

1m³ Bucket Digger - Official Technical Overview & Datasheet

EXECUTIVE SUMMARY

Engineered for the rigorous demands of modern construction, mining, and large-scale agricultural projects, the 1m³ Bucket Digger represents a pinnacle of heavy machinery design. This equipment is strategically positioned as a versatile workhorse, offering an optimal balance of power, efficiency, and durability for a wide range of earthmoving applications. Its primary value proposition lies in its ability to deliver high productivity with low operating costs, making it an indispensable asset for contractors and site operators seeking to maximize their return on investment.

Built upon a legacy of robust engineering, this machine seamlessly integrates a high-performance powertrain with a sophisticated hydraulic system. The result is a digger that not only meets but exceeds the expectations for reliability and performance in the most challenging environments. From foundational excavation to material handling, the 1m³ Bucket Digger is the definitive solution for professionals who demand uncompromising quality and efficiency from their equipment.



STRUCTURAL INTEGRITY & POWERTRAIN

The 1m³ Bucket Digger is constructed using high-grade, high-tensile steel, ensuring exceptional chassis strength and longevity to withstand the harshest working conditions. This robust construction provides a durable platform that guarantees structural integrity over thousands of operational hours, minimizing downtime and maintenance costs. The machine's undercarriage and main frame are designed to absorb impact and torsional stress, providing a stable base for all digging and lifting operations.

At the heart of the machine lies a state-of-the-art, high-efficiency engine, renowned for its reliability and fuel economy . This engine delivers the necessary power and torque to handle heavy loads while complying with stringent emission regulations, providing an eco-friendly solution without

compromising performance. The powertrain is paired with an advanced hydraulic system that ensures smooth, responsive, and precise control of all machine functions, maximizing productivity and reducing cycle times.

KEY FEATURES & OPERATOR COMFORT

- **Advanced Load-Sensing Hydraulics:** The digger features a load-sensing hydraulic system that provides precise flow and pressure on demand. This optimizes fuel efficiency by reducing parasitic losses and ensures powerful, smooth operation for all attachments, enhancing both performance and control in complex tasks.

- **ROPS/FOPS Certified Cab:** The operator's cab is designed to the highest safety standards, with ROPS (Roll-Over Protective Structure) and FOPS (Falling Object Protective Structure) certifications. This ensures operator safety in the event of an accident, while the ergonomic layout and climate control features maximize comfort and reduce fatigue during long shifts.

- **Intelligent Control Panel:** A state-of-the-art, user-friendly control panel provides the operator with real-time data on machine performance, fuel consumption, and maintenance alerts. This smart interface allows for efficient monitoring and control, ensuring the machine operates at peak efficiency and simplifying diagnostics.

- **Superior Versatility:** With a 1m³ bucket capacity, this digger is optimized for a variety of attachments, increasing its utility on any job site. The machine's

design facilitates quick and easy attachment changes, enabling operators to switch between tasks with minimal downtime, from excavation to material handling.

- Enhanced Durability: The machine is subjected to rigorous cycle, heat, and vibration testing during the design and manufacturing process . This ensures that every component, from the steel chassis to the hydraulic cylinders, is built to endure the most demanding applications, guaranteeing exceptional reliability and a long service life.

COMPLIANCE & SAFETY STANDARDS

The 1m³ Bucket Digger is manufactured in compliance with the most rigorous international safety and quality standards. It adheres to ISO 9001 quality management protocols, ensuring consistency and reliability in production. The machine also meets CE certification requirements for the European market and is compliant with EPA Tier 4 Final emission standards, reflecting a commitment to environmental stewardship and sustainable operation . This comprehensive compliance provides assurance of the machine's safety, quality, and environmental responsibility.

TECHNICAL SPECIFICATIONS

The following table provides a comprehensive technical overview of the 1m³ Bucket Digger, detailing its key performance metrics and physical characteristics.

Parameter	Specification
Engine Model	Cummins/Isuzu High-Efficiency Diesel
Engine Power	118 - 131 kW (158 - 176 hp)
Operating Weight	18,000 - 23,200 kg
Bucket Capacity	1.0 m ³
Max. Digging Depth	5.4 - 7.2 m
Max. Breakout Force	157 kN
Emission Level	

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