

2 Ton Mini Excavator - Official Technical Overview & Datasheet

EXECUTIVE SUMMARY

Engineered for the demanding environments of construction, mining, and agriculture, the 2 Ton Mini Excavator represents a pinnacle of compact machinery design. This machine delivers exceptional power-to-weight ratio and superior maneuverability, making it the optimal solution for utility work, landscaping, and confined site excavation where larger machines cannot operate. Its primary value proposition lies in combining heavy-duty performance with the operational economy of a compact footprint, ensuring maximum return on investment for contractors and fleet managers.

Built around a philosophy of durability and serviceability, this excavator integrates a high-strength chassis with a precision-engineered powertrain. The machine is designed to withstand rigorous daily use while providing the operator with a safe, comfortable, and highly responsive working environment. This document serves as the definitive technical overview and inspection guide, outlining the structural integrity, key features, compliance standards, and critical inspection points to ensure the machine's longevity and optimal performance.



STRUCTURAL INTEGRITY & POWERTRAIN

The foundation of the 2 Ton Mini Excavator is a robust chassis constructed from high-grade, stress-relieved steel, engineered to absorb operational shocks and resist torsional flexing. This rigid frame ensures long-term structural integrity and provides a stable platform for all digging and lifting operations. The machine is powered by a globally renowned, Tier 4 Final compliant diesel engine (such as the Kubota D1105) , delivering a net horsepower output between 10-20 HP. This engine is mated to a high-efficiency hydraulic system featuring a gear pump that provides a flow rate of approximately 48.4 L/min, ensuring swift and powerful implement response while maintaining optimal fuel consumption .

KEY FEATURES & OPERATOR COMFORT

- **Load-Sensing Hydraulic System:** Advanced load-sensing hydraulics provide precise, proportional flow to the boom, arm, and bucket, ensuring smooth, powerful, and fuel-efficient operation. This system delivers an optimal hydraulic pressure of up to 21.5 MPa (approximately 3118 psi), maximizing digging forces (Bucket: up to 14.5 kN) for superior breakout performance .
- **ROPS/FOPS Certified Cab:** The operator station is built around a Rollover Protective Structure (ROPS) and Falling Object Protective Structure (FOPS) certified canopy or enclosed cab . This safety-focused design, combined with ergonomically placed pilot controls, minimizes operator fatigue and ensures maximum safety on the jobsite.
- **Swing Boom & Auxiliary Hydraulics:** The machine features a swing boom (with a left/right swing angle of 75/45 degrees), allowing for offset digging parallel to the tracks—ideal for working against walls or foundations . It is pre-plumbed with extra hydraulic hoses for attachments, offering quick connectivity for tools like hydraulic breakers and augers .
- **Retractable Undercarriage:** For enhanced maneuverability in tight spaces, the undercarriage can be retracted to reduce overall width (e.g., from 1300mm to 990mm), allowing the machine to navigate through narrow doorways, stairwells, and confined urban worksites .
- **High-Torque Travel Motors:** Equipped with high-torque, dual-speed travel motors, the excavator provides a maximum travel speed of approximately 3.5 km/h and a gradeability of 35 degrees, offering powerful traction and smooth

control on rough terrain .

COMPLIANCE & SAFETY STANDARDS

The 2 Ton Mini Excavator is manufactured in accordance with rigorous international quality and safety standards to ensure reliability and environmental responsibility. The machine holds CE and EPA certifications, confirming compliance with European and North American emissions and safety directives . The production facility and quality management systems are certified to ISO 9001:2000 standards . The design also prioritizes workplace safety with fully functional backup alarms, a working horn, and clear, legible safety decals as standard features .

TECHNICAL SPECIFICATIONS

The following technical parameters define the core capabilities of the 2 Ton Mini Excavator. All specifications are based on standard machine configuration and are subject to variation with the installation of specific attachments.

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Specification	
Engine Model	Kubota D1105 (or equivalent)
Engine Power	14.0 kW / 2200 rpm
Operating Weight	Approx. 1950 kg
Bucket Capacity	0.06 - 0.07 m ³
Max Digging Depth	2050 - 2400 mm
Max Digging Height	3365 - 3570 mm
Max Digging Radius	3880 - 4040 mm
Max Bucket Digging Force	14.5 kN
Hydraulic System Pressure	21.5 MPa
Travel Speed (Max)	3.5 km/h

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border: 1px solid #ddd;'>Overall Width (Retracted/Extended)</td> <td
style='padding: 8px; border: 1px solid #ddd;'>990 / 1300 mm
</td> </tr> <tr> <td style='padding: 8px; border: 1px solid #ddd;'>Fuel Tank
Capacity</td> <td style='padding: 8px; border: 1px solid #ddd;'>18 L
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