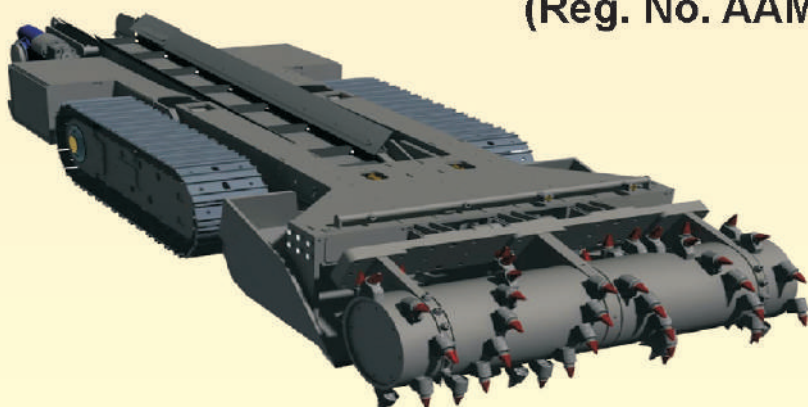


ASSORTED MINING SOLUTIONS LLP

(Mining Beyond Limits, Innovating for Tomorrow)

(Reg. No. AAM-3548)



- ▶ Underground Mining
- ▶ Opencast Mining
- ▶ Digital Mining
- ▶ Drifting & Tunneling
- ▶ Mining Equipment Supply

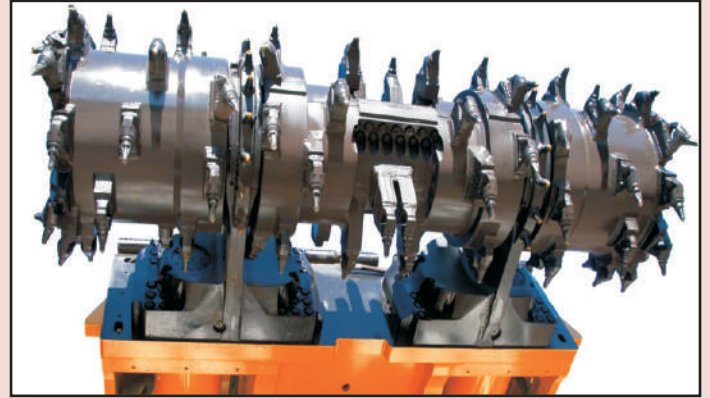
INTRODUCTION TO AMS

Assorted Mining Solutions LLP (AMS) is an experienced mining consultancy providing end-to-end solutions—from concept development to execution and operational support in mining projects. AMS is a Limited Liability Partnership registered under MSME and is an ISO 9001:2017 certified startup. The firm is backed by a team of highly experienced mining engineers from leading organizations such as Coal India Limited (CIL), CIMFR, DVC, NTPC, IIT (ISM) Dhanbad, and IIT Kharagpur. Under expert guidance, AMS specializes in underground mass production technologies, mine planning, and efficient execution strategies. The company is committed to delivering innovative, safe, and sustainable mining solutions tailored to client needs.

With a strong commitment to safety, innovation, and operational excellence, AMS actively contributes to

meeting India's growing demand for efficient, technology-driven mining solutions.

The organization is backed by a team of highly experienced Mining Engineers, Electrical and Mechanical Engineers, Geologists, Operators, and Technical Professionals, each possessing 5-20 years of expertise in coal and metal mining sectors.



STRATEGIC COLLABORATION

AMS has associated with HELWB, a Brazilian manufacturer of Continuous Miners and other underground mining equipment for sales, service, operational support across India.

Through this strategic collaboration, AMS offers:

- **Continuous Miner (HELWB Make)**
- **Road Headers**
- **Bolter Miner**
- **Quad Bolter/ Twin Bolter**
- **Shuttle Cars**
- **Feeder Breaker**
- **Load Centre**
- **LHD /SDL/MUV**
- **Mine Safety Equipment's & Various Strata Monitoring Instruments**

This partnership strengthens India's mechanized underground mining capability with globally proven technology.

