

40 Ton Payloader - Official Technical Overview & Datasheet

EXECUTIVE SUMMARY

The 40 Ton Payloader represents the pinnacle of heavy-duty wheel loader engineering, purpose-built to meet the rigorous demands of large-scale infrastructure, quarry, and surface mining operations. As a cornerstone of modern material handling fleets, this machine bridges the critical gap between standard wheel loaders and ultra-class mining loaders, delivering exceptional productivity for 40-ton payload class requirements. Its design philosophy centers on providing maximum breakout force and load capacity while maintaining the maneuverability and efficiency essential for high-cycle loading applications, particularly in truck loading, stockpile management, and heavy excavation support roles .

Engineered to outperform mid-sized loaders by a significant margin, the 40 Ton Payloader boasts a substantial 40-ton capacity that enables a marked reduction in cycle times and operational costs. It is the definitive solution for operators seeking to maximize efficiency in high-volume earthmoving, from feeding primary crushers in quarries to loading 40-ton off-highway trucks in mining and large-scale construction projects. This machine is built not just to move material, but to do so with an unrivaled combination of power, durability, and total cost of ownership .



STRUCTURAL INTEGRITY & POWERTRAIN

The 40 Ton Payloader is constructed around a robust and durable chassis, utilizing high-strength, specially-designed thickened steel plates in the front and rear frames . This heavy-duty construction is reinforced with enlarged hinge pins and seats, significantly improving the machine's loading capacity and torsional resistance to withstand the extreme stresses of continuous heavy loading and rough terrain operations. The structural integrity is further enhanced by a wide stance, with the machine boasting an overall width of 3520 mm, which provides exceptional lateral stability during loading and travel, minimizing rollover risk .

At the heart of this powerhouse lies a high-grade, turbocharged diesel engine

equipped with an intercooling system, delivering the immense power required for demanding applications with high efficiency and low operational noise . This engine meets stringent emission standards, underscoring the manufacturer's commitment to environmental responsibility. The powertrain is completed by a robust, fixed-shaft electronic control transmission, ensuring seamless shifting and long gear service life for improved machine flexibility and reliability, even in the harshest quarry conditions .

KEY FEATURES & OPERATOR COMFORT

- High-Performance Hydraulic System: The machine features a high-pressure hydraulic system engineered for maximum productivity. The drive hydraulics operate at peak efficiency, while the work hydraulics provide immense breakout force and fast cycle times, enabling rapid material loading. A separate cooling system for the transmission and hydraulic oil improves overall system stability and extends component life .
- Purpose-Built Drive Axle: The drive axle is specifically engineered for the 40-ton payload, incorporating high-strength bearings, gears, and hubs to reliably bear heavy loads. The braking system is equally robust, featuring multiple brake calipers on each axle with materials designed for heavy-duty truck applications, ensuring safe and controlled stopping even when fully loaded .
- Ergonomic Operator Environment: The pressurized, ROPS/FOPS-certified cab

is designed for maximum comfort and control. It comes equipped with professional air conditioning to maintain a comfortable working environment, and a single-handle pilot control system coupled with an electronic control gearshift minimizes operator fatigue and maximizes precision during repetitive loading cycles . A wide-view cab design and double swing arms provide excellent all-around visibility, enhancing safety and productivity .

- Advanced Frame and Steering Design: The machine features an articulated design with a large articulation angle and optimized hinge point, providing exceptional maneuverability in tight loading areas. The frame is engineered with a pendulum steering system for improved traction and stability on uneven ground, ensuring that all four tires maintain contact for optimal power transfer .

COMPLIANCE & SAFETY STANDARDS

Safety and regulatory compliance are paramount in the design of the 40 Ton Payloader. The machine is manufactured in accordance with international quality standards and is CE certified, confirming its compliance with European Union safety, health, and environmental protection legislation . It also meets the rigorous demands of ISO 9001 quality management standards, ensuring consistent quality and reliability in manufacturing. The operator's cab is certified to ROPS (Roll-Over Protective Structure) and FOPS (Falling Object Protective Structure) standards, providing a secure environment for the

operator. The machine is also designed to be compatible with modern emission standards, such as EPA Tier 4 Final and EU Stage V, through the integration of advanced aftertreatment systems .

TECHNICAL SPECIFICATIONS

The following table provides the key technical specifications for the 40 Ton Payloader, demonstrating its class-leading performance and capability.

Parameter	Specification
Nominal Payload Capacity	40.0 tons (36,287 kg)
Engine Model	High-Grade Diesel with Intercooling
Gross Engine Power	~340 HP (251 kW)
Operating Weight	Approx. 46,000 kg

Overall Width	3,520 mm
Overall Height (to Cab)	~2,700 mm
Transmission Type	Electronic Control, Fixed-Shaft Powershift
Certification	CE, ISO 9001, ROPS/FOPS Certified