Greiner Pachter,
CEO, Region India & Asia
Pacific, SMS Group

Shri D K Mohanty
Director (Prod.), NMDC Ltd.

Ms Soma Mondal
Chairman, SAIL

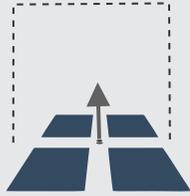
Shri Parmod Sagar
MD & CEO, RHI Magnesita

Dr. S K Jha
CMD, MIDHANI

Dr. S Basu
Director, CSIR-IMMT

Shri S K Tripathy
Tata Steel





20,0705 Sqm
GROSS EXHIBITING AREA



272
EXHIBITING COMPANIES



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Ministry of Environment, Forest & Climate Change
Ministry of Electronics & Information Technology
NITI Aayog
Council of Scientific & Industrial Research (CSIR)
Ministry of External Affairs  ECONOMIC DIPLOMACY DIVISION



6
EXHIBITING COUNTRIES
China, Germany, India, Sweden,
Taiwan, United Kingdom



11,401
UNIQUE VISITORS



3 DAYS CONFERENCE ON
*"Resource Efficiency and Circular Economy
in Mineral & Metal Sectors in India"*



29
VISITING COUNTRIES
Algeria, Bahrain, Bangladesh, Brazil, Canada,
China, Ethiopia, Ghana, India, Iran, Italy, Japan,
Luxembourg, Nepal, Nigeria, Oman, Poland,
Russian Federation, Singapore, Sri Lanka, Sudan,
Switzerland, Taiwan, Thailand, Tunisia, Turkey,
United Arab Emirates, USA, Zimbabwe



26
INVITED NATIONAL & INTERNATIONAL
TRADE DELEGATIONS FROM
5 COUNTRIES



SUPPORT FROM
MAJOR TRADE ASSOCIATIONS
AND WORLD METAL FORUM

Panel Discussion : Industry-Academia Conclave on Resource Efficiency & Circular Economy
Chairman Ms. Ruchika Chaudhry Govil, Addl. Secretary, (Steel)
Panel Members Shri Atul Bhatt, CMD, RINL
Shri Amarendu Prakash, Director I/c, Bokaro Steel Plant, SAIL
Shri D K Mohanty, Director (Prod.), NMDC Ltd.
Shri Parmod Sagar, MD & CEO, RHI Magnesita
Dr. S Basu, Director, CSIR-IMMT

TECHNICAL SESSION I

Decarbonisation and Green Metal Production

Chairman Dr. Sanak Mishra, Former, President, INAE
1. Challenges in deep decarbonisation of steel industry
Dr. Debashish Bhattacharjee, Tata Steel (Invited)
2. Decarbonizing the steel sector in India; An analytical perspective on the role of circular economy
Dr. Sachin Kumar, Shakti Foundation (Invited)
3. Danieli's way forward towards low carbon Future
Shri Manoranjan Ram, Danieli India Ltd.
4. SAIL on a greener path through circular Economy
Shri S K Das, EMD-SAIL
5. Role of Mining & Iron Ore in Green Initiatives
Shri Ramakrishna Chinnamsetty, AMNS

TECHNICAL SESSION II

Resource Efficiency and Circular Economy in Metal Sector

Chairman Shri S S Mohanty, CEO & MD, Essar Minmet Ltd
1. Resource efficiency and circular economy of mineral and metal sectors
Shri Ravi Ranjan, ESL
2. HPPI for circularity and wealth creation from Wastes
Shri P K Tripathy, Tata Steel
3. Resource Efficiency through by-product Recycling and waste material utilization in the development of metal production / recycling technologies – DMRL initiatives
Dr. Ch RVS Nagesh, DMRL
4. Enhancing resource efficiency of metal scrap recycling sector in India
Commodore Sujeet Samaddar, MRAI
5. Acid leaching of cobalt and lithium from Li-ion batteries in presence of copper reductant
Dr. Chenna Rao Borra, IIT, Kharagpur
6. Improving resource efficiency in steel Industry through world class manufacturing -The Toyota way
Shri A N Singh, Lean Solutions
7. Resource Efficiency in mining and metal sector
Shri Sanjay Dutta, MECON Ltd.

