Confederation of Indian Industry

INFRAMINES

CII MINING AND CONSTRUCTION EQUIPMENT DIVISION NEWSLETTER

November 2025

Confederation of Indian Industry

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Message from MCED Chairman

Mr Vivek Bhatia
Managing Director & CEO
TKIL Industries Pvt Ltd

The Mining and Construction Equipment (MCE) industry today stands at a defining moment. What makes this phase unique is not just the scale of opportunities, but the speed at which technology, sustainability, and global priorities are converging to reshape our sector.

India's infrastructure ambitions, from smart cities to clean energy corridors, continue to expand at an unprecedented pace. Each milestone achieved in roads, housing, mining, and logistics translates directly into demand for advanced equipment and innovative solutions. At the same time, global shifts, whether in critical mineral demand, supply chain diversification, or sustainability commitments, are pushing our industry to reimagine how we operate and how we contribute to long-term national goals.

Encouragingly, we are seeing members across the value chain adopt automation, electrification, and digital fleet solutions not as distant aspirations but as practical business decisions. The integration of AI-driven analytics, IoT-based monitoring, and green energy applications is no longer limited to pilots, it is steadily becoming mainstream.

These transformations are not only enhancing safety and efficiency but also preparing Indian industry to meet global benchmarks of competitiveness.

Equally important is collaboration. The journey ahead demands that OEMs, MSMEs, policymakers, and end-users work in closer partnership. By strengthening skill development initiatives, expanding local manufacturing capacities, and embedding ESG practices in everyday operations, we can ensure that the sector grows in a way that is both inclusive and sustainable.

This edition of Inframines captures this dynamic moment through thought leadership, technology updates, and success stories from across the industry. It reflects our Division's continued commitment to serve as a platform for knowledge, dialogue, and collective progress.

I invite you to engage actively with the ideas presented here and to share your own experiences, innovations, and insights for future editions. Together, we have the opportunity to build not just equipment and infrastructure, but a stronger and more sustainable foundation for India's future.

About MCED

Mining & Construction Equipment Division (MCED) of the Confederation of Indian Industry (CII) has been serving the cause of mechanization and modernization and a vital value-adding link between manufacturers, suppliers and the government. As technology transforms the style and scale of the mining sector, CII MCED plays an important role in promoting an environment for stimulating growth of the sector through continuous engagement with Government & relevant stakeholders and Ease of Doing Business.

The major areas of interventions of the CII MCED are:

- Policy Advocacy for promoting an environment for stimulating growth of the sector through continuous engagement with Government
- Strategize and develop initiatives for improving the competitiveness of the industry by organizing capacity building initiatives, advocate adoption of global best practices
- Strategize and develop initiatives for promoting linkages with other countries to achieve the objective of promoting not only business development but also in the areas of research & development
- Harnessing opportunities to support Self Reliance “Atmanirbhar Bharat”
- Creating opportunities to engage more with the major PSUs and large-scale buyers
- To engage and encourage industry members to emphatically work on Environment, Social and Governance (ESG)

SECTORAL NEWS

Incentive scheme in the works: Construction gear production likely to get Rs 16k crore buildup

The Centre is readying a programme to incentivise the local manufacture of key construction equipment to plug a yawning gap in India's infrastructure development push that's aimed at easing bottlenecks and boosting growth. Proposals for supporting the indigenisation of construction equipment, tunnel boring machines and cranes have been initiated.

Source:
https://economictimes.indiatimes.com/industry/indl-goods/svs/engineering/incentive-scheme-in-the-works-construction-gear-production-likely-to-get-rs-16k-crore-buildup/articleshow/123772884.cms?from=mdr

Indian mining and construction equipment industry to report 2-5% volume in FY26: ICRA

The Indian mining and construction equipment (MCE) industry anticipates muted growth of 2-5% in FY26, reaching 1.43-1.47 lakh units, according to ICRA. While exports showed strong growth, domestic demand was hampered by tepid award activity and CEV-V norm implementation, leading to higher costs and squeezed OEM margins. Recovery hinges on improved traction in H2 FY26.

Source:
https://realty.economictimes.indiatimes.com/news/allied-industries/indian-mining-and-construction-equipment-sector-forecasts-2-5-growth-in-fy26/122572938

Daimler India unveils trucks for construction, mining applications

Daimler India Commercial Vehicles has introduced its new BharatBenz 'HX' and 'TorqShift' series trucks, targeting the growing construction and mining sectors. The launch follows successful trials of nearly 200 trucks across various sites in India over six months. This move aligns with projections indicating substantial growth in the domestic mining and construction equipment sector by 2030.

