

NOTICE

The Grant Parish Police Jury will receive sealed bids until 3:00 pm Thursday, June 9, 2022 in the Police Jury Meeting Room, Courthouse Building, Colfax, Louisiana and publicly open same for the following:

Purchase of One (1) or more, current productive model 72" Portable Asphalt Reclaiming / Trenching Machine with Integrated Enhanced Pulverizing System, Wheel Assist, and Options

This specification shall cover a diesel-powered portable asphalt reclaiming / trenching machine that attaches to the bucket of a wheel loader. Full specs attached.

The Grant Parish Police Jury reserves the right to reject any and all bids and waive informalities.

Specifications

72" Portable Asphalt Reclaiming / Trenching Machine with Integrated Enhanced Pulverizing System, Wheel Assist, and Options

- 1. General:** This specification shall cover a diesel powered portable asphalt reclaiming / trenching machine that attaches to the bucket of a wheel loader.
- 2. Engine:** Water-cooled, six-cylinder Tier IV Final EPA compliant, electronically controlled 6.7 liter turbo diesel engine developing 260 hp at rated RPM and generating 730 foot pounds of peak torque. Engine shall be equipped with a remote throttle and an exhaust system with muffler. Shall be equipped with 24-volt electrical system including starter, batteries, wiring harness, and alternator. Shall be equipped with an engine management system that includes low oil pressure shutdown, high coolant temperature shutdown, hour meter, and starter protection lockout. Batteries shall be maintenance free with top mounted, threaded posts and shall provide no less than 1,000 cold cranking amps at 0 degrees F. Alternator shall produce 27 volts and 70 amps. Shall be equipped with engine manufacturer's approved 2-element air cleaner, oil and fuel filters. Fuel tank shall have a capacity of no less than 50 U.S. Gallons. Radiator cooling system shall be protected to -20° F with ethylene glycol type antifreeze in compliance with engine manufacturer's specifications.
- 3. Engine Instrument Panel:** Shall be a wired remote type, which is placed in the cab of the loader to allow the loader operator to monitor engine functions without leaving the cab. Shall include engine emergency stop (E-Stop) control, clutch disengage & engine idle down, and a digitally controlled multifunction display panel that can selectively indicate, at a minimum: fuel level, engine hours, percent engine load, engine oil pressure, system voltage, engine speed, and engine coolant temperature.
- 4. Control Panel:** Shall be equipped with an operator control panel located on the belt cage side of machine which allows machine operator to control depth of cut, engine speed, hydraulic clutch engage & disengage, baffle position, water pump on/off, wheel assist depth and steering, maintenance hatch open/close control, and bucket clamping as well as indicators for belt tension and clutch pressure on curb side of machine away from traffic. A key switch to control engine start, run and shutoff will also be mounted on this panel as well as an emergency stop switch.
- 5. Z-Pro Cutter Head Assembly:** Shall be securely attached to the machine's main-frame, enclosed by a heavy-duty cowling. Maximum cutting depth shall be approximately 12" (twelve inches). Shall have a standard cutting width of 72" (seventy-two inches). Shall have a minimum of 174 carbide tipped, 19mm shank, snap-in bits with spring-steel full sleeve retainers and washers. The bit holders or blocks shall have locating pins that insert into a base that is welded to the cutter head. The cutter head and housing shall be designed so that only pulverized materials leave the drum assembly.
- 6. Cutter Head Drive:** Power shall be transmitted from the engine to the cutter head through a power take-off and V-belts to a planetary reduction gearbox at the cutter head. Drive belt tension shall be regulated by the use of an idler wheel and hydraulic cylinder. The proper belt tension shall be monitored by a gauge mounted on the machine frame and visible to the operator on the ground.
- 7. Active Hydraulic System:** Unit shall be equipped with a hydraulic system consisting of a hydraulic gear pump that is engine powered by an auxiliary drive adapter, reservoir, pressure side filter, hydraulic manifold with poppet valves, lines and two cylinders with electronic position feedback to actuate and control depth and angle of cut. All hydraulic fittings shall be leak free and o-ring face seal or o-ring boss

design. Hydraulic fluid shall be dyed red to distinguish it from other engine fluids. The reservoir shall hold at least five U.S. gallons of hydraulic fluid.