TECHNICAL SESSION III

Manufacturers & Exhibitor's Presentation

Chairman Mr. Manoranjan Ram, Danieli India Ltd.
1. Decarbonisation in blast furnace iron making
Mr. Kaushik Mukhejee, Danieli Corus
2. Pathways for decarbonization of the steelmaking industry
Shri Praveen Chaturvedi, TENOVA
3. Energy efficiency through lubricants which can contribute in environment conservation
Shri Arighna Banerjee Exxonmobil Lubricants Pvt. Ltd.
4. Role of repair, refurbishment and life extension services in circular economy
Ms Surbhi Sood, Industrial Processors & Metallizers Pvt. Ltd.
5. Utilization of slags and co-products
Shri Abhijit Gupta, Harsco India



TECHNICAL SESSION IV

Utilization of slag and Co-Products

Chairman Dr. S K Jha, CMD, MIDHANI

1. Value addition of LD slag: a by-product of steel industry, an opportunity for agriculture
Dr. Bhupinder SICAR-IARI
2. Steel slag road: a sustainable green Utilization of steel slag in road construction
Shri Satish Pande CRRRI
3. Valorization of iron and steel slag for value- Added products in cement and construction Applications
Dr. Rama Murthy, Tata Steel
4. Development of cement free concrete using Slags produced in iron and steel plants
Shri Gautam Banerjee, AMNS
5. Utilization of LD slag in developing new Composite/blended cementitious binder
Dr. S K Singh, CSIR-CBRI
6. Comparative study on low coast Ca/Mg/Al/Fe layered double hydroxide (LDH) derived from EAF slag with standard TiO₂ for waste water remediation
Dr. S K Singh, CSIR-CBRI
7. Slag sand: A sustainable way to reuse slag
Dr. Satish Kumar, JSW, Vijaynagar

TECHNICAL SESSION V

Utilization of Lean Grade Ores

Chairman Dr. S Basu, Director, CSIR-IMMT

1. Challenges in utilization of lean grade iron ores for sustainable iron making
Dr. Rameshwar Sah, JSW Vijaynagar
2. Production of pellet grade concentrate from sub-grade iron ore using enhanced gravity Separation
Dr. G V Rao, NMDC Ltd.
3. Recovery of values from low and lean grade Iron ore resources
Dr. A K Sahu, CSIR-IMMT
4. Utilization of iron ore bearing co-products through sinter and pellets
Shri Dharmendra Rajak, JSW, Dolvi
5. Characterization and pelletization studies of chromite overburden for smelting in Submerged arc furnace
Shri S K Tripathy, Tata Steel
6. Utilization of lean grade iron ore fines in Beneficiation process at JSW Steel Ltd.
Shri S S Yadav, JSW, Vijaynagar
7. Requirements and challenges of high pellet charging in blast furnace
Shri Manda Rajananda Kumar, MECON Ltd.

TECHNICAL SESSION VI

Energy and Environment

Chairman Ms Neha Verma, Director, Ministry of Steel

1. Integrated sustainability assessment of Steel manufacturing in India: a comparative LCA
Shri Souvik Bhattacharjya, TERI (Invited)
2. Technological interventions towards reduction in energy consumption and GHG emission in SAIL plants
Shri Partha Banerjee, RDCIS, SAIL
3. Present practices and future plans to minimize GHG emission at AMNS
Shri V. Pokharna, AM/NS
4. Circular economy solutions: refractories recycling
Shri Jaydeep Bagchi, RHI Magnesita
5. Trends in non-ferrous metal production industry- the future of metals is circular, digital and carbon neutral
Mr Amol Paliwal, SMS India Pvt. Ltd.,

TECHNICAL SESSION VII

New Technology

Chairman Dr. Mukesh Kumar, Director, SRTMI

1. A new solution for metal recovery with special plasma arc furnace technology with least emissions and high efficiency
Shri Raghuram Rao, Proman Infrastructure/ Masercata Oy
2. Lanza Tech: Recycling carbon, creating value
Ms. Preeti Jain, Lanza Tech Pvt. Ltd.
3. Latest developments in wet and dry gas cleaning
Shri Kaushik Mukherjee Danieli Corus
4. Advanced Iron Ore Beneficiation of Low Grade resources through DMS Technology
Shri Sunil Yadav, Exagogi
5. Beneficiation of Lean iron ore and tailings: A waste to wealth management initiative at Dalli Mechanized mine, BSP, SAIL
Shri S Manoj Kumar, BSP, SAIL

