

## Used Digger - Official Technical Overview & Datasheet

### EXECUTIVE SUMMARY

The HD-330R Certified Used Digger is a pre-owned, factory-reconditioned medium-duty hydraulic excavator engineered for contractors and mine service operators who demand enterprise-grade reliability at optimized capital expenditure. Rigorously inspected under ISO 24430 guidelines, this unit targets the secondary construction market, artisanal mining operations, and large-scale agricultural trenching where new-equipment ROI is protracted.

Every HD-330R undergoes a 237-point remanufacturing process including NDT chassis crack detection, powertrain dynamometer validation, and hydraulic contamination flushing. With a residual service life of 6,500+ operating hours and immediate parts availability, the machine delivers Tier 4 Final emissions compliance while retaining aggressive digging forces up to 145 kN. The value proposition: new-machine capability, used-machine economics.



## STRUCTURAL INTEGRITY & POWERTRAIN

The upper and lower frame structures are fabricated from HARDOX 450-grade abrasion-resistant steel with a minimum yield strength of 1,100 MPa. The swing bearing raceway exhibits measured radial runout below 0.3 mm post-reconditioning, meeting OEM factory tolerances. Boom and arm assemblies undergo magnetic particle inspection to verify zero subsurface fatigue cracks.

Powertrain is centered on a remanufactured Cummins QSB6.7 or Isuzu 6BG1 (market-dependent) turbodiesel producing 160 hp (119 kW) at 2,050 rpm. The engine features a full rebuild including new piston rings, bearings, injectors, and an aftermarket DOC+SCR aftertreatment system certifying EPA Tier 4 Final / EU Stage V equivalency. Hydraulic system is a closed-center, load-sensing

configuration with a factory-calibrated Kawasaki K3V series main pump delivering 295 L/min at 34.3 MPa (4,975 psi). Total system efficiency measured at 83% on a hydraulic dynamometer.

#### KEY FEATURES & OPERATOR COMFORT

- Load-Sensing Hydraulics with Boom Priority Logic: The axial piston pump automatically adjusts flow and pressure to match digging resistance, reducing fuel consumption by 12% compared to fixed-displacement systems. Auxiliary circuits are pre-plumbed for hydraulic breakers or augers.

- ROPS/FOPS Level II Certified Cab: Rollover and falling-object protective structure (ISO 12117) features laminated front glass, emergency egress hammer, and a 12V DC auxiliary outlet. Sound pressure level at operator ear is 72 dB(A) with windows closed.

- Smart Control Panel with Telematics: A 5.7-inch LCD monitor displays real-time engine load, hydraulic temperature, and maintenance intervals. Integrated GPS and cellular modem support remote machine tracking and geofencing (compatible with FleetManager Pro).

- Reconditioned Undergear with Extended Track Shoes: New track chain links,

sealed greased rollers, and 600 mm triple-grouser shoes reduce ground pressure to 43 kPa. Adjustable track tensioner allows field calibration without special tools.

- Quick-Coupler Ready Interface: Factory-welded coupler bracket with hardened steel pins (diam. 75 mm) accepts all major pin-grabber and hydraulic wedge systems. Safety lock indicator included.

## COMPLIANCE & SAFETY STANDARDS

The HD-330R carries full CE marking (Machinery Directive 2006/42/EC) and EPA Certificate of Conformity for Nonroad Compression-Ignition Engines (CFR 1039). Manufacturing process and inspection protocols are ISO 9001:2015 certified. Safety systems include two emergency boom-lowering valves, a hydraulic lock lever with position sensor, and a rearview camera with 170-degree field of view. Fire suppression system mounting brackets (pre-drilled for Ansul or Amerex systems) are standard. The machine meets ISO 20474 earth-moving machinery safety requirements.

## TECHNICAL SPECIFICATIONS

The following parameters are measured under SAE J1098 standards with

standard 600 mm shoes and without operator. All values represent post-reconditioning as-delivered performance.

Parameter	Specification
Engine Model	Cummins QSB6.7 or Isuzu 6BG1 (remanufactured)
Operating Weight	19,800 kg (43,650 lb)
Bucket Capacity (SAE struck)	0.85 m <sup>3</sup> (1.11 cu yd)
Max Digging Depth	6,250 mm (20 ft 6 in)
Max Digging Reach	9,400 mm (30 ft 10 in)
Max Digging Force (bucket)	145 kN (32,600 lbf)
Swing Speed	

11.2 rpm	
Hydraulic Flow (main pump)	295 L/min at 2,200 rpm (77.9 gal/min)
Fuel Tank Capacity	320 L (84.5 gal)
Ground Pressure	43 kPa (6.2 psi)
Certifications	CE, EPA Tier 4 Final, ISO 9001, ROPS/FOPS

Specifications note: Operating weight includes full fuel tank (320 L) and 75 kg operator. Swing torque measured at the output pinion. Digging forces are ISO 6015 compliant.