AMS OFFER MINING OPERATIONS & SERVICES

- Continuous Miner Operations (LHCM & SHCM)
- Drifting & Tunneling (Manual & Mechanized)
- LHD/SDL Operations with Drilling & Blasting
- Opencast Mining, Transportation Service
- Exploration Drilling, Reinforcement, Greenfield Mining, EC/FC, Project Planning, DPR Preparation, Survey & Scientific Study.
- Strata Monitoring & Slope Stability Study in Mines

Digital Mining & Engineering Solutions by using of AI/ML numerical modelling

- Predictive maintenance & production optimization
- Pillar/panel design & geo-technical analysis (UG mines)
- Gas forecasting, roof fall & subsidence prediction
- Slope Stability Analysis
- Ore grade modelling & resource evaluation
- Smart Mining (IoT, fleet management, real-time dashboards)
- Digital Twin (3D simulation & production forecasting)
- Numerical modelling by ANSYS, FLAC3D etc.
- Technical & financial feasibility (CAPEX/OPEX, risk, compliance)
- Scientific mine planning & excavation sequencing & other allied mining activity.

AMS integrates field instrumentation, digital data, and simulation tools to deliver a complete digital mining ecosystem.



BOLTER MINER

HELWB make Bolter Miner enables simultaneous cutting and roof bolting, improving roadway development rates while minimizing unsupported roof exposure.

Bolter Miner combines the functions of a Continuous Miner and Roof Bolter in a single unit. It cuts coal from the face and simultaneously installs roof bolts for immediate roof support, improving safety and operational efficiency.

ADVANTAGES OF HELWB BOLTER MINER :

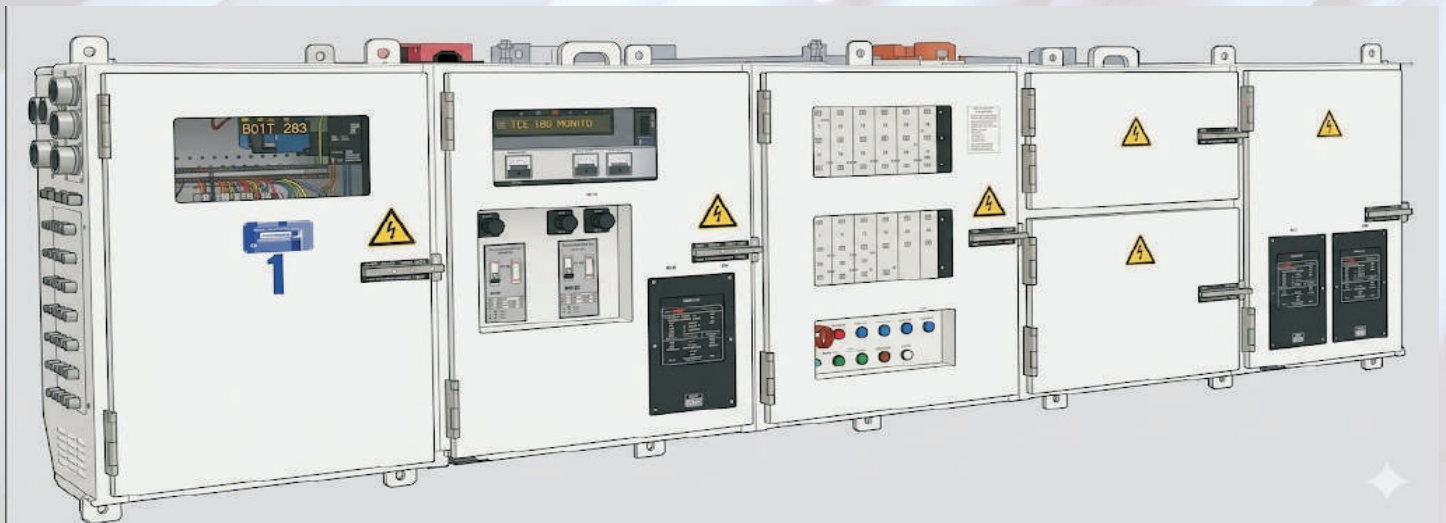
- Simultaneous Cutting and Roof Support
- Roof bolts are installed immediately after cutting, improving safety.
- Higher Level Safety with Proximity Sensor.
- Workers are better protected because the roof is supported during mining.
- Higher Productivity
- Compact and Robust design machine with



advance methane sensor fitted.