Panel Discussion

Industry View

Chairman

Shri P K Bajaj, Former MD, Durgapur Steel Plant

Panellist

Shri R P Sharma, Recycling & Environment Industry

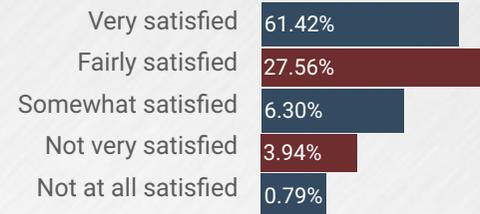
Shri Deepak Bhatnagar, PMAI, Shri D Kashiva, SIMA

Shri Kamal Aggarwal, AIIFA, Shri K K Pahuja, ISSDA

VISITOR STATISTICS

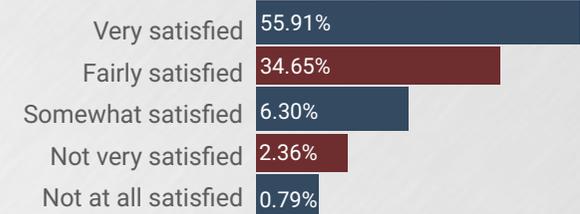
Day	No. of Visitors
Day 1	3,251
Day 2	4,860
Day 3	3,290
Total	- 11,401

OVERALL SATISFACTION



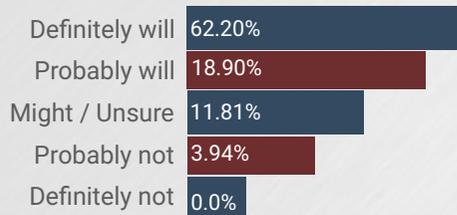
😊 95% are Overall Satisfied with shows

IMPORTANCE OF EVENT



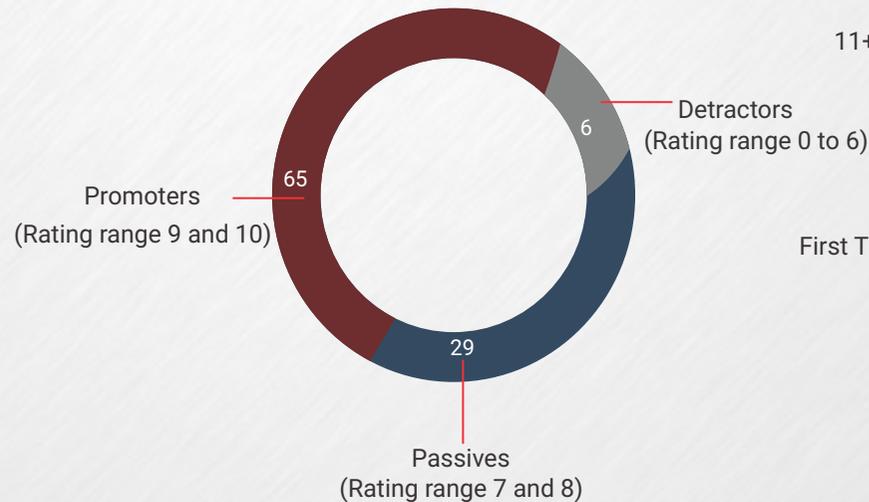
😊 97% Feel the Importance of Event

LIKELIHOOD TO RETURN TO ATTEND

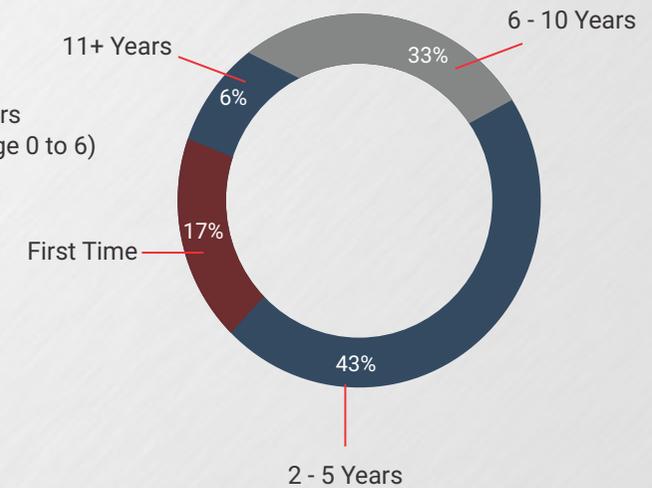


😊 93% are likely to attend for MMMM 2024 next edition.