Source:
https://www.thehindu.com/business/daimler-india-unveils-trucks-for-construction-mining-applications/article69764207.ece

Tata Hitachi eyes ₹5,500 crore in FY26 revenue

Tata Hitachi Construction Machinery is looking at about 5 per cent year-on-year revenue growth in FY26 amid muted industry growth expectations, said a top company official. The construction equipment JV has earmarked ₹150 crore in investment this year, with plans to channel bulk of it into expanding heavy mining equipment portfolio.

Source:
https://auto.economictimes.indiatimes.com/news/automotive/tata-hitachi-targets-5500-crore-revenue-by-fy26-amidst-industry-challenges/123302377

BEML secures $6.23 million export orders from Russia, Uzbekistan

State-owned BEML has secured two export orders worth $ 6.23 million for supply of heavy-duty bulldozers and motor graders to Russia and Uzbekistan. The latest order strengthens BEML's presence in the resource-rich Russian and CIS mining markets, known for their complex terrain and high demand for durable and dependable heavy machinery.

Source:
https://www.business-tandard.com/companies/news/beml-secures-6-23-million-export-orders-from-russia-uzbekistan-125070401276_1.html

All-Women Team Commissions 100-Tonne Dump Truck at Tata Steel

In a record-setting development in India's mining and construction equipment sector, an all-women team from Larsen & Toubro's Construction & Mining Machinery business (L&T CMB) has commissioned a 100-tonne dump truck at Tata Steel's Noamundi iron ore mine in Jharkhand. This marks the first instance in India where a machine of such scale and complexity has been assembled, tested and commissioned entirely by women technicians.

Source: https://www.constructionworld.in/policy-updates-and-economic-news/all-women-team-commissions-100-tonne-dump-truck-at-tata-steel/78757

Mining Equipment Market Projected to Reach USD 160.32 Billion by 2030, Says Mordor Intelligence

The global mining equipment market is poised for steady expansion, according to a new report from Mordor Intelligence. Fuelled by the rising demand for efficient mining operations, stricter safety standards, accelerated adoption of advanced machinery, and robust growth in emerging markets, the sector is set to experience sustained momentum over the next five years.

Source:
https://finance.yahoo.com/news/mining-equipment-market-projected-reach-150100624.html?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAAB90-2AS_A0uf8UfmsiyzIZYOqdRC0uvGi2D1q-uPeFp_iFCDiO7SZEyFq2hg5IQqJj5aiobOQQIenaemgN0IL-JIUqMyaxbdWNkZ2pPUf2OZXeIb6Zn8fcWqpzC7BS26Ly4h_PuxQ_JYuv2DjOyCXieQrz0_ekT37xzNXfU7BfF

EXPERT VOICES

Empowering India's Mining & Construction Future – Oscar Equipment's Role in Building Resilience and Scale

Mr. V P Jain
Managing Director
Oscar Equipments Pvt Ltd

The Indian mining and construction equipment (MCE) sector is entering a decisive growth phase. As the government drives strategic reforms, emphasizes critical mineral security, and targets infrastructure-led development under the Viksit Bharat 2047 vision, industry players must step up with innovation, agility, and deeper value addition. At Oscar Equipment Pvt Ltd, we are proud to contribute not just as hydraulic cylinder manufacturers but as a comprehensive engineering partner to India's core sectors.

With nearly four decades of expertise in fluid power systems and large-scale custom engineering, Oscar Equipment is uniquely positioned to support evolving equipment demands in mining, steel, and construction. Our product portfolio extends beyond high-performance cylinders to include allied structural and machined components such as rotary actuators, welded frames, and sub-assemblies tailored to OEM and project-specific needs.

As India eyes energy transition technologies, critical mineral extraction, and a surge in underground and surface mining activities, our focus is aligned on three fronts:

- **Indigenisation and Value Engineering** – Supporting OEMs and EPC players in reducing import dependence by delivering precise, cost-effective, and tested alternatives through local manufacturing capabilities.
- **Sustainability and Lifecycle Focus** – Ensuring higher reliability, maintainability, and remanufacturing solutions in harsh mining environments, thus contributing to the circular economy and ESG goals.
- **Capability Expansion** – Investing in process upgrades, large-component handling, and welding certifications such as ISO 3834-2:2021 to meet global quality benchmarks.

We believe the current momentum in infrastructure creation, coupled with rising coal and critical mineral demand, presents an opportunity to shift from component supply to collaborative equipment engineering. Oscar Equipments is open to technology partnerships and co-development programs with MNCs and Indian leaders alike to deliver complete assemblies and semi-finished kits ready for final integration.

