

**Industrial Articulated Front-End Loader, 2.75 CY Bucket**

Industrial articulated front-end loader ("Loader"), new and of current year model, equipped as advertised by manufacturer, to meet or exceed the following **MINIMUM** specifications:

**Proposed Front End Loader:** Make: \_\_\_\_\_ Model: \_\_\_\_\_

Non-Restrictive Clause: Any use of brand name or equal within this specification is to be considered a reference for the purpose of describing the standard of quality, performance, and characteristics desired. It is not intended to limit or restrict competition.

**The bidder must respond to each of the following statements.** Specifications listed are **minimum** requirements that must be met for a bidder to qualify for an award. A "YES" response means the bidder guarantees that they meet or exceed the requirement. A "NO" response means the bidder cannot meet the requirement and will not be considered. The bidder must supply printed literature that shows compliance with each requirement of the Specifications and, if on inspection, an item is found not to comply, the Loader will be rejected.

**Descriptive literature shall be furnished to substantiate the details specified throughout this bid.**

**SPECIFICATIONS**

**Type:** Four (4) Wheel Drive

**Comply Yes/No:** \_\_\_\_\_

**Capacity:** 2.75 cubic yard bucket

Bucket capacity (cubic yard): \_\_\_\_\_

**Comply Yes/No:** \_\_\_\_\_

**Dump Clearance:** At full lift and 45-degree dump – 9 feet

**Comply Yes/No:** \_\_\_\_\_

**Reach:** At full lift and 45-degree dump – 36 inches

**Comply Yes/No:** \_\_\_\_\_

**Static Tipping Load:** Straight 19,000 pounds; full 35-degree turn 16,500 pounds

Tipping load – straight (pounds): \_\_\_\_\_

Tipping load – turn (pounds): \_\_\_\_\_

**Comply Yes/No:** \_\_\_\_\_

**Breakout force:** 25,700 pounds

Breakout force (pounds): \_\_\_\_\_

**Comply Yes/No:** \_\_\_\_\_

**Operating Weight:** 29,500 pounds with all required equipment

Operating weight (pounds): \_\_\_\_\_

**Comply Yes/No:** \_\_\_\_\_

**Engine:** Diesel; 170 horsepower, net; equipped with electric starter; dual element dry-type air cleaner with service indicator and turbo pre-cleaner; and all standard engine accessories

Horsepower: \_\_\_\_\_

**Comply Yes/No:** \_\_\_\_\_

**Transmission:** Full power shift having at least 3 forward and 2 reverse ranges or hydrostatic

**Comply Yes/No:** \_\_\_\_\_

**Axles:**

Front axle: fixed

Rear axle: oscillating with no spin, torque proportioning, or limited slip front differential

**Comply Yes/No:** \_\_\_\_\_

**Final Drives:** All wheel drive, planetary reduction each wheel

**Comply Yes/No:** \_\_\_\_\_

**Steering:** Full hydraulic

**Comply Yes/No:** \_\_\_\_\_

**Brakes:**

Service: disc type or internal expanding on all four (4) wheels

Hydraulic: power actuated, hydraulic – air actuated or straight air

Parking: mechanical or spring-applied hydraulically released type, sufficient to hold loaded machine

**Comply Yes/No:** \_\_\_\_\_

**Tires:** four (4) traction-type, 20.5 x 25, 12-ply tubeless, L-3 tread

**Comply Yes/No:** \_\_\_\_\_

**Hydraulic System:** Combination loader/steering pump or loader pump and steering pump, with both a suction filter and a return filter, complete with pump, valves and required fittings, boom lift to be double-acting cylinder(s), bucket to be self-leveling, controlled by double-acting cylinder(s), system to be sufficient size to perform all operations

**Comply Yes/No:** \_\_\_\_\_

**Cab:** All standard equipment, including but not limited to:

- ROPS (rollover protection system) / FOPS (falling object protection structure) certified enclosed cab
- Safety glass
- Adjustable air suspension bucket seat
- High-visibility orange safety belt
- Engine oil pressure gauge
- Temperature gauge
- Amp meter
- Hour meter
- Torque convertor

- Temperature gauge
- Warning lights for battery charging and parking brake
- Engine Side Shields
- Lockable caps on fuel tanks
- Hydraulic and radiator tanks
- Cold start aid
- Air conditioning
- Heater/defroster
- Working lights, front and rear
- Tail and stop lights
- Turn signals
- Front and rear light guards
- Horn
- Windshield wipers
- Backup alarm
- Rearview camera
- Fire extinguisher
- Slow moving vehicle emblem, rear-mounted

Telematics systems with warning lights shall be acceptable in lieu of the listed gauges but one or the other shall be present.

