

Refurbished Digger - Official Technical Overview & Datasheet

EXECUTIVE SUMMARY

Our factory-certified Refurbished Digger series bridges the gap between used equipment uncertainty and new machine capital expenditure. Each unit undergoes a 320-point inspection, complete disassembly, and selective component replacement using genuine OEM parts. Targeting mid-to-large construction, quarry, and agricultural operations, this platform delivers 90% of original productivity while reducing acquisition cost by up to 40%. Typical applications include earthmoving, trenching, material handling, and site preparation.

Every refurbished digger is backed by a 12-month / 2,000-hour powertrain warranty and comes with documented service history. For fleet managers prioritizing ROI without compromising operator safety or job site reliability, the refurbished line represents the optimal total cost of ownership.



STRUCTURAL INTEGRITY & POWERTRAIN

Chassis: High-tensile BS700MC steel main frame with reinforced boom foot and swing tower. All refurbished units receive NDT (non-destructive testing) on lower frame and track frame welds. Track chains are evaluated for pin/bushing wear; replacement occurs at 15% wear threshold.

Engine: Rebuilt to OEM tolerance using Isuzu 4JJ1X (74.3 kW) or Cummins QSF3.8 (86 kW) turbodiesel platforms. Includes new injectors, piston rings, bearings, and gaskets. Post-rebuild dyno testing verifies power output within 5% of factory rating. Emissions retrofits available for Tier 3 or EPA Tier 4 Final equivalency via DOC + EGR configurations.

Hydraulic System: Main pumps (Kawasaki K3V series) are remanufactured with

new seals, bearings, and port plates. Achieved volumetric efficiency >92% at rated pressure (34.3 MPa / 4,980 psi). Load-sensing hydraulic system with two-stage pressure cutoff reduces parasitic loss by 12% compared to non-refurbished used machines.

KEY FEATURES & OPERATOR COMFORT

- Feature 1: Factory Re-certified Hydraulics – Every hydraulic cylinder is honed, re-plated (chrome), and fitted with OEM seal kits. Pilot control valves are disassembled and lapped. Result: <3% internal leakage after 1,000 hours.
- Feature 2: ROPS/FOPS Certified Cab – New tempered glass, sealed HVAC system with R134a refrigerant recharge, and vinyl-coated floor mat. Cab interior noise reduced to 76 dBA (meeting ISO 6396). Suspension seat with 120mm travel and lumbar support.
- Feature 3: Smart Monitoring Panel – Reconditioned 7-inch LCD display showing engine oil pressure, coolant temp, hydraulic oil temp, fuel rate, and maintenance countdown. Includes USB charging port and auxiliary input.
- Feature 4: Undercarriage & Track Options – Choice of new aftermarket tracks (rubber or steel) or reconditioned sealed/lubricated chain with 75% remaining life. Track rollers and idlers are rebuilt with new bushings and thrust rings.
- Feature 5: Quick-Coupler Ready – Auxiliary hydraulic lines and mounting brackets pre-installed to ISO 13031 standard. Compatible with hydraulic hitch for tool changes without leaving cab.

COMPLIANCE & SAFETY STANDARDS

All refurbished diggers are certified to meet CE marking requirements (Machinery Directive 2006/42/EC) and ISO 9001:2015 refurbishment protocols. Engine emissions comply with EPA Tier 4 Final (for models after 2018 base year) or Tier 3 equivalent for older units with retrofit DOC. Safety features include: two emergency engine stops (cab + ground level), backup camera with 7-inch monitor, counterweight markings (500 kg increments), and SWL (safe working load) chart laminated inside cab. ROPS certification per ISO 12117-2:2008. Machines with over 8,000 original hours receive new seatbelt (76 mm width) and fire extinguisher bracket.

TECHNICAL SPECIFICATIONS

Below parameters represent typical refurbished 14-ton class digger (base model equivalent to Komatsu PC138 or Caterpillar 313). Values vary by donor machine vintage and refurbishment level.

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Specification	
Engine Model	Isuzu 4JJ1X (remanufactured) or Cummins QSF3.8
Net Power	74.3 kW - 86 kW @ 2,000 rpm
Operating Weight	13,200 - 14,800 kg (depending on refurbishment spec)
Bucket Capacity (SAE)	0.45 - 0.65 m ³ (recommended)
Max Digging Depth	5,550 mm
Max Reach at Ground Level	8,300 mm
Max Dumping Height	6,100 mm
Swing Speed	9.8 rpm
Travel Speed (High/Low)	4.5 / 2.8 km/h
Hydraulic Flow (Main)	

2 x 110 L/min @ 2,200 rpm	
Hydraulic Pressure (Working)	34.3 MPa (4,980 psi)
Fuel Tank Capacity	230 L
Hydraulic Tank Capacity	120 L
Tail Swing Radius	1,980 mm
Ground Clearance	430 mm
Track Shoe Width	500 mm (steel) or 600 mm (rubber)