To achieve this, we must also address sector-wide challenges, including skilled manpower, the adoption of smart manufacturing, and seamless integration into global supply chains. We are actively building internal training modules and strengthening project planning to deliver on time and with agility.

In closing, the MCE sector is vital to India's economic engine. At Oscar Equipments, we are committed to deepening our role—from being a quality sourcing partner to a solution provider powering India's next phase of mechanised growth.

Ventilation Solutions in Coal Mining: Engineering Approaches and Applications

Awinash Kumar Jha
Vice President
Minova Runaya Private Limited

Ventilation is one of the most critical aspects of underground coal mining. It ensures the supply of fresh air to working areas, dilutes and removes hazardous gases, and controls dust and heat levels. An effective ventilation system is not only a statutory requirement under mining regulations but also a key factor in safe and productive operations.

In modern coal mines, ventilation solutions have evolved from simple airways to highly engineered systems designed for flexibility, durability, and compliance with safety standards. This article discusses technical approaches to ventilation control, referencing common devices and designs used in coal mining.

Ventilation Control Devices

Ventilation control devices (VCDs) form the backbone of mine airflow management. They are strategically installed to control, restrict, or direct air movement. Typical categories include:

- **Stoppings –** Permanent or temporary walls used to separate intake and return airways.
- **Seals & Bulkheads –** Barriers designed to isolate abandoned or inactive areas, preventing the migration of gases.
- **Regulators –** Adjustable devices that control air quantity by providing resistance in airways.
- **Overcasts & Undercasts –** Structures that allow one air current to cross another without mixing.

Ventilation Stoppings

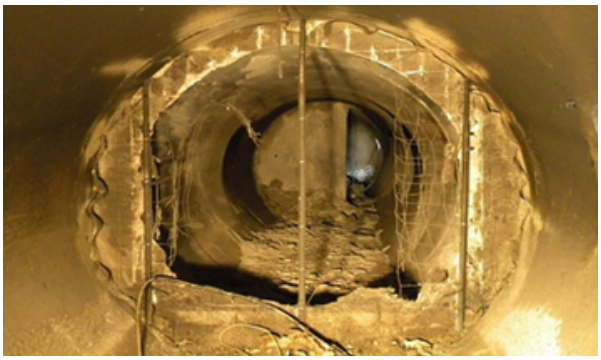
Stoppings are perhaps the most widely used VCDs in coal mines. The selection of materials—such as prefabricated panels, block walls, or reinforced alternatives—depends on fire resistance, installation speed, and cost.

Key considerations in designing stoppings include:

- Air tightness – Minimizing leakage to improve system efficiency.
- Durability – Withstanding mine pressure and environmental conditions
- Ease of installation – Reducing downtime in dynamic mining layouts.

Flexsitop Flexible stoppings have been designed to be capable of withstand 14kPa and 35kPa overpressures. The clothes are of superior material with a tensile strength over 100kN/m ensuring resilience to projectile damage. The cloth is compliant with international guidelines of non-metallic materials for use in underground coal mines.

SprayPlast&Spray plast UW stoppings have been designed by using natural gypsum shotcrete. It's extensively tested in explosion chambers and can be designed for any roadways or ratings.



Seals and Bulkheads

Seals and bulkheads are designed to withstand differential pressures while isolating mined-out areas. Their performance is governed by regulatory standards, such as explosion resistance, fire rating, and long-term stability.

Technical aspects include:

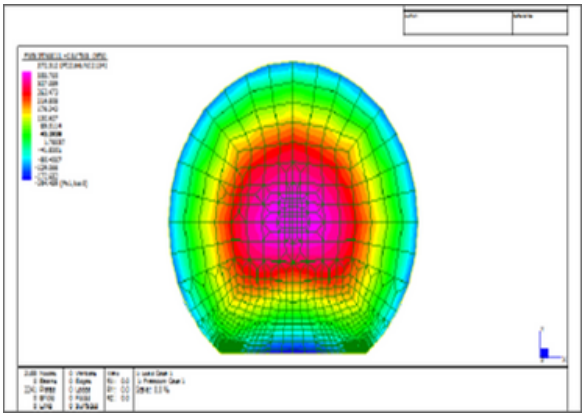
- Material selection – Foamed concrete, reinforced structures, or prefabricated designs.
- Load-bearing capacity – Ensuring resistance against methane explosions or strata movement.
- Inspection and monitoring – Use of sampling pipes and monitoring ports.

