

Specifications for Compact Track Loader
City of Natchez – Public Works Department November 2023

All Equipment offered for consideration must be new and current year model. Used, demonstrator, or discontinued models are unacceptable. Bidders shall include printed literature for the equipment offered.

The following specifications are considered minimum acceptable.

Engine:

- Four (4) cylinder, turbocharged diesel engine and shall be designed by Manufacturer
- Engine shall be certified to meet EPA Tier FT4/EU Stage IV non-road emission standards;
- Engine displacement shall be no less than 186.3 cu. In. (3.1L);
- Engine net peak power (SAE J1349/SO 9249) shall be no less than 97 hp (72kW) at 2,500 rpm;
- Engine gross power (ISO 14396) shall be no less than 100 hp (74.6 kW) at 2,500 rpm;
- Engine shall have an electric transfer fuel pump with auto prime;
- Service intervals for the engine oil and oil filter shall be a minimum of 500 hours;
- Engine air filter restriction indicators shall be displayed in the cab monitor;
- Engine shall have automatic pre-heat and auto-shutdown provided;
- Engine to provide Auto Idle feature to automatically reduce engine speed to idle when the machine is not in use for maximum fuel efficiency;
- Engine, hydrostatic-hydraulic and chain chase reservoirs shall utilize 10W-30 oil to simplify service;
- Fuel tank shall be no less than 30 gallons (114L)

Cooling:

- Hydraulically driven variable speed cooling fan to cool only on demand for fuel economy, lower average noise levels and less cooler clogging in high debris applications;
- Unit shall have a coolant recovery tank provided;
- Unit should be equipped with a tri-cool configuration that pulls fresh air individually through the Hydraulic and Engine coolers for dedicated first pass air flow. The Hydraulic and Engine coolers should be separated and must not be stacked in line;
- Unit shall provide a reversing fan option that automatically blows out the engine and hydraulic coolers periodically. The cooling system shall pull air in from both sides of the machine, and top rear hood, and then directing it away from the operator station and cut the rear of the unit;

Power Train:

- Maximum travel speed shall be at least 7.8 mph (12.6 km/h)
- Transmission shall be electronically modulated soft shift 2-speed
- Transmission system must be directly coupled to the engine without additional belts or pulleys

Axles/Brakes:

- Parking brake shall be automatic spring applied, hydraulically released, wet-disk and sealed from water, Mud and dust

Hydraulic System:

- Hydraulic Oil Filter Restriction Indicator shall be displayed in the cab monitor
- Hydraulic system pressure at the couplers shall be no less than 3,450 psi;
- The standard pump flow shall be no less than 25 gpm (95 L/m);
- The calculated standard flow hydraulic horsepower shall be no less than 50 hp (38 kW)
- The unit shall have high flow hydraulics

Electrical:

- Loader shall have 2 front LED work lights and 1 rear LED work light to illuminate the work area;
- Courtesy lighting feature shall provide an adjustable time delay to automatically shut off all lights after the machine is turned off for enhanced safety and battery protection;
- Battery shall be no less than 12 volts, 925 CCA
- In cab John Deere patented Quik-Tatch system shall be electronically activated for convenient machine to Attachment coupling

Operator Station:

- Cab enclosure option shall be pressurized and sealed
- Cab enclosure shall provide a swing-out curved glass front door, not an overhead roll-up door, for maximum visibility and a large exit/entry opening;
- Machine shall be equipped with auxiliary hydraulics activated by a thumb switch located on EH joystick controls;
- Joystick control options shall provide a foot throttle for fuel efficiency and periodic power bursts;
- Optional Joystick Control Option must be EH and not Pilot hydraulic controlled;
- Machine must be equipped with a standard equipment pull-down interlocking lap bar;
- Retractable seat belt shall be provided as standard equipment;
- Deluxe instrumentation EMU with Operator-selectable monitoring- Hour meter, engine rpm, battery voltage, diagnostics, EMU configuration, engine coolant temperature, hydraulic oil temperature / LED warning indicators- Glow plug, seat switch seat belt, door open, auxiliary hydraulics park brake engaged, 2-speed engaged, stop, low engine oil pressure, engine coolant over temperature batter not charging, air filter restriction and hydraulic filter restriction

General Specifications:

- Fuel tank shall be protected by a locking engine compartment and easily accessed without opening a rearward door;
- The tipping load shall be no less than 10,570 lb. (4,799 kg) rated with standard track and foundry bucket;
- The boom break out with HD construction bucket shall be no less than 7,750 lb. (3,515 kg);
- Bucket breakout force with HD construction bucket shall be no less than 9,250 lb. (4,196 kg);
- Unit shall have a vandal protection package that includes a lockable engine enclosure and DEF compartment for all fluid fill locations;
- Unit shall be provided with an in-cab boom service lock-out bar so only one person can easily secure The boom in the upright position;

- Operating weight with standard equipment, ROPS cab, 175 lb. operator and full fuel tank shall be a Minimum of 12,100 lb. (5,493 kg)

Frames and Structure:

- The loader design shall be a vertical-lift boom for heavy lifting, high reach, and superior visibility to the attachment at full loader height
- Ground clearance under the loader shall be no less than 9.4 in. (.24 m)
- Unit shall have height to hinge pin no less than 11 ft. 0 in. (3.35 m)

Undercarriage:

- The tractive effort must be no less than 11,500 lbs. (5,221 kg.)
- The rubber track design must be reinforced with a steel cord
- The track lugs must be imbedded metal for longer life and performance
- The track tensioner must be horizontal design with single grease zerk adjustment
- The unit shall have 17.7" off set lug rubber tracks

Warranty:

- Full machine warranty for 60/month or 5,000 hours, including any travel time and mileage

Other:

- Bidder shall have a certified parts and service center located within 50 miles of Natchez, MS Adams County;
- Must give estimated time of delivery;
- Must include delivery to City of Natchez Public Works Department.
- Must include full service manual.