8. **Hydraulic Clutch:** The machine shall be equipped with a hydraulically activated clutch that will engage and disengage the cutter head by a button on the control panel or by a button on the handheld wireless remote control.
9. **Mounting:** Unit shall be designed and recommended by the manufacturer to mount to the bucket of a wheel loader with a gross operating weight of at least 24,000 lbs. Mounting system shall allow the loader to load and unload the reclaiming / trenching machine from its transport trailer. Mounting of the machine shall not require the removal of the bucket nor shall it require the use of a quick connect, quick connect hooks or direct attachment pins. No other mounting systems will be considered.
10. **Hydraulic Bucket Clamps:** Unit shall be equipped with a hydraulic bucket clamping system to secure the unit to the bucket of the host vehicle. System will maintain a pressure of 1500 psi. The system shall have pressure relief valve to safeguard against over pressurizing the system.
11. **Cutter Head Service Access Hatch:** Unit shall be equipped with a powered hydraulic system that will lift the access hatch to expose the cutter head for service and clamp down during operation. This system will operate without the diesel engine running. Hatch shall have an electrical safety interlock that will prevent the engine from running or starting while the hatch is in the open position.
12. **Integrated Enhanced Pulverizing System:** Unit shall be equipped with a fully integrated enhanced containment system that fully encloses the cutting chamber at all cutting depths, allows baffle position to be hydraulically adjusted to control material size on the fly, allows grade adjustment of up to 1.5 inches across the cutting width, and allows depth control to be fully independent of loader bucket height.
13. **“X” Frame Design:** The frame shall allow continuous actuated control in cutting depth from 0 to 12 inches. This frame shall rest on ski wear plates that provide distributed support for the machine during operation. The frame shall have improved side shielding that provides for better material containment, reducing the amount of debris that could be ejected from the dome. The frame shall also allow for new material such as crushed gravel or emulsions to be mixed with the pulverized asphalt.
14. **Wheel-Assist System:** The machine shall be equipped with a front-mounted wheel-assist attachment. The wheel-assist system shall provide the machine operator fine steering adjustment for directional control while grinding. The system shall also provide free turning support for maneuvering the machine to a work location without lifting the machine off the ground.
15. **Weight:** Reclaiming / trenching machine (without optional trailer) shall have an approximate dry weight of 15,675 pounds.
16. **Additional Equipment:** Tools for changing cutter bits and a supply of 25 extra bits and 5 extra blocks shall be provided. Two bucket retention chains for holding the machine in the loader bucket shall be included.
17. **Wireless Remote Control:** The unit shall have a wireless remote control consisting of a receiver and hand held transmitter that will be able to control engine speed, clutch, depth & angle of cut, baffle position, wheel assist steering and depth, and engine stop. It will function up to a distance of 50 feet.

18. **Color:** Unit shall be powder coated with factory standard colors. Shall include manufacturer's standard warning, safety, and instructional decals. Shall have identification and serial number decals.
19. **Warranty:** Units purchased under this specification shall be warranted against defects in materials and workmanship for a period of one year from date of delivery to customer with unlimited hours of use. Customer shall have direct and immediate access to factory technical experts for items thought to be defective. Defective items shall then be either repaired, replaced or referred to an in-state local service center under direction of factory technicians.
20. **Training:** Manufacturer shall furnish qualified personnel to instruct operators and service technicians on the operation and maintenance of units purchased under this specification. Up to four hours of training in the correct use and maintenance of the unit shall be given at time of delivery. Manufacturer shall furnish one (1) copy of the owner's / operator's manual at time of delivery.

Options:

21. **Optional Custom Transport / Storage Trailer:** As an option, Unit shall include its own custom transport trailer. Custom trailer shall allow the machine to transport inset into trailer with a lower center of gravity. Shall include a secured tool box and serve as a safe working platform for field maintenance. Shall be a heavy-duty (24,000 LBS GVW) tandem axle trailer specifically designed by the manufacturer for transporting the asphalt reclaiming / trenching machine. The frame shall be constructed of steel channel; rectangular steel tubing or I beam with all welded construction. Shall have steel wheels. Hubs shall run on tapered roller bearings. Tires shall be the size and load bearing capacity to handle the machine at highway speeds. The trailer shall be equipped with electric brakes and automatic breakaway system in compliance with current ICC requirements. Trailer coupler shall use a standard pintle hitch. The trailer shall come with four independent attachments that secure unit to trailer with grade 70 transport chains and ratchet style load binders. The trailer shall have a lockable toolbox, tongue jack, machine supports, hydraulic powered loading ramp, and all necessary lights and reflectors to meet U.S. Federal DOT and ICC requirements. Shall come complete with trailer wiring connectors.
22. **Optional 300 Gallon Wheel Assist Mount Water System:** As an option, the unit shall include a water tank and pump system that is attachable to the wheel assist system. The water system shall have a tank capacity of 300 gallons and shall have a 12-volt D.C. electric pump system. It shall be equipped with appropriate hosing and electrical controls for operation while the Asphalt Zipper is in operation.

Specifications are subject to change without notice.