

Bid specifications for Excavator

Compliance

Engine

- yes___ no___ Net Rated Power shall be no less than 188hp @ 2100 rpm
- yes___ no___ Engine must be certified to EPA Interim Tier 4/EU Stage IIIB
- yes___ no___ Engine shall have six cylinders and a displacement of no less than 415 cu in (6.8 L)
- yes___ no___ Engine shall have auto-idle mode to reduce engine speed when hydraulics are not in use to reduce fuel consumption and noise
- yes___ no___ Engine oil interval shall have a scheduled 500 hour interval for reduced operating costs
- yes___ no___ The engine oil and fuel filters will be remotely mounted for ease of access
- yes___ no___ The engine will have a cold-start aid, such as glow-plugs or equivalent.
- yes___ no___ The engine accessory drive belt will have an automatic tension device to reduce maintenance costs

Cooling

- yes___ no___ The cooling system shall be cool-on demand, using a hydraulically driven fan that operates at variable speed to reduce fuel consumption and noise.
- yes___ no___ The hydraulic coolers shall have no more than 10.2 fins per inch rating to resist plugging and for easier clean-out
- yes___ no___ The radiator cooling core shall have no more than 10.2 fins per inch to resist plugging and for easier clean-out
- yes___ no___ The fan will have an optional reverser that will reverse direction and blow out the screens periodically. The feature can also be actuated by the operator at any time or it can be shut off.
- yes___ no___ Cooling system shall be protected from debris by a pre-screening side shield.

Power Train

- yes___ no___ The excavator will have two speed propel with auto-shift for smooth and fast operation
- yes___ no___ The propel motor will be protected with a shield or guard
- yes___ no___ There will be three power modes and one work mode to simplify a variety of applications
- yes___ no___ The travel speed in low shall be limited to 2.1 mph
- yes___ no___ The travel speed in high shall reach 3.4 mph
- yes___ no___ Drawbar pull shall be at least 48,300 lb

Brakes

- yes___ no___ The propel brake will be spring applied, hydraulically released
- yes___ no___ The swing brake will be spring applied, hydraulically released

Hydraulic System

- yes___ no___ The excavator will come equipped with a reduced-drift valve for boom down, arm in for full control
- yes___ no___ The excavator will come equipped with a main pin hydraulic thumb
- yes___ no___ An auxiliary hydraulic valve section will be provided to operate a hydraulic thumb
- yes___ no___ Hydraulic sight gauge shall be provided for quick daily checks to reduce operating costs.
- yes___ no___ The auxiliary hydraulic flow will be adjustable through the monitor
- yes___ no___ The excavator will be capable of boosting power to increase digging forces on the fly when needed
- yes___ no___ The hydraulic system will have a oil-sampling valve will be provided as standard equipment
- yes___ no___ Hydraulic return filter shall be positioned inside the hydraulic tank to protect from contamination when the hydraulic oil is changed.
- yes___ no___ Swing speed shall be capable of 13.5 rpm for maximum productivity
- yes___ no___ Swing torque shall be no less than 57,150 lb-ft
- yes___ no___ Maximum system operating pressure for implement circuit (not including power dig function) shall be no more than 4,975 psi to minimize fatigue of the hydraulic components
- yes___ no___ Maximum system operating pressure for travel circuits shall be no more than 5,076 psi
- yes___ no___ Maximum system operating pressure for swing circuits shall be no more than 4,830 psi
- yes___ no___ The right joystick controller shall be pre-wired from the factory for auxiliary hydraulics

- yes___ no___ The boom and arm shall be equipped with standard welded bosses or attachment lugs for auxiliary high flow lines
- yes___ no___ Hydraulic oil change interval shall be 5,000 hours for reduced operating costs and increased productivity
- yes___ no___ The excavator hydraulic tank will be cylindrical in shape to promote oil mix on return and minimize potential for leaks.

Electrical

- yes___ no___ The electrical system shall be 24 volt with 100 amp alternator
- yes___ no___ The circuits shall be blade type multi-fused
- yes___ no___ The machine performance and utilization data will be captured and stored by a data-acquisition system with software that can produce graphs showing machine utilization and performance history.

Operator Station

- yes___ no___ The operator station shall be mounted on four silicone-filled cab mounts or equivalent to reduce noise, vibration and operator fatigue
- yes___ no___ The cab shall have an openable roof hatch to provide additional emergency escape path and clear visibility to overhead obstacles with a sunshade for operator comfort
- yes___ no___ The cab fresh air filter must be accessible from the ground and outside of the cab and not require any tools for removal - other than the key to open the door
- yes___ no___ Seat shall be deluxe, adjustable, with suspension, headrest and adjustable lumbar support and 4-in (100 mm) adjustable armrests
- yes___ no___ The control positions and the seat can be adjusted independently of each other for greater operator comfort
- yes___ no___ The cab shall have auto-climate control, A/C with heater and pressurizer
- yes___ no___ System shall retain and display active fault codes and incidents related to machine operating outside of the specified parameter
- yes___ no___ The monitor shall be capable of storing maintenance/service interval information on items like engine oil, engine oil filter, hydraulic oil, hydraulic oil filter and air cleaner filter.
- yes___ no___ The monitor shall be capable of showing machine diagnostic information including error messages, fault codes and system operating information. Examples of operating information include, engine rpm, pump pressures, hydraulic oil temperatures and pilot pressures.
- yes___ no___ The horn and travel alarm shall be operable while the machine is moving forward or in reverse
- yes___ no___ The right window of the cab must be glass

Undercarriage

- yes___ no___ The undercarriage will have two upper carrier rollers per side and nine lower rollers per side
- yes___ no___ The excavator will have two track guides per side
- yes___ no___ The chain shall be sealed and lubricated and the track adjustment shall be hydraulic

Upperstructure

- yes___ no___ The boom shall be reinforced with three welded bulkhead plates to deliver maximum strength and durability
- yes___ no___ The outer mainframe of the house shall be constructed with a reinforced D-channel for durability
- yes___ no___ The cab door, fuel cap and service doors and tool box shall be lockable.
- yes___ no___ The machine will have dirt seals on all bucket pins

Overall Machine Specs

- yes___ no___ Standard minimum operating weight shall be no less than 57,800 lbs with 1.38 cu yd, 48 in bucket; 11 ft 10 in arm; 11,270 lb counterweight and 32 in triple ,semi-grouser shoes
- yes___ no___ Overall height to top of cab shall be no more than 9 ft 11 in
- yes___ no___ Counterweight clearance shall be 3 ft 7 in

Operating Specifications

- yes___ no___ The ISO arm digging force with a 11 ft 10 in arm shall be no less than 25,628 lb
- yes___ no___ The ISO bucket digging force with a 11 ft 10 in arm shall be no less than 42,489 lb
- yes___ no___ Lifting capacity over the side @ ground level 20 ft reach with 11 ft 10 in arm, 1,920 lb bucket and 32 in triple semi-grouser shoes shall be no less than 11,568 lb
- yes___ no___ Maximum digging depth with 11 ft 10 in arm shall be not less than 25 ft 0 in

General

yes___ no___ Machine shall be 2012 year model or newer no more than 5000 actual hours

yes___ no___ Bidder must be an authorized dealer for the product bid

yes___ no___ Bidder must have a authorized service center with factory trained technicians, a minimum of 4
staffed field service trucks and adequate parts inventory on hand within 30 miles of Itawamba
County.