

3 Ton Backhoe Loader - Official Technical Overview & Datasheet

EXECUTIVE SUMMARY

Engineered as a truly versatile multi-tool, the 3-ton Backhoe Loader redefines productivity standards for the compact construction equipment segment. Serving as the ideal solution for construction, agriculture, landscaping, and mining operations, this machine integrates powerful digging, efficient loading, and precise trenching capabilities into a single, highly maneuverable unit. Its compact footprint allows for operation in confined urban spaces and tight job sites where larger, less agile equipment cannot venture, effectively reducing the need for multiple machines and significantly lowering operational costs.

This model is built to deliver exceptional value and robust performance. Combining a high-strength steel chassis with a fuel-efficient, high-torque diesel engine and a state-of-the-art hydraulic system, it ensures reliable, heavy-duty operation even under the most challenging conditions. The dual-function design allows operators to switch seamlessly from loading to excavating with minimal effort, maximizing job site efficiency and project profitability.



STRUCTURAL INTEGRITY & POWERTRAIN

At the core of this backhoe loader is a commitment to durability and structural integrity, featuring a heavy-duty chassis fabricated from high-strength, reinforced steel. This robust construction is designed to absorb the high-impact stresses encountered in excavation and heavy loading, ensuring a long service life and resistance to torsional flexing on uneven terrain. The machine is powered by a high-performance, fuel-efficient diesel engine, such as the renowned Cummins or Isuzu models, designed to deliver reliable power and exceptional torque for tough digging conditions. The engine is engineered to meet stringent emission standards, offering a balance of performance and environmental responsibility.

The advanced hydraulic system is the machine's powerhouse, incorporating a

variable-flow, load-sensing axial piston pump. This closed-center system intelligently matches hydraulic flow and pressure to the specific demands of the task, providing full lifting and digging forces at any engine speed. This design ensures precise control of the loader and backhoe attachments while optimizing fuel consumption by reducing hydraulic inefficiencies, enhancing overall machine productivity. A torque converter and a synchronized transmission ensure smooth and efficient power transfer to the wheels, providing excellent tractive effort and roading speeds.

KEY FEATURES & OPERATOR COMFORT

- Load-Sensing Hydraulic System: Equipped with a variable-flow axial piston pump, the hydraulic system delivers power on demand, ensuring efficient operation and precise control for both the loader and backhoe functions.
- ROPS/FOPS Certified Cab: The operator station is built to the highest safety standards, featuring a Roll-Over Protective Structure (ROPS) and Falling Object Protective Structure (FOPS) certified canopy or cab, ensuring operator safety in hazardous environments.
- Ergonomic Operator Station: Designed for comfort and reduced fatigue, the station includes an adjustable air-suspension seat, intuitive joystick controls, and clear LCD instrument panels, allowing for extended operational periods without compromising productivity.

- Dual-Function Design: This model features a swiveling seat that allows the operator to quickly transition from the loader to the backhoe station, maximizing efficiency by reducing the time to switch tasks.
- High Versatility: The machine is compatible with a wide array of attachments—such as pallet forks, grapples, hammers, and brooms—transforming it into a comprehensive worksite solution.

COMPLIANCE & SAFETY STANDARDS

The 3-ton Backhoe Loader is manufactured in strict adherence to international quality and safety regulations. The machine holds certifications including CE and ISO 9001, confirming its compliance with rigorous European safety, health, and environmental requirements, as well as international quality management standards. The engine platform is designed to meet current emission standards, such as U.S. EPA Tier 4 Final or EU Stage V, where applicable, demonstrating a commitment to sustainable operation. Standard safety features include hydraulic disc brakes, backup alarms, and integrated system fault alarms to ensure secure job site operation.

TECHNICAL SPECIFICATIONS

The following table outlines the key technical parameters for the standard

configuration of the 3-ton Backhoe Loader. These specifications are a benchmark for the machine's operational capabilities and performance metrics.

Parameter	Specification
Engine Model	High-Performance Diesel (e.g., Cummins, Isuzu)
Engine Power	75 - 85 kW (100-114 hp)
Operating Weight	~7,200 kg (15,873 lb)
Overall Dimensions (L x W x H)	7,800 x 2,300 x 3,180 mm (307 x 90.5 x 125 in)
Loader Bucket Capacity	1.0 - 1.3 m ³ (1.3 - 1.7 yd ³)
Backhoe Bucket Capacity	0.3 m ³ (0.39 yd ³)
Max. Digging Depth	

>4,250 mm (14 ft)	
Max. Dumping Height (Loader)	>3,350 mm (11 ft)
Breakout Force (Loader)	38 - 47 kN
Max. Traction Force	39 - 86 kN
Max. Travel Speed	~35 - 40 km/h (22 - 25 mph)
Hydraulic System Type	Load-Sensing, Closed Center
Certifications	CE, ISO 9001