

SPECIFICATIONS, AMPHIBIOUS EXCAVATOR

These specifications describe the minimum requirements for an excavator mounted on an amphibious undercarriage. This amphibious excavator shall be new, of current manufacture, and a production model. Any additions, deletions, or variations from the following specifications should be outlined in an attached letter.

A John Deere 240D LC Super Long Front, Komatsu PC 270, and a Caterpillar 330GN Super Long Reach were used to develop specifications for the excavator portion of this machine. Equipment of similar style, type, character, quality, and purpose conforming to the detailed requirements listed below will be considered equivalent.

Any unit delivered under this specification is subject to rejection if there is evidence of poor workmanship. Any defect, so noted, may be corrected by vendor to the satisfaction of the equipment engineer or his representative. Defect corrections must be completed before invoices can be processed for payment.

Excavator Component of Machine:

Engine: Diesel, net HP 177 with an off-level capacity (gradeability) of 100%.

Hydraulic System: Maximum flow of 58 gal/min, 5220 psi under heavy lift.

Swing System: Full hydraulic, 360 degrees, 9.6 RPM.

Cab and Controls: Fully enclosed; air conditioner; heater; suspension seat with fore/aft, height and weight adjustments with wide armrests; AM/FM radio; monitor for pre-start fluid levels and maintenance reminder; and safety glass (call).

Stick, Boom & Bucket: Boom length 33' 6", arm length 25' 9", bucket digging force 33,047 lbs., maximum digging depth 47' 11", and maximum reach at ground level 59' 7". Bucket to be standard 60" clean out.

Minimum Service Fill Capacities: Fuel capacity not less than 750 gal (Amphibious Excavator manufacturer to replace counter weight with fuel tank); cooling system not less than 5.4 gal; swing drive no less than 2.2 gal.; hydraulic system including tank not less than 79 gal; hydraulic tank not less than 38 gal.

Undercarriage Component of Machine:

Pontoons: 32' x 6' x 5' – Corten steel material – four (4) bulkheads each pontoon forming five (5) water tight compartments – belly pan to conceal hose and swivel assembly – sandblast, dimetcote paint system – tank liner inside pontoon to prevent corrosion – 3/16" thick sides & top – ¼" thick bottom.

Catwalk: 2 side catwalks and 2 cross walks.

Tracks: Three strand 5" pitch heavy-duty marsh buggy roller chain – 3" marine grade aluminum cleat with .438" heavy web – Two (2) plastic support blocks per cleat – Three (3) wiper pads per pontoon – track adjustment provided by stainless steel 18-8 adjustment bolt, block to be 304 stainless steel; manual pushrod assembly; bearing bolts to be stainless steel.

Travel System: Direct drive – no intermediate drive chain – independent (2) speed hydrostatic travel motors to be factory final drive components provided with excavator, i.e. CAT drive motors if CAT excavator – All hydraulic components mounted within width of side frames to allow 360 degree work capability.

Automatic Downshift: When operating in difficult travel conditions, the travel motor automatically downshifts from high to low speed for increased tractive effort and then automatically returns to high speed when travel conditions permit. Maximum travel speed 2.1/3.4 mph (3.4/5.5 Km/h); Traction effort 43,010 lbs. (19 509kg); Gradeability 70%; Spring applied, hydraulically released disc parking brake built into each motor. Each travel motor equipped with counterbalance valve to prevent over speeding down an incline and 3 – stage reliefs for smooth starts and stops. Travel hoses enclosed within side wall of pontoons with access doors for inspection and service; Travel motors to be fully enclosed within sealed frame mount with sealed, hinged access panel; anti-corrosive coating applied.

Warranty: 1-year full machine coverage, with a 5-year, 5,000 hour manufacturer’s extended power train and hydraulics warranty; including drive motors.

Parts/Service: Vendor should attach to bid a listing of the Louisiana locations where parts and service can be obtained.

Delivery: The completed Amphibious Excavator will be delivered to Rockefeller Wildlife Refuge. Address: Rockefeller Wildlife Refuge
 5476 Grand Chenier Hwy.
 Grand Chenier, La. 70643

Product Support Literature: Equipment will not be considered delivered nor invoices processed until all manual(s) are furnished and unit is checked for compliance with Department specifications. To include: Dealer’s Service Policy, Owner/Operator’s manual, and copies of all Manufacturers’ Warranties.

This Amphibious Excavator shall be a production model, not a prototype, and vendor should provide documentation with their bid of machines they have manufactured with these specifications.