MESHBLOCK CONCRETE SEALS

This seal uses a unique Meshblock formwork system, a proven system over several decades. Steel rock bolts are used to anchor the meshblock formwork into the strata, which are subsequently filled by a specially designed high-strength concrete mix.

SPRAYPLAST SPRAYD SEALS

This seal requires simple formwork with no steel reinforcement to construct rated seal. From comprehensive live testing program, suitable designs can be developed for any roadway size and rating. Available in sprayplast UW for mines where water resistant plaster is required.



FB200 &TEKSEAL PLUG SEALS

Used throughout the globe, this plug seals are designed for mines where roadways convergence impacts the seal .High volume grouts FB200 and Tekseal have a proven history in toughest conditions. Plug seals also allows seals to be installed remotely where mine logistics impacts productivity.

Fabricated Ventilation Devices

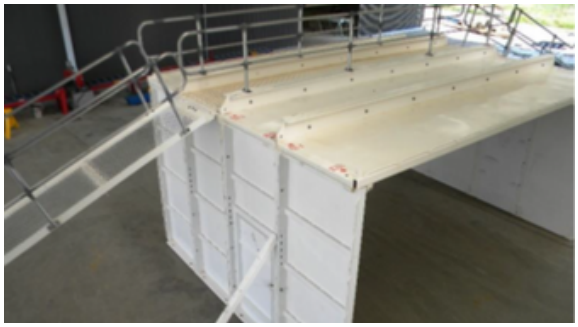
Modern ventilation solutions also include fabricated devices such as air doors, man-doors, regulators, and auxiliary fan housings. These components are designed to:

- Provide controlled personnel and equipment access.
- Allow precise regulation of airflow.
- Ensure safety through fire-resistant materials and standardized testing.

OVERCAST SYSTEMS

The Minova overcast system is a tried and tested method for separating air paths. These are available in various sizes to suit different mining requirements:

- 14kPa and 35kPa rated overcast
- splayed and canche style overcast
- Various ramp and stair configurations



MACHINE DOORS &REGULATORS

Each machine door has an air relief slider that can be configured for manual and pneumatic operation. These regulators are available in either steel or roll-up configurations.

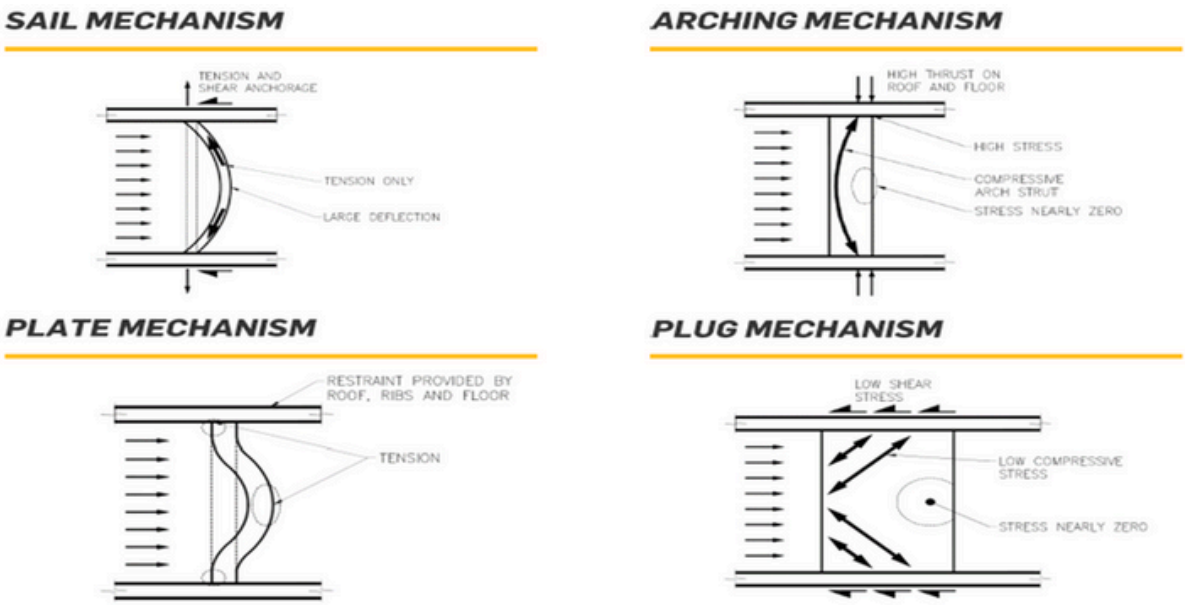
EXCELLENCE IN VENTILATION

For almost more than three decades Minova has promoted excellence in the design and construction of ventilation devices in underground coal mines . Our extensive live testing programs at NIOSH lake lynn, USA and Testsafe Londonderry ,NSW allows us to design efficient VCD's which are backed through complete testing programs. We believe that our industry is based served through sharing of knowledge with many years of conference papers and Industry presentations. We are preferred partners for Installation of VCD's in Underground Coal Mines.

