State of Illinois

Department of Transportation

Bureau of Business Services

**Specifications and Questionnaire for 8,000 lbs., Diesel Powered, Pneumatic Tired, Material-Handling, Forklift**

November 2017

This specification and questionnaire covers a hydraulic, diesel powered, material handling forklift to be used by the Department of Transportation Division of Highways Operations forces. In an effort to improve parts and service availability and increase tool life, the Department of Transportation is specifying units and accessories as outlined below.

Each bidder shall submit with his bid **two sets** of descriptive literature and specifications describing **all** the **equipment** and **options** proposed. This information shall be clearly marked to indicate the make, model, and accessories proposed to be furnished. If this information is not furnished, the bid may not be considered.

Bidders quoting on specified equipment must submit with their bid written proof of the following:

1. The manufacturer of the equipment proposed has been actively involved in the manufacture of the equipment called for in the **Bid** for a period of not less than 5 years.
2. Parts and service for the equipment proposed are readily available within the State of Illinois.

It is the responsibility of each bidder to complete and return this questionnaire with the bid. If the questionnaire is returned incomplete or is not returned, the bid may not be considered.

**Bidders are advised to carefully read these specifications as changes have been made since the last solicitation issue.**

**Unless otherwise specified, the proposed equipment shall be complete in all parts and ready for immediate use upon delivery.**

|  |
| --- |
| **Proposed With This Bid:** |
| Make: |       |
| Model: |       |
| Manufactured By: |       |
| Address: |       |
|  |       |
|  |       |
| Telephone: |       |
| Contact Name: |       |
| Email: |       |

**All forklifts shall include the following standard or optional accessories and equipment:**

**Chassis:**

The forklift shall be a four-wheel design, with solid pneumatic tires front and rear.

Complies: Yes [ ]  No [ ]

The forklift equipped with all standard equipment, must provide the titled lifting capacity @ 24” load center.

Complies: Yes [ ]  No [ ]

Provide the forklift capacity equipped per specification with requested options at 24” load center.

|  |  |  |
| --- | --- | --- |
| Rated capacity @ 24” load center: |       | Pounds |

The operator’s station shall be a sit down style with automotive type steering wheel and lever actuated controls.

Complies: Yes [ ]  No [ ]

**Engine:**

The engine shall be a current production, fuel injected, liquid cooled diesel and meet the following:

The engine shall have a minimum SAE gross horsepower rating of 74 H.P. at governed RPM.

Complies: Yes [ ]  No [ ]

The engine shall be equipped with a cold weather starting aid.

Complies: Yes [ ]  No [ ]

Component provided:

|  |  |
| --- | --- |
| Make: |       |
| Model: |       |
| Number of cylinders: |       |
| Horsepower @ governed RPM: |       |
| Rated H.P. (Gross) |       |

**Fuel system:**

The fuel system shall be diesel and clearly labeled as such.

Complies: Yes [ ]  No [ ]

The fuel tank shall be sized properly to manufacturer’s specifications for engine supplied with unit.

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| --- | --- | --- |
| Tank capacity: |       | Gallons |

**Cooling System:**

Manufacturer’s standard cooling system with extended life antifreeze rated to -30°F.

Complies: Yes [ ]  No [ ]

**Transmission:**

The transmission shall be an automatic with forward, neutral and reverse. It shall be controlled by hand lever or foot control. The backup alarm shall engage when reverse is selected.

Complies: Yes [ ]  No [ ]

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| If no, describe: |       |

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**Hydraulic System:**

The power for the mast shall be provided by a hydraulic pump system. Gear type pumps with load sensing valves or load sensing pumps are acceptable.

Complies: Yes [ ]  No [ ]

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| Pump type: |       |
| Flow rating: |       |

The hydraulic oil reservoir capacity shall be as required by the manufacturer.

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| --- | --- | --- |
| Reservoir capacity: |       | gallons |

The hydraulic system shall include filtration to remove debris and water.

Complies: Yes [ ]  No [ ]

**Brakes:**

Manufacturer’s standard hydraulic wet disc brake system shall be provided.

Complies: Yes [ ]  No [ ]

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| If no, describe: |       |

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|  |       |

The unit shall include a mechanical parking brake.

Complies: Yes [ ]  No [ ]

**Steering:**

Manufacturer’s standard hydrostatic power steering shall be provided.

Complies: Yes [ ]  No [ ]

**Operators Station:**

**Controls and Accessories:**

The operator’s position shall include the following items:

1. ROPS (roll over protection system) with overhead guard.
2. Adjustable suspension seat with safety lap belt.
3. Tilt adjustable steering wheel.
4. Anti slip matting.
5. Horn button
6. Rear view mirror

Complies: Yes [ ]  No [ ]

The rain guard shall be manufacturer approved clear polycarbonate with hardware to mount on ROPS.

Complies: Yes [ ]  No [ ]

**Controls:**

The forklift shall include lever and/or foot controls to provide the following:

1. Mast/Fork elevation
2. Carriage tilt - forward and rearward
3. Hydraulic side shift
4. Hydraulic “in-and-out” fork position control
5. Transmission gear selection
6. Braking
7. Parking brake
8. Lighting

Complies: Yes [ ]  No [ ]

The following monitoring systems shall be provided using an information center, lights, or audible alarm:

1. Hour meter.
2. Fuel gauge.
3. Alternator charge indicator.
4. Coolant temperature.
5. Low engine oil pressure.
6. Parking brake alarm.
7. Backup alarm.
8. Check engine or system indicator.

