



STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
TECHNICAL SPECIFICATIONS FOR
DIESEL HAMMER WITH EXCAVATOR MOUNTED MAST

SERIES NO. 201-500

REV. 8/18/2026

EQUIPMENT SPECIFICATION 201-500E

GENERAL

This specification sets forth the minimum requirements for an excavator mounted mast and diesel powered hammer for pile driving operations.

Equipment shall be new, a production model of current manufacture, and must meet all state and Federal safety and emission standards in effect at time of order.

REPRESENTATIVE SPECIFICATIONS

A Delmag D8-22 Single Acting Impact Hammer and a Vulcan Excavator Mounted Masts, with appropriate options and standard features, were used to develop these specifications and establish equivalency evaluation criteria.

Equipment of similar style, type, character, quality, features, and purpose conforming to the following detailed requirements/specifications will be considered. For evaluation purposes, bidders proposing an exception/equivalent option/feature to those specified herein, may be required to provide manufacturer/product information (catalogue sheets, detailed specifications, pictures, etc.). This information will be evaluated against the minimum requirements of this specification. Proposed submittals that are determined not to be equivalent to the established criteria will be rejected.

DELIVERY & ACCEPTANCE

Vendor shall perform a test run of each unit to verify that all features and capabilities are operating properly at time of delivery. Documentation of testing may be required prior to acceptance by the Department.

Unit(s) must be delivered completely assembled (including all components, accessories, etc.) and ready for operation without any additional preparation including, but not limited to, ensuring all fluid levels are at their full mark, fuel tank(s) is full, all necessary lubrication has been performed, etc.

Any unit delivered under this specification is subject to rejection if there is evidence of poor workmanship, by either the vendor or the original manufacturer. Noted defects and/or nonconformance findings may be corrected by the vendor. Corrections must be completed and approved by the Equipment Engineer or his representative prior to final acceptance.

Unit(s) shall be delivered "**on the ground**;" DOTD will not unload nor provide any unloading equipment to the vendor/delivery driver in order to offload the unit(s).

NOTE: The Department will have space available for equipment to be unloaded.

EACH UNIT MUST BE SUPPLIED WITH THE FOLLOWING DOCUMENTATION AT TIME OF DELIVERY:

1. Dealer's Service Policy
2. Owner's/Operator's Manual(s)
 - a. One (1) Hardcopy
 - b. One (1) Digital Copy
 - i. Acceptable Formats: PDF delivered via USB "Flash Drive", or E-mail
3. Service Manual(s)
 - a. One (1) Hardcopy
 - b. One (1) Digital Copy
 - i. Acceptable Formats: PDF delivered via USB "Flash Drive", or E-mail
4. Build Sheet(s) – as applicable
 - a. One (1) Hardcopy
 - b. Build sheets should be written in plain language (not company specific codes) and include, at a minimum, all standard & optional features of the delivered unit.

NOTE: Invoices will not be processed for payment until the unit(s) have been inspected by the Equipment Engineer or their representative and deemed in compliance with the specifications.

BID SUBMITTALS

Any additions, deletions, or variations from the specifications should be noted in the "Bidder's Exceptions" page of this specification. Exceptions that are noted to be less than a minimum requirement will not be accepted.

Any additions, deletions or variations from the manufacturer's standard published specifications should be noted on the "Bidder's Exceptions" page of this specification. Unless otherwise noted, any items appearing in the manufacturer's standard published specifications furnished by the Bidder are assumed to be included in the Bidder's submittal.

Bidder should note on their submittal any installation(s) to the equipment that will be performed by the vendor instead of the manufacturer.

Failure to note any specification exceptions, manufacturer specification alterations, and/or vendor installations prior to award may result in rejection of the equipment at the time of delivery.

THE NUMBER OF DELIVERY DAYS AFTER RECEIPT OF ORDER (ARO) MAY BE USED AS A FACTOR IN THE AWARD.

EQUIPMENT SPECIFICATIONS

NOTICE TO BIDDERS

Bidder should review the detailed "Equipment Specification" completely and respond to the compliance question at the end of each section by marking "X", in the space provided, for "Yes" or "No". Mark "Yes" to indicate that the equipment bid meets the section exactly as specified. Mark "No" if there are exceptions to any part of that section. Exceptions/deviations to any part of the specification are to be detailed on the "Bidder's Exceptions" page of this specification.

IN ORDER TO BE CONSIDERED FOR AWARD, BIDDER SHOULD RETURN THIS SPECIFICATION, COMPLETED IN FULL, WITH THEIR BID SUBMITTAL.

Note: All values listed below are minimums unless noted otherwise.

1. Pile Hammer

- 1.1. Diesel or bio-diesel fuel: 5 gallon minimum capacity
- 1.2. Lubrication system: 1.5 gallons minimum capacity
- 1.3. Pile driver shall have a minimum piston weight of 1,750 lbs.
- 1.4. Energy per blow in a range of 9,000 - 18,000 ft.-lbs.
- 1.5. Blow rate in range of 30 – 50 blows/minute
- 1.6. Heavy duty trip system
- 1.7. Operating weight of pile driver with tripping device to be at a minimum of 5,500 lbs.
- 1.8. Drive Cap System
 - 1.8.1. Primary Driving Head to be 21" consisting of striker plate, cushion section, drive cap base
 - 1.8.2. Timber Pile insert capable of driving timber piles up to 16" diameter
 - 1.8.3. H Pile insert capable of driving H-beam piles of 10", 12" or 14"
 - 1.8.4. Sheet Pile insert
- 1.9. Compatible with Vulcan excavator mounted mast system

Comply: ____Yes ____No

2. Mast

- 2.1. Mast system capable of mounting to an excavator boom with a pin height of 20'
- 2.2. Mast System to be 60': Base section to be 45' with additional 15' section that can be added to base section
- 2.3. Mast weight to be 8500 lbs.
- 2.4. Mast Pile and Hammer lifting system
 - 2.4.1. Mast hammer winch capable of lifting 15,000 lbs.
 - 2.4.2. Mast pile winch capable of lifting 8,000 lbs.
 - 2.4.3. Hammer and Pile winch to be powered by hydraulic system of Excavator
 - 2.4.4. Hydraulic piping and hoses to be installed on excavator
 - 2.4.5. Hydraulic winch controls to be mounted in excavator cab clear of all other excavator controls

Comply: ____Yes ____No

EQUIPMENT SPECIFICATIONS

3. Training/Set Up

- 3.1. Vendor to install complete Mast and Pile Driver on a customer supplied Volvo EC370 tracked excavator
- 3.2. Two (2) days operator training to be provided at time and location chosen by the Department of Transportation and Development.

Comply: ____ Yes ____ No

BIDDER'S EXCEPTIONS

Instructions: Bidder should note all exceptions in space provided below. List the detail number from the aforementioned specification in the column to the left and the exception in the column to the right. Responses may be typed or hand-written. Handwritten responses must be legible. If additional space is needed, please print a duplicate copy of this sheet. "Bidder's Exceptions" page(s) should be returned with the bid submittal.

Examples:

1.6	Engine has 325 horsepower
1.18.3	Batteries have 2000 CCA combined.
2.2.8	Crossmembers are 4" channel on 12" centers.

**Spec./Detail
Reference**

Exception