Design Principles for Ventilation Solutions

Our rigorous design principles allow for a wide range of VCD's to be constructed to any situation in underground. We review mine requirement and suggest best path forward based on our extensive product suite and Industry understanding.

When designing VCD's , four different structural behaviors can be used to resist forces from gas or liquid pressures depending upon the chosen construction material . We have analyzed these and calibrated our designs based on our live testing programs.



CONCLUSION

Coal mining ventilation remains a highly technical field that integrates structural design, airflow modeling, and safety engineering. Solutions such as stoppings, seals, bulkheads, and fabricated devices form critical components of this system. By applying robust design principles and selecting appropriate materials, mines can ensure safe, efficient, and adaptable ventilation networks.

The continuous evolution of ventilation control technologies reflects the industry's commitment to improving mine safety and operational efficiency.

Benefit of introducing belt monitoring system in conveyor belt operation

Shekhar Kumar Dey
Sr Vice President
Forech India Pvt. Ltd.

The belt monitoring system plays a significant role in preventive maintenance of the conveyor belt, instead of waiting for a breakdown. This system continuously checks the belt's health and provides early warnings to help avoid unplanned downtime and costly damage.

The following points play an important role in preventive maintenance through system:

Early Detection of Issues

- Monitors belt wear, cuts, tears, and surface damage.
- Identifies small defects before they turn into major failures.

Belt Alignment & Tracking

- Detects belt misalignment (off-tracking), which can cause spillage, edge damage, and pulley wear.
- Alerts operators to correct tracking before belt failure.

Splice & Joint Health

- Continuously inspects splice/joint conditions.
- Ensures weak joints are repaired before they snap and stop operations.

Load & Slippage Monitoring

- Monitors belt speed and slippage at drive pulleys.
- Prevents overheating and excessive wear of both the belt and the motor.

Predictive Maintenance Data

- Provides real-time condition data and trends.
- Helps plan scheduled maintenance rather than emergency repairs.

Safety Enhancement

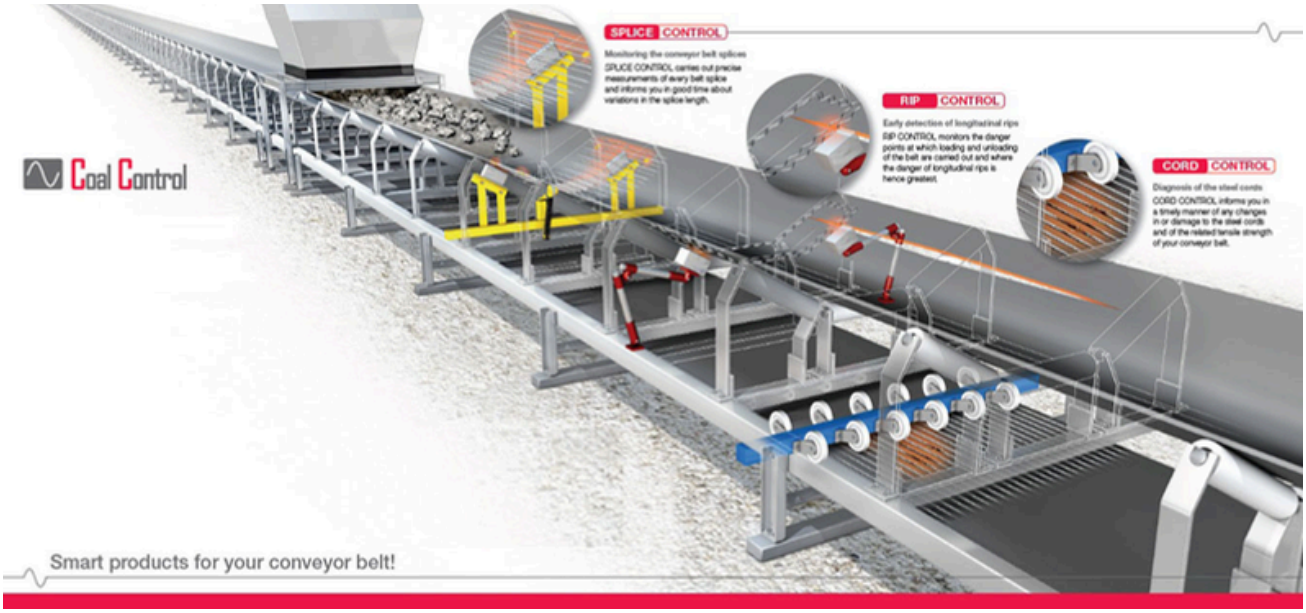
- Prevents accidents due to belt snapping, fire hazards, or material spillage.
- Protects workers and reduces workplace risks.