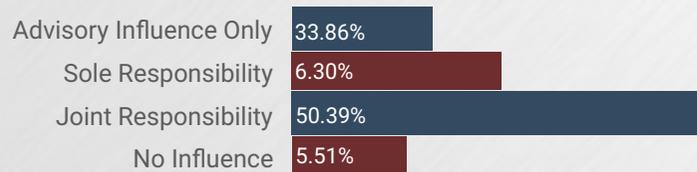
NET PROMOTER SCORE



NUMBER OF PREVIOUS EXHIBITS



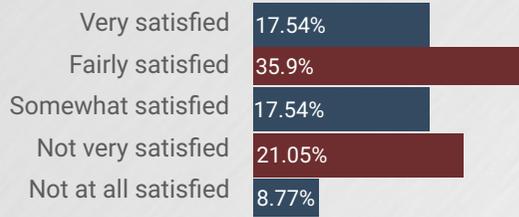
OVERALL PURCHASE RESPONSIBILITY



😊 91% have Overall Purchase Responsibility

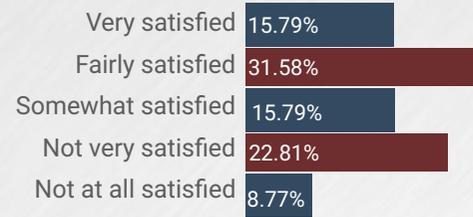
EXHIBITOR'S FEEDBACK

OVERALL SATISFACTION



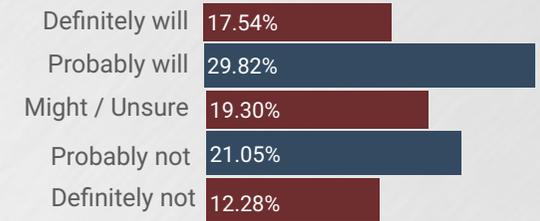
😊 70% are Overall Satisfied with shows

IMPORTANCE OF EVENT



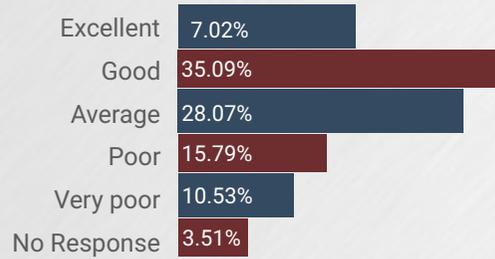
😊 63% Feel the Importance of Event

LIKELIHOOD TO RETURN NEXT YEAR



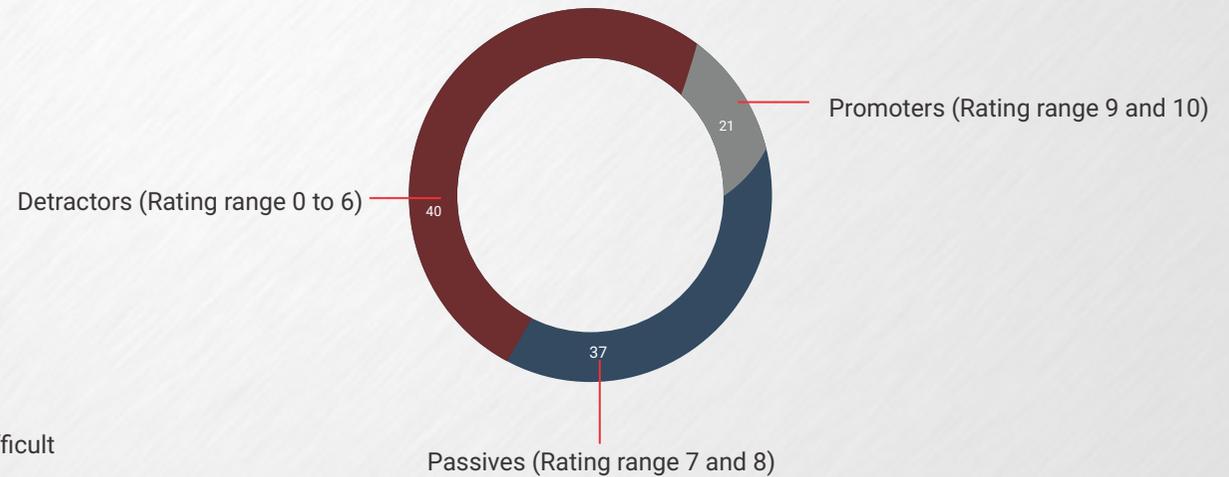
😊 67% are likely to return for MMMM 2024 next edition.