- Reduces downtime between coal cutting and roof bolting.
- Better Ground Control
- Improves stability in weak roof conditions.
- Less maintenance is required
- Seams with weak or moderately weak roof strata
- Mines requiring high safety standards
- Seam thickness generally between 1.8 m to 4.5m

LOAD CENTRE



Our Load Centre is an robust underground electrical distribution unit, used in mines to receive high-voltage power and distribute it safely to various mining equipment such as Continuous Miner, Shuttle Car, Feeder Breaker, and Quad Bolter/Twin Bolter.

It usually consists of a step-down transformer, switchgear, protection devices, and control panels housed in a flameproof enclosure for safety in gassy mines.

ADVANTAGES

Power Distribution

Supplies electrical power to underground mining machines.

Voltage Transformation

Converts high voltage (e.g., 3 kV or 6.6 kV) to lower voltage suitable for equipment.

Protection System

Includes circuit breakers, relays, and protection systems to prevent overload, short circuit, and earth faults.

Control of Equipment

Provides switching and control for multiple underground machines.

- Safe power supply in gassy underground mines
- Centralized electrical control and protection
- Reliable power distribution to mining equipment
- Reduces electrical hazards and equipment damage

TWIN / QUAD BOLTER

HELWB make Quad bolter/Twin Bolter is an advanced underground support system designed for efficient and safe roof and side bolting, offering high productivity, improved strata control, and reliable performance in mechanized mine development.

Key Features:

- Operating Seam height: 1.0 m - 5.0 m
- 420 Nm drilling torque
- 15-20 bolts/hour
- Advance Temporary Roof Support (ATRS)
- Methane Sensor
- Canopy Fitted Driver Cabin



TECHNICAL SPECIFICATIONS	L-TBRB TRS PLUS	TBRB TRS PLUS
Operation mining Height recommended*	1.0m - 2.0 m	1.4m - 3.0 m
Machine Height	900mm	1300mm
TRS (Temporary Roof Support System)	Optional	YES
Driver Safety Canopy system	Optional	Optional
Driller Safety Canopies system	YES	YES
Machine Length (minimum)	8350mm	8650mm
Chassis overall Width	2620mm	2620mm
Maximum boom separation	5000mm	5000mm
Minimum boom separation	1200mm	1200mm
Steering articulation	65°	65°
Drive System four wheel hydraulic motors	YES	YES
Tram speed	0-2.4 km/h	0-2.4 km/h
Automatic Brake (hydraulic release)	YES	YES
Drilling System Independent Twin booms	YES	YES
Drilling mast feed height	400mm - 1350mm	600mm - 1650mm
Drilling maximum torque	420 Nm	420 Nm
Drill rotation	0-700rpm	0-700rpm
Drilling nature option	Wet / Dry	Wet / Dry
Bolting rate (Bolts per hour)	15 - 20	15 - 20
Machine Power (depends option)	75 / 100 HP	75 / 100 HP
Supply Voltage	525v / 660v	525v / 660v
Electrical Frequency AC	50Hz / 60Hz	50Hz / 60Hz

SHUTTLE CAR

This is a HELWB make shuttle car with 15te or 20 te capacity, electrically operated, featuring high payload capacity, flameproof configuration, heavy-duty conveyor chain, and articulated steering. HELWB Shuttle Car has in-built proximity sensor for detecting human interference in the closed proximity to increase higher level safety.



TECHNICAL SPECIFICATIONS	SCH15	SCH20
Payload máx. capacity	15 Tonnes	20 Tonnes
Machine length	8650mm	9620mm
Machine width	2600mm	3600mm
Machine height (without canopy and side boards)	1500mm	1700mm
Working seam height (minimum)	2600mm	3000mm
Gauge of wheels	2115mm	2450mm
Dual chain conveyor	YES	YES
Ground clearance	420mm	420mm
Tire size	14.00 x R20	14.00 x R24
Máx Speed (empty vehicle)	0-9 km/h	0-9 km/h
Maximum grade	8°	8°
Minimum Approach angle Front / Rear	10° / 12°	10° / 12°
Turning Radius Inside / Outside	2700 / 6700mm	3100 / 7600mm
Wheel Unit	Bevel and Planetary	Bevel and Planetary
Traction Case	Spur Gears	Herringbone Gears
Proximity Detection System	Optional	Optional
Traction Drive System	VFD	VFD
Front gantry axle	Swinging	Independent suspension
Rear gantry axle	Rigid	Independent suspension
Conveyor Speed	0 - 0.6m/s	0 - 0.6m/s
Supply Voltage	660v / 1140v	660v / 1140v
Electrical Frequency (Alternating current)	50Hz / 60Hz	50Hz / 60Hz
Cable reel capacity (depending on cable type)	150m - 200m	170m - 220m