Cost & Downtime Reduction

- Minimizes unscheduled stoppages.
- Increases belt life and reduces overall maintenance cost.

Conclusion:

A belt monitoring system acts like a “health check-up tool” for conveyor belts. It gives continuous feedback, warns about upcoming failures, and ensures maintenance is done at the right time, not after a breakdown.



India's Mining Industry: Growth with Responsibility

Avantika Pasari
Director
Vishwa group of companies

India's coal and mining industry is entering a new era, powered by rising energy demands and bold government initiatives like "Make in India" and "Atmanirbhar Bharat." Beyond fuelling energy security, the sector promises jobs, infrastructure, long-term economic growth, boost in domestic production and reduced reliance on imports.

As Ratan Tata aptly noted, "All of us do not have equal talent, but all of us should have an equal opportunity to develop our talent." Responsible mining development can unlock these opportunities for India's communities.

This growth will help India become more self-sufficient in reaching its energy demands.

Balancing Growth and Sustainability

While opportunities abound, concerns remain. Environmental concerns, safety issues, and the push for sustainability are pressing. Mining must balance progress with responsibility, ensuring development does not come at the cost of ecosystems and communities.

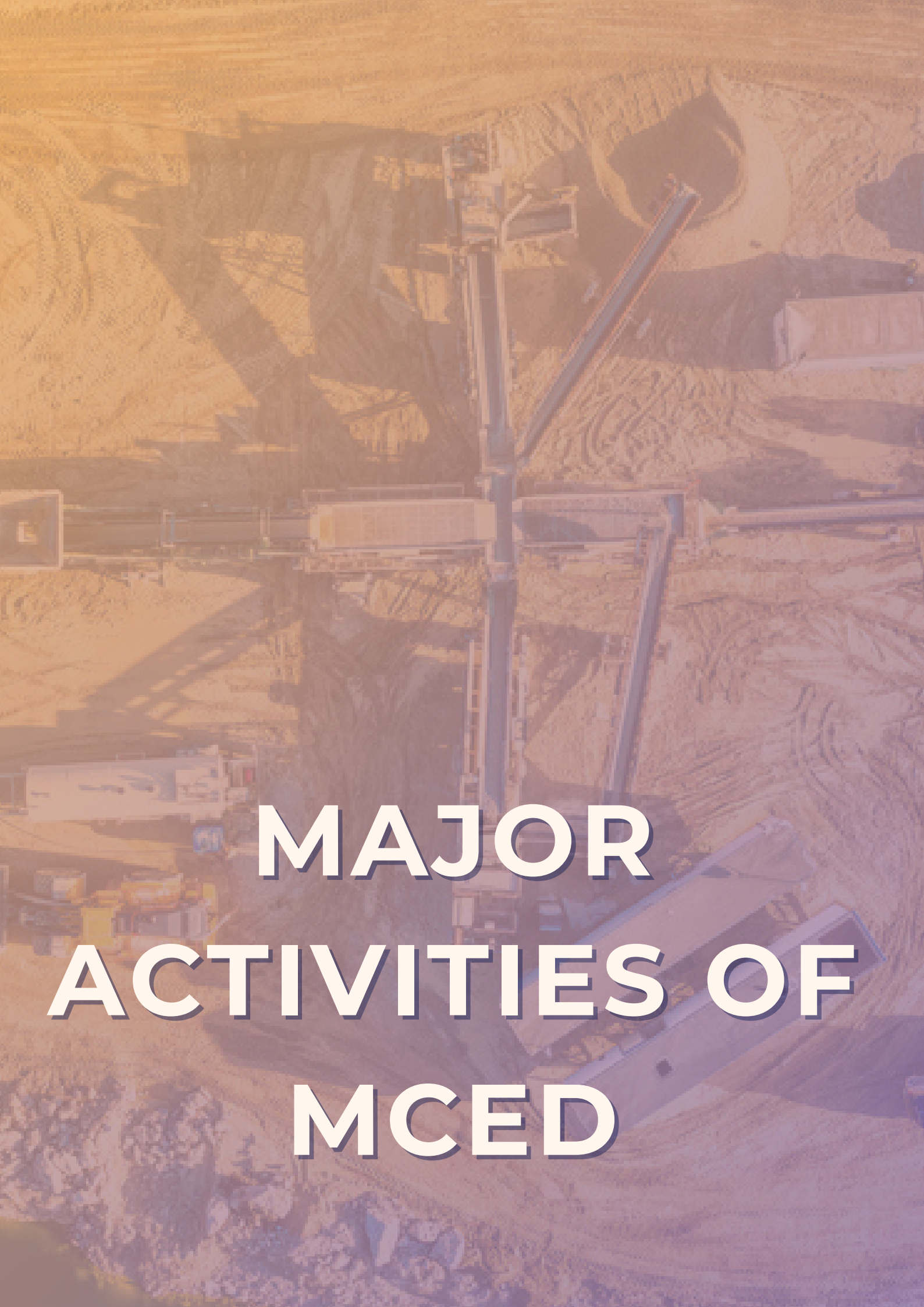
Technology-Driven Transformation

The sector's future will be defined by its ability to leverage emerging technologies and address safety concerns. Battery-electric vehicles, AI-powered geo-technical monitoring, ventilation-on-demand, and real-time telemetry are redefining mining operations. Equally critical are Environmental Monitoring Systems that track air quality, emissions, and water discharge in real time. These systems and tools will help companies meet regulatory standards, protect miners' health, build trust with surrounding communities, promise a safer and more productive faced with smaller footprints.

