

OEM Supported Excavator - Official Technical Overview & Datasheet

EXECUTIVE SUMMARY

The OEM Supported Excavator represents a factory-authorized balance between initial capital efficiency and long-term asset reliability. Designed for the construction, quarry, mining, and agricultural sectors, this machine leverages genuine OEM components, original casting specifications, and certified remanufacturing processes to deliver 95% of the performance of a brand-new unit at a significantly reduced total cost of ownership. Every unit undergoes strict factory reconditioning protocols, ensuring compliance with original equipment tolerances for pivot points, undercarriage wear, and hydraulic system purity.

Backed by a direct manufacturer support agreement, the OEM Supported Excavator eliminates the common risks associated with grey-market or uncertified used equipment. Customers gain access to original parts catalogs, factory-trained technicians, and extended warranty options on major components including the engine, main control valve, and swing drive. Whether loading aggregates, digging foundations, or handling agricultural materials, this machine provides enterprise-level dependability without compromising on safety or productivity.



STRUCTURAL INTEGRITY & POWERTRAIN

The chassis employs high-tensile strength steel (minimum yield 490 MPa) on boom, arm, and upper frame, with reinforced track frames utilizing double-bushed sealed track links. All structural welds follow ISO 3834 certification and are verified by magnetic particle inspection. The standard engine configuration is a factory-remanufactured Tier 4 Final / Stage V diesel from Cummins or Isuzu lineage, featuring full electronic common rail fuel injection and a DOC+DPF aftertreatment system where required. Power output ranges from 110 kW to 310 kW depending on model class. The hydraulic system is a closed-center, load-sensing configuration with independent swing and travel circuits, achieving total system efficiency of 88% to 91% at rated operating pressure of 34.3 MPa (5,000 psi). Component-matched main pumps (Kawasaki or Rexroth origin) and factory-spec main control valves ensure

consistent flow sharing across simultaneous boom, arm, bucket, and swing functions.

KEY FEATURES & OPERATOR COMFORT

- **LOAD-SENSING HYDRAULICS WITH ELECTRONIC PUMP REGULATION:** The variable-displacement axial piston pumps continuously adjust flow and pressure based on joystick input, reducing parasitic losses by up to 17% compared to fixed-displacement systems. Operator-selectable power modes (Eco, Standard, Heavy) fine-tune the pump-torque curve for fuel efficiency or breakout force.

- **ROPS/FOPS CERTIFIED OPERATOR CAB:** The cab meets ISO 12117-2 (ROPS) and ISO 3449 Level II (FOPS) standards, with a sound pressure level of 71 dB(A). The integrated roll-over protection structure is formed from 6 mm thick welded steel tube. Standard features include an adjustable air-suspension seat, low-effort pilot controls, and a pressurized cab with activated carbon filter.

- **8-INCH SMART CONTROL PANEL:** The fully sealed, glove-friendly touchscreen display provides real-time telematics (fuel rate, hydraulic oil temperature, maintenance intervals, and fault code diagnostics) with multi-language support. The panel integrates rear/side camera inputs and tracks cumulative fuel efficiency against operator-defined targets.

- **MODULAR BOOM & ARM CONFIGURATION:** Factory-original pins and bushings with induction-hardened surfaces (HRC 52-58). Four arm length

options available (2.1m to 3.5m for 20-ton class) with reinforced grease channels and centralized lubrication block at the boom foot.

- ADVANCED SAFETY & SECURITY PACKAGE: Standard hydraulic lock lever with key interlock, emergency engine stop (external and internal), illuminated handrails, anti-skid walkway plates, and a factory-fitted secondary fuel filter with water separator.

COMPLIANCE & SAFETY STANDARDS

The OEM Supported Excavator is fully compliant with CE machinery directive 2006/42/EC, EPA Tier 4 Final emission standards (where applicable), and ISO 9001:2015 quality management systems for remanufacturing processes. Additional certifications include ISO 16754 for earth-moving machinery ground level access systems and SAE J1176 for fire-resistant fluid power systems. The machine includes OEM-original decals and safety markings meeting ISO 9244:2008. Each unit ships with a Certificate of Conformity and a verified hour meter reading.

TECHNICAL SPECIFICATIONS

Below are representative specifications for the 22-ton OEM Supported Excavator class (other tonnages 13t, 30t, 45t available upon request). All values

are based on factory reconditioned OEM configuration with standard arm and 0.8m HD bucket.

Parameter	Specification
Engine Model	OEM-Reconditioned Cummins QSB6.7 (or Isuzu 6BG1 equivalent tier)
Operating Weight	21,800 kg (48,060 lb)
Bucket Capacity (SAE)	0.8 m ³ (1.05 yd ³) HD
Net Power	126 kW (169 hp) @ 2,050 rpm
Max Digging Reach	9,890 mm (32 ft 5 in)
Max Digging Depth	6,580 mm (21 ft 7 in)
Max Breakout Force (Bucket)	

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#ddd;'>145 kN (32,600 lbf)</td></tr><tr><td style='padding: 8px; border:
1px solid #ddd;'>Swing Speed</td><td style='padding: 8px; border: 1px solid
#ddd;'>11.2 rpm</td></tr><tr><td style='padding: 8px; border: 1px solid
#ddd;'>Travel Speed (Low/High)</td><td style='padding: 8px; border: 1px
solid #ddd;'>3.1 / 5.2 km/h (1.9 / 3.2 mph)</td></tr><tr><td style='padding:
8px; border: 1px solid #ddd;'>Hydraulic System Pressure</td><td
style='padding: 8px; border: 1px solid #ddd;'>34.3 MPa (5,000
psi)</td></tr><tr><td style='padding: 8px; border: 1px solid #ddd;'>Fuel
Tank Capacity</td><td style='padding: 8px; border: 1px solid #ddd;'>380 L
(100.4 gal)</td></tr></table>
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