OVERALL RETURN ON INVESTMENT

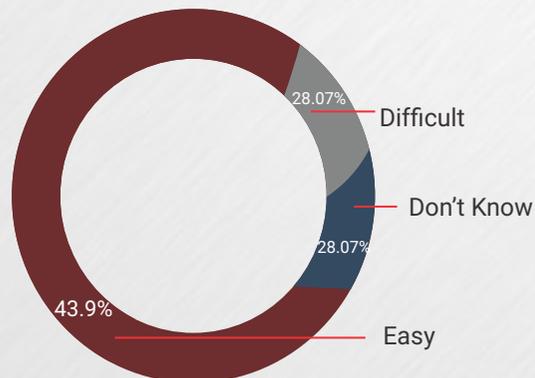


42% exhibitors agree that exhibition delivered a better ROI for them

NET PROMOTER SCORE



NET EASY SCORE



SOME BRANDS AT SHOW



All exhibitors placed remarkable efforts to set up impressive displays at the event and the jury members appreciated their efforts in some categories of awards.

Design & Concept

Exxonmobil Lubricants Pvt Ltd

Intercalative Stand Display

Shri Balaji Impex

Green Concept Display

Castrol India Ltd

Innovative Technology Display

First Electrotherm (India) Ltd.
Second Rollcon Engineering Co Pvt Ltd

SPECIAL COMMENDATION -MACHINERY & EQUIPMENT DISPLAY

PP Rolling Mills Mfg. Co. Pvt. Ltd.
MRL

Largest Exhibitor International Sector

Sinosteel MECC, China

SPECIAL COMMENDATION – DEBUT PARTICIPATION

National Engineering Industries Ltd
ATS Techno Pvt Ltd
Neles India Private Limited

SPECIAL COMMENDATION – NATIONAL

Eastern Bearings Pvt. Ltd.

AWARD & WINNERS

SPECIAL COMMENDATION – STEEL SEGMENT

JSW Steel Limited

SPECIAL COMMENDATION – PUBLIC SECTOR ENTERPRISES

Bharat Petroleum Corporation Ltd



Metal sector needs to be at forefront of circular economy model: Jyotiraditya M Scindia

ANI • Last Updated: Aug 26, 2022, 05:31 PM IST

SHARE FONT SIZE SAVE PRINT COMMENT

Synopsis

Circular strategies such as circular design, material efficient production, reuse, repair and recycling lead to saving in material consumption and reduce greenhouse gas emissions. By focusing on maximum value retention and closing material recycle, the circular economy possesses robustness that will help in dealing with drastic changes caused by climate change.



Consensus seems to have emerged across the globe that a circular economy is the only way towards conservation of resources and the metal sector needs to be at the forefront of this economic model, Union Minister for **Steel** and Civil Aviation Jyotiraditya M **Scindia** said on Friday.

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Metal Sector Needs To Be At Forefront Of Circular Economy Model: Scindia

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"Steel makers across the globe are set on a course to evolve suitable strategies to tackle the twin challenges of environmental sustainability and circular economy," he said

Newsletters per Gas Connections under Pradhanmantri Ujwala Yojana and Mahatma Gandhi National Solar Mission

Home » Economy » 3-day conference on resource efficiency in mineral, metals to be held from Friday, minister Scindia to inaugurate

Economy

3-day conference on resource efficiency in mineral, metals to be held from Friday, minister Scindia to inaugurate

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हिंदी न्यूज़ / दिल्ली / नई दिल्ली

f 2030 तक भारत में स्टील का उत्पाद दोगुना हो जाएगा : ज्योतिरादित्य सिंधिया

GLOBAL STEEL & METALLURGY INDUSTRY

CONSUMER CONNECT INITIATIVE

The grand carnival of steel & metallurgy industry begins tomorrow

The event is an amazing celebration of mineral, metal, machinery, machinery, manufacturing and allied industries