As Dhirubhai Ambani once said, "Think big, think fast, think ahead. Ideas are no one's monopoly." By adopting such innovations early, India can spearhead the global mining transformation. Propelling itself to even greater heights.

A Defining Role Ahead

Policy support and localized equipment manufacturing will be vital as deeper, higher-value seams are tapped. The choices India makes today will shape not only its energy security but its overall economic trajectory.



MAJOR ACTIVITIES OF MCED

CII MCED BUSINESS DELEGATION TO AUSTRALIA

The CII Mining and Construction Equipment Division (MCED) delegation, led by Mr. Vivek Bhatia, Chairman, CII MCED and Managing Director, TKIL Industries Pvt. Ltd., visited Australia from 14–19 October 2025, covering Perth and Melbourne. The mission aimed to explore collaboration opportunities in mining technology, equipment manufacturing, and critical minerals promoting partnerships between Indian and Australian mining industry stakeholders.

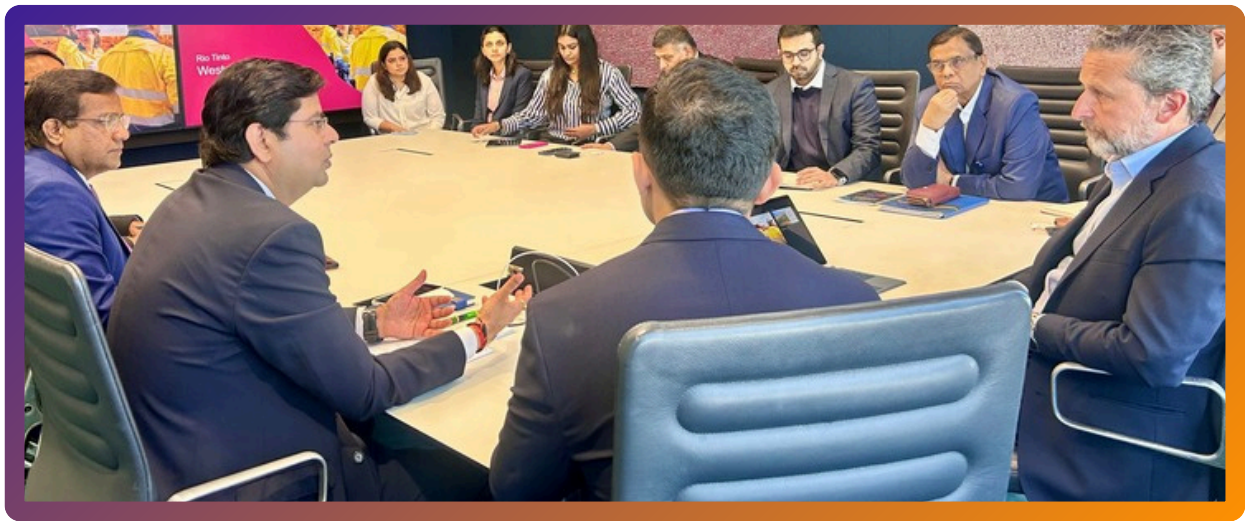
During the visit, the delegation engaged with leading companies including Hofmann Engineering, Legacy Iron Ore Ltd., and Rio Tinto, gaining valuable insights into Australia's advanced mining ecosystem and operational excellence. The team also held productive interactions with the Chamber of Commerce and Industry of Western Australia (CCIWA) and met with the Consul General of India in both Perth and Melbourne. These meetings provided a strong platform to discuss opportunities for joint ventures, technology transfers, R&D collaboration, and supply chain partnerships that can support India's growing demand for sustainable mining solutions.

