

Crawler Excavating Machine - Official Technical Overview & Datasheet

EXECUTIVE SUMMARY

Engineered as a pinnacle of heavy machinery, this crawler excavating machine is designed to conquer the most challenging earthmoving and material handling tasks across the construction, mining, and agricultural sectors. Combining raw power with surgical precision, this machine is the definitive solution for projects demanding high productivity, exceptional reliability, and low operating costs. Whether it is excavating foundations, loading haul trucks in a quarry, or performing heavy-duty demolition, our crawler excavator provides the stability and force necessary to maximize worksite efficiency .

The machine's tracked undercarriage delivers superior traction and stability, allowing it to navigate soft, uneven, or rugged terrain where wheeled machines cannot operate . This robust platform, paired with a state-of-the-art hydraulic system and a powerful, emissions-compliant engine, ensures maximum uptime and a rapid return on investment. Built with the operator in mind, the machine offers a safe and comfortable working environment, further enhancing productivity over extended work cycles.



STRUCTURAL INTEGRITY & POWERTRAIN

The structural backbone of this crawler excavator is forged from high-tensile steel, providing a robust chassis that withstands the immense stresses of heavy excavation and material handling. This durable construction ensures long-term reliability, with the upper and lower structures engineered to handle continuous, high-load operations without compromising integrity. The undercarriage is built for longevity, featuring sealed and lubricated track links and heavy-duty rollers that deliver exceptional service life even in abrasive conditions .

At the heart of this machine lies a high-performance, turbocharged diesel engine, renowned for its fuel efficiency and reliability in the most demanding applications. This powerplant meets stringent emission standards (such as EPA Tier 4 Final), delivering substantial horsepower and torque for fast cycle times .

The machine's advanced hydraulic system is the key to its precision and power. Featuring a variable-displacement, load-sensing pump, the hydraulics deliver optimized flow and pressure to the boom, arm, and bucket, ensuring smooth, responsive, and powerful movements. This closed-center system minimizes hydraulic losses, resulting in improved fuel economy and precise control, even when using demanding attachments .

KEY FEATURES & OPERATOR COMFORT

- Robust Track Undercarriage: Designed for stability and traction, the wide tracks distribute the machine's weight effectively, resulting in low ground pressure. This allows the excavator to operate on soft or uneven surfaces without sinking, while optional rubber pads protect sensitive finished surfaces .
- Advanced Load-Sensing Hydraulics: The system's variable-displacement pumps provide power on demand, matching flow and pressure to the work at hand. This design maximizes efficiency by reducing fuel consumption and heat generation while providing exceptional multi-function control for precise digging and lifting .
- Operator-Centric Cab Environment: The spacious cab is ROPS/FOPS certified and designed for maximum comfort and safety . Equipped with a high-back, air-suspension seat, intuitive joystick controls, and an advanced, multi-functional monitor panel, the operator can manage machine functions and monitor performance metrics effortlessly.

- **Advanced Smart Control & Telematics:** The machine features an intelligent control system that manages engine speed and hydraulic output to optimize performance and fuel efficiency. Integrated telematics provide real-time data on machine location, health, and operating parameters, enabling proactive maintenance and improved fleet management .
- **Power Boost Mode:** For demanding applications, such as digging in hard rock, a dedicated Power Boost function provides a temporary surge in hydraulic pressure for increased breakout and lifting forces, dramatically improving productivity when it is needed most .

COMPLIANCE & SAFETY STANDARDS

Our crawler excavator is engineered and manufactured in compliance with the most rigorous global standards. The machine is fully compliant with ISO 9001 quality management standards and meets the latest emissions regulations, including EPA Tier 4 Final and EU Stage V, underscoring our commitment to environmental stewardship .

Operator safety is a paramount design principle. The cabin is built to meet ROPS (Roll-Over Protective Structure) and FOPS (Falling Object Protective Structure) standards, providing a protective cell for the operator . The machine is also certified with CE marking, confirming its conformity with European

health, safety, and environmental protection standards. Additional safety features include an automatic engine shutdown to prevent damage from overheating, a fire suppression system (optional), and a comprehensive rearview camera system to eliminate blind spots.

TECHNICAL SPECIFICATIONS

The following specifications are representative of the machine's performance capabilities. For specific model details and regional availability, please consult your local dealer.

Parameter	Specification
Engine Model	High-Performance Turbo-Diesel (e.g., Tier 4 Final)
Gross Horsepower	400 - 500+ HP (Varies by Model)
Operating Weight	80,000 - 120,000+ lbs (Varies by Model)

Bucket Capacity	2.0 - 5.0 yd ³ (Varies by Model)
Max Digging Depth	25 - 40+ ft (Varies by Model)
Max Reach at Ground Level	35 - 50+ ft (Varies by Model)
Hydraulic Flow (Main Pump)	2 x 200+ L/min (Varies by Model)
Main Hydraulic Pressure	34.3 MPa (approx. 4,970 PSI)