India is the world's second largest producer of crude steel and has produced 130 million tonnes (MT) of crude steel during financial year ended March 31, 2022. The output was about 18 per cent higher compared to the country's production in the preceding fiscal year which was 112 MT steel in 2020-21. The growth in the Indian steel sector has been driven by the domestic availability of raw

materials such as iron ore and coal-effective labour. Consequently, the steel sector has been a major contributor to India's manufacturing output. Government of India is aiming to scale the steel production up to 300 million tonnes and increase the per capita steel consumption up to 160 kg by 2030-31, as per National Steel Policy. The liberalisation of industrial policy and other initiatives taken by the government have given a definite impetus for entry, participation and growth of the private sector in the steel industry. Indian steel industry is not missing consolidation of players which will present an opportunity for global players to enter the Indian market, while the existing units are being modernised/replaced. A large number of new steel plants have also come up in different parts of the country based on modern, cost-effective, state-of-the-art technologies.



give for manufacturing and raw material processing techniques. MMIM 2022 will provide an opportunity for business to get acquainted with latest products and services. Trade visitors will be the most

important part of the event and will experience new technology & developments for engineering and manufacturing industry and get an opportunity to have face-to-face interaction with industry leaders at one place.



AMAN INDIA

प्रगति मैदान में खनिज और धातुओं पर भारत की सबसे भरोसेमंद 3 दिवसीय ग्लोबल प्रदर्शनी शुरू

August 25, 2022 * Akram Choudhary



एमएमएम 2022 एक्सपो का यह 13वां संस्करण आयोजित किया जाएगा

- PREVIEW**
- A high-level international conference on Resource Efficiency and Circular Economy in Mineral & Metal Sectors in India by Indian Institute of Metals, Delhi (IIM-D)
 - 75+ invited national & international trade associations from 5+ countries
 - Exclusive industry excellence awards
 - Various new launches to exhibitors
 - Exclusive branding and display area inside the exhibition halls
 - Support from major trade associations and World Metal Forum
 - 30+ Leading exhibitors from 6 countries including China, Taiwan, Germany, etc.
 - Trade visitors from across the globe

Myra India's MMIM 2022 event being largest for industry stakeholders in one instance across all showcase and display new products, connect with other companies, and accelerate the growth of 'New India'.

The MMIM is the largest and most prestigious event on minerals, metals, metallurgy & associated with presence of a large number of leading companies of mining, metals and materials industries. The event has

VISITORS, EXHIBITORS AND SPEAKERS WILL SHARE THEIR EXPERTISE ON TOPICS INCLUDING INNOVATIVE MATERIALS, SMART TECHNOLOGIES, ETC

been organized by IIM-DK and Myra India Pvt Ltd. MMIM 2022 is co-sponsored by the ministries of steel, coal, external affairs, New Age, Council of Scientific & Industrial Research (CSIR), government of India and supported by World Metal Forum (WMF). The event has always received worldwide appreciation

from all over the industry. The MMIM 2022 show will feature concurrent events, including IITF - the advanced metal trade, power tools and fasteners, EMSE for latest machine tools, Tech India for engineering & manufacturing and CWI - for advanced cutting and welding equipment & technology including laser technology. Additionally, there will be ILMEE - the annual-old Pre-welded machinery in the industry.

The grand business carnival will have India's largest gathering of trade visitors from various industry segments, making it a business meeting of CEOs, plant managers, material managers, maintenance managers, factory managers, quality heads, production managers and distributors associated with design, manufacturing, engineering and allied industries.

Trade visitors, exhibitors and speakers will share their expertise on a wide range of topics including innovative materials, new solutions for the mining industry, smart technology

प्रगति मैदान में खनिज और धातुओं पर भारत की सबसे भरोसेमंद 3 दिवसीय ग्लोबल प्रदर्शनी शुरू

August 25, 2022 * Uday Bhan Rajbhar * डिजिटल



यह समाचार सुनें

नई दिल्ली: खनिज, धातु, धातुओं के खनन और मटीरियल के क्षेत्र में 3 दिवसीय एमएमएमएम एक्सपो के 13वें संस्करण का उद्घाटन दिल्ली के प्रगति मैदान में गुरुवार को किया गया। इंडस्ट्री के दिग्गजों की मौजूदगी में एमएमएमएम 2022 का आयोजन पांच दूसरी सहायक इंडस्ट्रीज, पावर टूल्स और फास्टनर्स (एचटीएफ) के लिए एडवांस्ड मेटल टूल्स, आधुनिक मशीन टूल्स के लिए आर्टिफिशियल इंजीनियरिंग और मैनुफैक्चरिंग के लिए टेक इंडिया, एक्वाइव करिंग एंड वेलिंग इक्विपमेंट के लिए सीडब्ल्यूई जैसी सहायक इंडस्ट्रीज के साथ मिलकर किया गया। तेजर टेक्नोलॉजी और सिफायली और सेक्रेट हेड मशीनरी के लिए यूएमईएक्स का प्रदर्शन भी इस एक्सपो में किया जाएगा।

