

15 TON MINING LOADER - Official Technical Overview & Datasheet

EXECUTIVE SUMMARY

Engineered for the rigorous demands of underground hard rock mining and large-scale surface operations, the 15 TON MINING LOADER establishes a new benchmark in productivity and cost-efficiency. This machine is strategically positioned for mining contractors, large-scale quarry operators, and aggregate producers who require a robust, high-capacity loader capable of moving 15 metric tons per cycle. With a focus on maximizing payload and minimizing cycle times, this equipment is the ideal solution for high-production load-and-carry applications and precise truck loading.

Redesigned with a focus on value, power, and performance, this next-generation loader hauls 20% more material per pass than its predecessors while maintaining a compact footprint for tight underground tunnels. The 15 TON MINING LOADER integrates cutting-edge technologies, including fully autonomous ready capabilities, without compromising on safety or operator comfort. It is the definitive choice for operations aiming to lower their cost per ton and enhance overall fleet efficiency through advanced powertrain management and intelligent hydraulic systems.



STRUCTURAL INTEGRITY & POWERTRAIN

Constructed from high-tensile, wear-resistant steel, the 15 TON MINING LOADER features a heavily reinforced chassis and a purpose-built articulated frame designed to withstand extreme torsional stress and impact loads. The robust rear frame and optimized front frame geometry ensure exceptional durability and a long service life in the harshest environments .

At the heart of the loader is a heavy-duty diesel engine, available in configurations compliant with Tier 3, Stage V, and ventilation reduction emission standards, allowing customization to meet specific mine ventilation requirements . The 6-cylinder, turbocharged, air-to-air after-cooled engine delivers a robust 257 kW (345 hp) in Stage V configuration, providing the high torque necessary for aggressive penetration into the muck pile . The powertrain

is matched with a highly efficient, load-sensing hydraulic system featuring variable displacement piston pumps. This design delivers precise power and flow on demand, enabling increased tractive effort during loading and significantly reducing fuel consumption and heat generation .

KEY FEATURES & OPERATOR COMFORT

- Unmatched Payload & Kinematics: The loader boasts a true 15,000 kg nominal payload capacity . A completely redesigned boom, front frame, and bucket shape optimize bucket filling, increase breakout forces, and reduce spillage during tramming. The 20% increase in capacity, combined with a 65% increase in lifting force, ensures faster truck loading and higher productivity .
- Next-Generation Cab & Ergonomics: The ROPS/FOPS-certified cab is engineered for maximum operator safety and comfort . Featuring a sealed and pressurized environment, three-layer laminated safety glass, and exceptional visibility over a flat rear frame, the cab reduces operator fatigue. Enhanced ergonomics include increased legroom, a multi-adjustable suspension seat, and padded armrests, allowing for extended shifts with reduced strain .
- Intelligent Control & Automation: Equipped with a state-of-the-art 12" touchscreen color display, the machine provides operators with real-time performance data, advanced diagnostics, and alarm logs . The loader is factory-ready for autonomous and tele-remote operations, including features like optional Autodig for consistent bucket filling and the Sandvik Intelligent

Control System for easy troubleshooting and connectivity .

- Advanced Hydraulic & Damping Systems: The load-sensing hydraulic system provides precise proportional control over steering and boom movements. An integrated ride control system automatically dampens boom and bucket bounce at speeds above 5 km/h, electronically snubbing the lift cylinders to protect them and providing a smoother ride, reducing material spillage .
- Serviceability & Uptime: Designed with a "ground-level" maintenance philosophy, all daily service points, filters, and centralized greasing points are easily accessible . Modular component designs allow for quick component changes, and a centralized cold-side service area groups engine oil, fuel, and air filters to minimize downtime .

COMPLIANCE & SAFETY STANDARDS

The 15 TON MINING LOADER is manufactured to the highest international safety and quality standards. The cab meets stringent ROPS (Rollover Protective Structure) and FOPS (Falling Object Protective Structure) certifications to ensure operator protection in the event of rollovers or falling debris . The machine is fully compliant with relevant ISO 9001 quality management standards.

Engine variants are available to meet European Union Stage V emissions standards, U.S. EPA Tier 4 Final, and Tier 3 equivalent regulations . Safety is

further enhanced by features like an electrohydraulic braking system with a magnetic interlock switch on the door, an integrated Eclipse™ fire suppression system, and optional traction control to reduce tire slip and wheel spin during pile penetration .

TECHNICAL SPECIFICATIONS

The following table outlines the standard performance data and physical parameters of the 15 TON MINING LOADER. All figures are based on standard configuration and may vary depending on specific attachments and options selected.

Parameter	Specification
Nominal Payload	15,000 kg
Engine Model	Cat C13 / Volvo Penta (Option)
Engine Power (Stage V)	257 kW (345 hp) @ 2050

rpm	
Engine Power (Tier 3)	269 kW (361 hp) @ 1800 rpm
Operating Weight	~40,000 - 43,000 kg (Dependent on Options)
Bucket Capacity	5.7 - 8.6 m ³
Static Tipping Load (Straight)	37,747 kg
Static Tipping Load (Full Turn)	31,586 kg
Breakout Force (Lift & Tilt)	24,190 kg
Hydraulic Cycle Time (Total)	13.2 seconds
Maximum Travel Speed	28.8 km/h
Fuel Tank Capacity	486 L
Turning Angle (Articulation)	44°