The visit reaffirmed CII's role in promoting cross-border cooperation and advancing the Indian mining and construction equipment industry's global footprint. Discussions centred on key themes such as automation in mining, decarbonisation technologies, equipment localisation, and skill development initiatives.

As a part of the follow-up actions, CII will facilitate the exchange of delegates' capability statements, prepare a comprehensive post-visit report, and explore the possibility of organising a reverse delegation or virtual B2B session in 2026 to deepen engagement.

The CII MCED delegation to Australia successfully enhanced India's visibility in the international mining landscape and positioned the Indian industry as a credible partner in mining and construction equipment collaboration.


Consulate General of India
Melbourne




HOFMANN
Engineering

CII MINING & CONSTRUCTION EQUIPMENT DIVISION VISITS VOLVO CE FACTORY IN BANGALORE

Members of the CII Mining and Construction Equipment Division visited the state-of-the-art Volvo Construction Equipment (CE) facility at Peenya, Bangalore. The delegation was warmly welcomed by Mr Dimitrov Krishnan, Managing Director, Volvo CE, and his team.

The visit offered members a unique opportunity to gain first-hand insights into Volvo's advanced manufacturing processes and cutting-edge innovations in the sector. Highlights of the visit included live demonstrations of Volvo's latest equipment, showcasing the company's strong focus on sustainable practices and technologically advanced solutions for the construction and infrastructure industries.

The engaging discussions with the Volvo CE leadership team also opened avenues for potential collaborations, reinforcing Volvo's position as a frontrunner in driving innovation and excellence in the construction equipment industry.

CII MCED DELEGATION MEETS CMD, COAL INDIA LIMITED

Members of the CII Mining & Construction Equipment Division (MCED) had an engaging interaction with Shri P. M. Prasad, Chairman & Managing Director, Coal India Limited, at Coal Bhawan, Kolkata.

The delegation was led by Mr. Vivek Bhatia, Chairman, CII MCED and MD & CEO, TKIL Industries Pvt. Ltd.

The discussions revolved around strengthening collaboration between industry stakeholders, advancing the adoption of modern technologies, and promoting sustainable practices. The meeting underscored the shared commitment of CII MCED and Coal India Limited towards building a stronger, more efficient, and environmentally responsible mining sector in India.

Notes

Confederation of Indian Industry

The Confederation of Indian Industry (CII) works to create and sustain an environment conducive to the development of India, partnering Industry, Government and civil society through advisory and consultative processes.

CII is a non-government, not-for-profit, industry-led and industry-managed organisation, with around 9,700 members from the private as well as public sectors, including SMEs and MNCs, and an indirect membership of over 365,000 enterprises from 318 national and regional sectoral industry bodies.

For more 130 years, CII has been engaged in shaping India's development journey and works proactively on transforming Indian Industry's engagement in national development. CII charts change by working closely with the Government on policy issues, interfacing with thought leaders, and enhancing efficiency, competitiveness, and business opportunities for industry through a range of specialised services and strategic global linkages. It also provides a platform for consensus-building and networking on key issues.

Through its dedicated Centres of Excellence and Industry competitiveness initiatives, promotion of innovation and technology adoption, and partnerships for sustainability, CII plays a transformative part in shaping the future of the nation. Extending its agenda beyond business, CII assists industry to identify and execute corporate citizenship programmes across diverse domains, including affirmative action, livelihoods, diversity management, skill development, empowerment of women, and sustainable development, to name a few.

For 2025-26, CII has identified "Accelerating Competitiveness: Globalisation, Inclusivity, Sustainability, Trust" as its theme, prioritising five key pillars. During the year, CII will align its initiatives to drive strategic action aimed at enhancing India's competitiveness by promoting global engagement, inclusive growth, sustainable practices, and a foundation of trust.

With 70 offices, including 12 Centres of Excellence, in India, and 9 overseas offices in Australia, Egypt, Germany, Indonesia, Singapore, UAE, UK, and USA, as well as institutional partnerships with about 250 counterpart organisations in almost 100 countries, CII serves as a reference point for Indian industry and the international business community.

Confederation of Indian Industry

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