उद्घाटन समारोह में प्रमुख औद्योगिक दिग्गज शामिल हुए। उनका मानना है कि एमएमएमएम जैसे बिजनेस प्लेटफॉर्म व्यापारिक डील को आसान और सहाज बनाने बनाने की प्रक्रिया में काफी योगदान देते हैं। उन्होंने कहा कि हैडसेक नेटवर्किंग और खरीदारों और सपलायर्स को खोज के लिए इससे व्यापार के लिए नए दरवाजे खुलेंगे। इसमें आधुनिक तकनीक की पहचान में मदद मिलेगी और इससे कारोबारी अपने फो अवैजेट कर सकते हैं।

दिल्ली ncr प्रगति मैदान में खनिज और धातुओं पर भारत की सबसे भरोसेमंद 3 दिवसीय ग्लोबल प्रदर्शनी शुरू

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दिल्ली: खनिज, धातु, धातुओं के खनन और मटीरियल के क्षेत्र में 3 दिवसीय एमएमएमएम एक्सपो के 13वें संस्करण का उद्घाटन दिल्ली के प्रगति मैदान में किया गया। इंडस्ट्री के दिग्गजों की मौजूदगी में एमएमएमएम 2022 का आयोजन पांच दूसरी सहायक इंडस्ट्रीज, पावर टूल्स और फास्टनर्स (एचटीएफ) के लिए एडवांस्ड मेटल टूल्स, आधुनिक मशीन टूल्स के लिए आर्टिफिशियल इंजीनियरिंग और मैनुफैक्चरिंग के लिए टेक इंडिया, एक्वाइव करिंग एंड वेलिंग इक्विपमेंट के लिए सीडब्ल्यूई जैसी सहायक इंडस्ट्रीज के साथ मिलकर किया गया। तेजर टेक्नोलॉजी और सिफायली और सेक्रेट हेड मशीनरी के लिए यूएमईएक्स का प्रदर्शन भी इस एक्सपो में किया जाएगा।

उद्घाटन समारोह में प्रमुख औद्योगिक दिग्गज शामिल हुए। उनका मानना है कि एमएमएमएम जैसे बिजनेस प्लेटफॉर्म व्यापारिक डील को आसान और सहाज बनाने बनाने की प्रक्रिया में काफी योगदान देते हैं। उन्होंने कहा कि हैडसेक नेटवर्किंग और खरीदारों और सपलायर्स को खोज के लिए इससे व्यापार के लिए नए दरवाजे खुलेंगे। इसमें आधुनिक तकनीक की पहचान में मदद मिलेगी और इससे कारोबारी अपने फो अवैजेट कर सकते हैं।

उम्मीद है कि 2030 तक भारत अपनी स्टील उत्पादन की क्षमता को 300 मिलियन ट्रीट्री तक पहुंचा देगा। अभी की उत्पादन की क्षमता 145 मिलियन ट्रीट्री है। स्टील मंत्रालय ने कॉन्स्ट्रक्टेड डिडेव्लपमेंट सेट का सिंगल पॉइंट स्थिति कर लिया है। इससे निवेश प्रक्रिया के विभिन्न चरणों में नेगेशनल डील पॉसिबिली 2017 के तहत निवेश को आकर्षित किया जाएगा।

इस प्रदर्शनी में 6 देशों की 300 से ज्यादा कंपनियां भाग लेंगी, जिसमें चीन, ताइवान, जर्मनी, ब्रिटेन शामिल हैं। यह एशिया के मेगा बिजनेस प्लेटफॉर्म में से एक बन गया है। प्रदर्शनी के 2022 के संस्करण ने 4 देशों के 25 से ज्यादा सदस्यों के राष्ट्रीय और अंतरराष्ट्रीय व्यापारिक प्रतिनिधिमंडलों को आकर्षित किया है। इस 3 दिवसीय प्रदर्शनी में 10,000 मेहमानों के शरीक होने की उम्मीद है, जिसमें उद्योग, सीओ, कंसल्टेंट्स, वरिष्ठ सरकारी अधिकारी, नीति निर्माता, वितरक और आर एंड टी प्रोफेशनल शामिल हैं।