ELECTRICAL SYSTEM

High Power DC or AC drives. Utilizing the best technology with the expert dedicated capabilities, the electrical systems meet and exceed customer requirements. We use best product lines and our equipment uses the electrical systems with concept design for Hazardous conditions and provide best quality machinery for safe and high capacity production for underground mining.



FEEDER BREAKER

Our HELWB Feeder Breaker is a robust, high-capacity underground mining system designed to ensure smooth and efficient coal handling in mechanized mining operations. Engineered to seamlessly integrate with Continuous Miner and shuttle car systems, it performs the dual function of receiving coal, breaking oversized lumps, and feeding it a uniform size onto the belt conveyor for uninterrupted transportation to the surface.

Built for demanding underground conditions, the machine combines a heavy-duty receiving hopper, high-efficiency breaker drum, and reliable conveyor system to deliver consistent performance and long service life.

KEY FEATURES & CAPABILITIES

Integrated Feeding & Crushing System: Efficiently receives coal from shuttle cars and breaks oversized lumps to conveyor-friendly sizes.

High Throughput Capacity: Designed to handle large volumes of coal from multiple shuttle cars without bottlenecks.

Robust Construction: Heavy-duty design ensures durability and reliable performance in harsh underground environments.

Smooth Material Flow: Maintains continuous and controlled coal feeding to the belt conveyor system.

Advanced Drive System: Equipped with high-performance motors and gearboxes for efficient operation.

WHY CHOOSE HELWB MAKE FEEDER BREAKER

Enhanced Conveyor Protection: Reduces coal



size before discharge, preventing belt damage and increasing conveyor life.

Improved Operational Efficiency: Ensures uninterrupted coal flow, supporting high-production Continuous Miner operations.

Optimized System Integration: Perfectly compatible with CM and shuttle car systems for seamless mining cycles.

Reduced Downtime: Reliable design minimizes breakdowns and maintenance interruptions.

High Productivity Performance: Capable of handling large volumes, making it ideal for high-output mining panels.

ROAD HEADER



Our Roadheader is a mechanized excavation system designed for efficient hard rock cutting, offering precise profile control and significantly reducing the need for drilling and blasting.

The machine size can be adjusted as per customer requirement with or without bolting arrangement.

Benefits We Deliver

QUALITY

"Our customers' dependence on our autonomous planning, operations, and R&D ensures alignment with the most current quality benchmarks in services and operation. The dissemination of quality certification and verification across our state-of-the-art global facilities solidifies our commitment to excellence."

TRUST

Leveraging our esteemed reputation steeped in independence and integrity, we cultivate trust in every essential interaction. We offer transparent, impartial operation and safety, we empower our customers to confidently vouch for the quality and reliability of our products, processes, systems, safety and services.

EFFICIENCY

Our customized business solutions streamline the implementation of processes and systems, amplifying operational speed, simplicity, and efficiency for our customers' enterprises.

REDUCE RISK

We provide our customers with independent and impartial services that enable them to identify, manage and reduce risk. Our experts deliver risk management solutions, drawing on our operation, service and monitoring capabilities, to verify that risk prevention measures are in place. We assist with the compliance of CMR 2017, Mine Act, risk management standards across every work.

SUSTAINABILITY

We encourage environmental responsibility and reduce the risk of accident in our customers' projects. Our services assist in developing sustainable facilities and production, as well as better working and social environments.

SAFETY

We help organizations develop effective health and safety systems to protect employees, generate consumer confidence and enhance trust in business operations. We support our customers in adhering to best practices and complying with local and national regulations.

“ To transform India's mining industry through mechanization, digital innovation, scientific planning, and sustainable practices. ”

For More Details Please Contact us :

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