

Track-mounted Excavator - Official Technical Overview & Datasheet

EXECUTIVE SUMMARY

Designed for the most punishing environments—from urban construction sites to high-altitude mines and expansive agricultural land development—the Track-mounted Excavator delivers class-leading breakout force, fuel efficiency, and serviceability. Its optimized kinematics and heavy-duty track system provide superior traction and stability on mud, sand, rock, and steep gradients, making it the preferred choice for contractors requiring a single machine to handle trenching, demolition, material handling, and grading.

Integrating advanced electro-hydraulic management with a robust, field-proven powertrain, this excavator series maximizes uptime while reducing total cost of ownership. Targeted at fleet operators in earthmoving, quarrying, and large-scale agriculture, the model family offers operating weights from 14 to 50 metric tons, with customizable arm configurations and attachment-ready hydraulics.



STRUCTURAL INTEGRITY & POWERTRAIN

The chassis and boom assembly utilize high-yield-strength DOMEX 700 MC or equivalent steel grades, fabricated with robotic welding for consistent penetration and fatigue resistance. The reinforced X-frame undercarriage incorporates sealed and permanently lubricated track rollers with maintenance-free bushings, extending service intervals beyond 4,000 hours in abrasive conditions.

Power is supplied by a Cummins X12 or Isuzu 6HK1 turbodiesel engine (depending on model variant), compliant with EPA Tier 4 Final and EU Stage V emissions standards. The engine drives a variable-displacement axial-piston main pump delivering up to 35 MPa system pressure. Total hydraulic flow reaches 2x300 L/min with independent load-sensing, reducing parasitic losses

by up to 12% compared to conventional open-center systems.

KEY FEATURES & OPERATOR COMFORT

- Load-sensing hydraulics with electronic pump torque control: Automatically matches flow and pressure to attachment demand, enabling simultaneous swing, travel, and boom functions without power loss.
- ROPS/FOPS certified pressurized cab: ISO 12117-2 compliant, featuring laminated front glass, roll-over protective structure (ROPS) and falling object protective structure (FOPS). Integrated viscous mounts isolate vibration by 70%.
- 8-inch touchscreen smart control panel: Real-time fuel consumption, maintenance countdown, hydraulic oil temperature, and attachment presets for hammer, shear, or grapple.
- Automatic track tensioning system: Hydraulically adjusts track tension from the cab, preventing derailments and reducing pin/bushing wear.
- Boom float function for grading: Allows boom to follow ground contour without operator modulation, with optional laser receiver interface for fine grading accuracy ± 20 mm.

COMPLIANCE & SAFETY STANDARDS

The Track-mounted Excavator is manufactured under ISO 9001:2015 quality management and ISO 14001 environmental systems. Safety certifications

include ISO 20474 (earth-moving machinery), EN 474-1, CE marking for European markets, and EPA 2025 emissions compliance. The machine meets ANSI/SAE J1309 for operator controls and ISO 3457 for falling object guard rail requirements. Secondary exit paths, anti-slip perforated steel plates, and emergency boom descent valve are factory-installed on all units.

TECHNICAL SPECIFICATIONS

General parameters based on standard 20-ton class model (variants available from 14 to 50 tons). All values tested per ISO 9249 and ISO 7457.

Parameter	Specification
Engine Model	Cummins X12 (or Isuzu 6HK1)
Operating Weight	19,500 kg (20-ton class)
Net Power	150 kW @ 2,000 rpm
Max Digging Force (bucket)	158 kN
Max Digging Force (arm)	120 kN
Swing Speed	11.5 rpm
Travel Speed (high/low)	5.2 / 3.3 km/h
Main Hydraulic Pressure	34.3 MPa
Fuel Tank Capacity	400 L