“It was a wonderful experience as we participated for the first time, the exhibition helped us in reaching out to our customer base at one place”

Urvashi, SRCT (Berix Bearing)

“It was a wonderful experience at MMMM 2022. We found many helpful customers here for our business growth, Thank you”

Preeti, Eastern Bearing

“This was a very well managed exhibition by team Hyve. They did an excellent job of networking a plethora of industries associated with the MMMM sector. I wish them the best of luck for future events.”

Saranjit Das, BPCL

“All mineral & metal industry will come they have started visiting us rather we are getting good response since morning. You can visit several industries at one go that helps in building up the market. “

Prime Roll, C R Chandalia

“This type of exhibition must be there & govt. should promote such exhibition and by far we have seen a very good response and we are very happy so far”

Rollcon, Indetjit

“A good platform for steel industry to come and meet the technology leaders in various fields. Needs to be promoted more vigorously. Keep it up & Congratulations”

YK Bhatia, PP Rollings

“Exhibition was very helpful in terms of getting to network with customers, at the same time to understand how the technology is advancing and what is the future holding for us”

Vasant, Exxon Lubricants Pvt. Ltd.

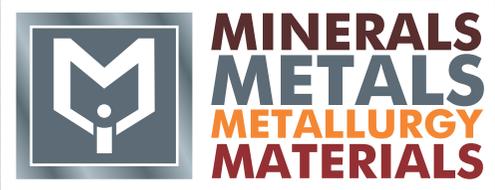
“When you visit such an exhibition, you get to see the different technologies that are emerging and how they can help the industry become more profitable and efficient in terms of production”.

Sharat Chojar, Electrotherm

“We had a very good turnout the customers which visited us were very new, we would like to compliment the entire team for the good job done and we believe it can further grow more”

MGM Varvel, Mr. Ravi Krishnamurthy





www.mmm-expo.com

14th International Exhibition & Conference on Minerals, Metals, Metallurgy & Materials

29 - 31 AUGUST 2024 PRAGATI MAIDAN NEW DELHI, INDIA

A sneak preview

- Support from major Ministries, trade associations of metal and allied industries.
- Presence of over 400 leading Exhibitors from 11+ countries
- International Participation from China, Austria, Finland, France, Germany, Italy, Russia, Spain, UK & USA.
- A high level International conference
- Concurrent Global Meet of World Metal Forum.
- International Business Networking Program (IBNP).
- Industry Excellence Awards.
- Investor Meet by International Chambers of Commerce.
- Various New Launches by exhibitors.
- International Trade Delegations from 7+ Countries.

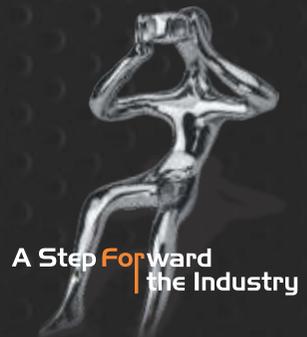
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- Display your latest array of products, technology and services to highly focused trade visitors, trade media and delegates
- One to one interaction with the industry at one location
- Brand building among industry and end users
- Explore new business and investment opportunities

As a Sponsor

- Benefit from an ideal time, place and opportunity to get noticed
- Stand out from the crowd
- Enhance your leadership status
- Project a long lasting brand image to a targeted audience

As a Visitor

- Access to the latest technology, products and services available in the market
- Find availability of raw materials, alternate suppliers, recent trends in the manufacturing and trading segments
- Find about sources of investments & funding
- Find professionals & skilled manpower

and **MUCH MORE** to **Explore...**



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We are Hyve - We create unmissable events, where people from all corners of the globe connect, learn & inspire, sharing extraordinary moments, advancing businesses and helping to shape industries. Our vision is to create the world's leading portfolio of content-driven, must-attend events delivering an outstanding experience and return on investment for our customers. This vision sits at the heart of everything we do and informs every decision we make.

We work across various industry sectors including, Engineering, Metal, Machinery, Paper, Packaging, Pro Sound & Light Roofing, Tools, Tissue and more across India & beyond.

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