



Press Release

BEML Unveils India's Largest Indigenously Developed Rope Shovel, Marking a New Era in Sustainable Mining

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In a major leap for India's mining sector and a powerful stride towards the Government's *Aatmanirbhar Bharat* mission, BEML Ltd has launched the country's biggest indigenously designed and developed electric rope shovel — BRS21. The monumental mining equipment was formally handed over, in the esteemed presence of Shri P. M. Prasad, Chairman and Managing Director of Coal India Ltd, by Shri Shantanu Roy, Chairman and Managing Director of BEML, to Shri B. Sairam, Chairman and Managing Director of Northern Coalfields Ltd (NCL), at Nigahi Mines, Singrauli. The occasion was graced by Functional Directors and senior officials from BEML, CIL, and NCL.

The BRS21 Rope Shovel is a technological marvel, wholly designed, engineered, and manufactured in India. This electric giant marks a historic shift in large-scale surface mining by offering an eco-friendly, zero-emission solution to overburden removal operations in opencast mines. Weighing an impressive 720 tons and equipped with a 21 Cubic meters bottom dump bucket, the BRS21 stands as one of the most capable and advanced machines in its class.

Shri Shantanu Roy, CMD of BEML, remarked:

“This moment marks a proud milestone for the nation as we advance the Prime Minister's vision of *Aatmanirbhar Bharat*. The successful development of this colossal mining equipment by BEML in just 24 months speaks volumes of our engineering strength and collective resolve. It's not just a triumph for BEML but a defining moment for India's coal sector, ushering in a new era of sustainable and self-reliant mining solutions. I am deeply grateful to Coal India and NCL for their unwavering confidence in us and for enabling us to deliver this breakthrough for the country.”

Shri P.M. Prasad, CMD, CIL, also expressed his appreciation, stating:

“The launch of the BRS21 is a moment of immense pride for India's mining sector and a significant step towards environmentally sustainable mining practices. With this remarkable achievement, we are opening a new chapter in green mining. For years, we have witnessed massive mining equipment being built overseas — today, thanks to BEML's unwavering commitment and excellence, India stands tall with its own indigenously designed and manufactured rope shovel. We extend our heartfelt appreciation to BEML for making this vision a reality.”

The BRS21 is a high-capacity, electric rope shovel purpose-built for large-scale overburden removal in open cast mining operations. With an operating weight of 720 tonnes and a 21 cubic metre bottom dump bucket, it ranks among the most capable shovels globally. It is driven by a

Siemens IGBT-based AC Drive System and incorporates numerous advanced features for enhanced performance, safety, and sustainability.

Key Highlights:

- **Zero Emission Operation:** Fully electric drive eliminates exhaust emissions, aligning with global sustainability goals.
- **Approximately 189 tons CO₂ saved per year per machine for BRS21 Rope shovel.**
- **High Durability:** Rugged construction, real-time monitoring, and predictive diagnostics ensure prolonged uptime in extreme mining conditions.
- **Advanced Control Systems:** Includes 360-degree vision, fatigue monitoring, predictive maintenance sensors, and a centralized lubrication system.
- **Operator Comfort:** Spacious and ergonomically designed cabin with dust-free machinery compartments and high-intensity LED lighting for night operations.

This milestone reflects BEML's deep-rooted engineering capabilities across mechanical, electrical, and control system domains. The BRS21 is not only a technological marvel but also a strategic asset that significantly reduces India's reliance on foreign OEMs for critical mining infrastructure.

About BEML

BEML Limited, a leading multi-technology 'Schedule A' company under the Ministry of Defence, plays a pivotal role in serving India's core sectors, including Defence, Rail, Power, Mining, and Construction, by offering world-class products. BEML operates in three verticals: Defence & Aerospace, Mining & Construction, and Rail & Metro. It has state-of-the-art manufacturing facilities located in Bengaluru, Kolar Gold Fields (KGF), Mysore, and Palakkad, with a strong R&D infrastructure and a nationwide sales and service network. With a legacy spanning six decades, BEML is a committed player in manufacturing earthmoving, transportation, and construction equipment, driving excellence and innovation.



Defence & Aerospace | Rail & Metro | Mining & Construction

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Event Pics : Below