**Comply Yes/No:** \_\_\_\_\_

**Bucket and accessories:** Quick attach/disconnect functionality, high-flow auxiliary hydraulics, rear counterweight set sufficient to stabilize Loader, and rearview monitoring system required. Auxiliary functions to be hand controlled with joysticks. A constant on function for the auxiliary controls must be available.

- 2.75 cubic-yard stamped bucket with bolt-on cutting edge of sufficient width to cut outside Loader tires
- Automatic return to dig
- Automatic bucket positioner and boom kick-out

**Comply Yes/No:** \_\_\_\_\_

#### **ADDITIONAL REQUIREMENTS**

**Service:** The Loader shall be delivered fully assembled and ready to operate. Factory-trained dealer representative is to inspect the Drill upon delivery and provide receiving MDOT equipment manager with information on operational, service, and maintenance requirements.

Bidder shall maintain a representative inventory of replacement parts and service facilities as well as all necessary diagnostic tools/equipment/software and software licenses needed for diagnosis, repair, service, and maintenance.

**Acknowledge Yes/No:** \_\_\_\_\_

**Warranty:** Clearly stated terms and conditions of all manufacturer warranties shall be included with the bid package. All materials, specialty equipment, or accessories that prove defective in normal operation within the warranty period shall be replaced or repaired by the manufacturer free of all cost to MDOT, including all material, labor, and transportation costs. Warranty replacement and/or repairs shall be furnished promptly by the successful bidder within a time not to exceed thirty (30) calendar days. **The bidder shall provide written assurance with the bid package regarding warranty repairs.**

The delivering dealer will have sole warranty responsibility (**all components**) for the first ninety (90) calendar days after acceptance of vehicle.

The manufacturer shall provide, with the bid package, a list of warranty service locations within the State of Mississippi for all components of the Loader (body, chassis, electrical, etc.) which may need warranty repair beyond the first ninety (90) calendar days.

**Acknowledge Yes/No:** \_\_\_\_\_

**Workmanship:** Workmanship throughout shall conform to the highest standard of commercially accepted practice for the class of work and shall result in a neat and finished appearance. The design which the manufacturer proposes must be of substantial and durable construction in all respects.

All parts shall be new. Used, reconditioned, or obsolete parts will not be accepted.

**Acknowledge Yes/No:** \_\_\_\_\_

**Parts Availability:** Dealer name and contact information located closest to the point of delivery:

Dealer Name: \_\_\_\_\_

Telephone: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State, ZIP: \_\_\_\_\_

**Acknowledge Yes/No:** \_\_\_\_\_

**Tests and Testing:** The complete Loader and all working and moving parts and operating devices shall be thoroughly tested and put in operating condition by the manufacturer.

Prior to acceptance by MDOT, the manufacturer shall service and adjust the Loader for operation.

**Acknowledge Yes/No:** \_\_\_\_\_

**Literature:**

**Technical manuals:** Operator's manual, service/maintenance manual, and parts book are to be made available in both hard copy and electronic (PDF file format on USB flash drive) versions. One set of technical manuals shall be provided with each Loader upon delivery. Additional manuals may be ordered later.

**Technical service bulletins:** Successful bidder shall provide TSBs (technical service bulletins) for all Loader(s) delivered to MDOT as they are published, regardless of the date of delivery. TSBs may be furnished in paper or electronic format and shall be updated regularly.

The following additional information shall be provided by the vendor at time of delivery (electronically if possible):

- Manufacturer's recommended service/preventive maintenance intervals
- Recommended fluids, lubricants, and their SAE equivalents

**Two (2) copies of descriptive literature shall be furnished to substantiate the details specified in the bid.**

**Acknowledge Yes/No:** \_\_\_\_\_

**Certification:** The manufacturer(s) shall furnish certification that the Loader meets or surpasses current U.S. Department of Labor Occupational Safety and Health Administration (OSHA) Regulations, U.S. Department of Transportation Federal Motor Vehicle Safety Standards (FMVSS), and any other applicable Federal regulations.

**Certificate of Origin (if applicable):**

Mississippi Department of Transportation, 9301  
P.O. Box 1850  
Jackson, MS 39215

**Acknowledge Yes/No:** \_\_\_\_\_