Complies: Yes [ ]  No [ ]

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| If no, describe: |       |

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**Electrical System:**

The electrical system shall be 12 Volt with an alternator and integral voltage regulator as recommended by the manufacturer.

Complies: Yes [ ]  No [ ]

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| Alternator rating: |       | amps |

The battery shall be rated for a minimum 500 CCA at 0°F.

Complies: Yes [ ]  No [ ]

**Lighting:**

The unit shall be equipped with front and rear lighting for night operations.

Complies: Yes [ ]  No [ ]

The unit shall include an LED warning strobe system.

Complies: Yes [ ]  No [ ]

**Tires and Wheels:**

The dual front tires shall be OEM or manufacturer approved wheel and tires consisting of four (4) pneumatic front tires.

Complies: Yes [ ]  No [ ]

The front tires shall be pneumatic, approximately 250 x 15 – 20 ply tires rated to the machines capacity.

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| --- | --- |
| Tire size: |       |
| Ply rating: |       | Tread: |       |
| Manufacturer: |       |

Rear tires shall be pneumatic, approximately 7.00 x 12 - 14 ply rating.

|  |  |
| --- | --- |
| Tire size: |       |
| Ply rating: |       | Tread: |       |
| Manufacturer: |       |

The wheels shall be heavy duty steel, painted or powder coated manufacturer’s standard color.

Complies: Yes [ ]  No [ ]

**Mast:**

The mast shall be a **three (3)** stage, see-through style with no obstructions between the rails, and overall extended minimum height of 206“ to the top of the fork.

Complies: Yes [ ]  No [ ]

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| --- | --- | --- |
| Extended height: |       | inches |
| Extended capacity: |       | Lbs. |

The mast shall be a maximum 98” high when fully retracted.

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| Retracted height: |       | inches |
| If no, describe: |       |

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|  |       |

The mast shall tilt a minimum of 6 degrees forward and 6 degrees back.

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| --- | --- | --- |
| Forward tilt: |       | Degrees |
| Backward tilt: |       | Degrees |

The hydraulic side shift shall be a built-in feature of the machine.

***Note:*** If not available from the factory, may be added by the dealer, prior to delivery.

Complies: Yes [ ]  No [ ]

The forklift tines shall provide an operator controlled “in-and-out” feature, control from the operator’s seat. The forks shall be approximately 2”x5”x48” in size and rated a minimum 8,000 lbs. capacity.

***Note:*** If not available from the factory, may be added by the dealer, prior to delivery.

Complies: Yes [ ]  No [ ]

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| --- | --- |
| Tine type: |       |
| Tine size: |       |
| Tine capacity: |       | Pounds |

The outside to outside width of the forks shall be no less than 43.5”.

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| --- | --- | --- |
| Outside to outside measurement: |       | Inches |
| If no, describe: |       |  |

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The load backrest shall be approximately 48” high with the capability of preventing materials from dropping on the operator.

Complies: Yes [ ]  No [ ]

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| Backrest height: |       | Inches |

**Paint/Finish:**

All exterior surfaces normally painted shall be cleaned, prepped, painted or powder coated manufacturer’s standard color.

Complies: Yes [ ]  No [ ]

**General:**

Three copies of all operators’ manuals, parts lists and warranty information shall be provided at the time of delivery.

Complies: Yes [ ]  No [ ]

One copy of the Service Manual for each machine shall be provided upon delivery.

Complies: Yes [ ]  No [ ]

**Training:**

The successful bidder shall supply as a part of this bid a written plan for the training of Department of Transportation personnel. Training shall cover routine service and minor repair. A second phase shall include the training of selected individuals as operators. The length of the operator’s training shall be a minimum of two (2) working days but may be extended by the receiving district if deemed necessary.

Complies: Yes [ ]  No [ ]

A training video covering the operation of this equipment shall be provided with the training.

Complies: Yes [ ]  No [ ]

**Requirements Covering Items Detailed Above:**

All equipment cataloged as standard shall be furnished and in place and shall be included in the purchase price of the unit. Any parts, tools, and/or accessories not specifically called for but required for proper operation shall be provided.

Complies: Yes [ ]  No [ ]

The component parts of the unit shall be of proper size and design to safely withstand maximum stresses imposed by a capacity load, and the manufacturer's rated loads for all component parts shall **not** be exceeded when the unit is so loaded.

Complies: Yes [ ]  No [ ]

Full coverage warranty for a minimum 12 months shall be provided for all components and their installation. The bidder shall attach a copy of warranty with the bid.

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| --- | --- |
| Describe warranty: |       |
|       |  |

**Delivery:**

This machine is to be delivered in first-class operating condition with acceptance subject to Department of Transportation approval.

Complies: Yes [ ]  No [ ]

**Bid Package:**

Bidders will need to send two copies of each of the following with their Bid.

1. Bid Document
2. Specification Questionnaire
3. Descriptive Literature
4. Board of Elections Certificate

Complies: Yes [ ]  No [ ]

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| --- | --- |
| If NO to any portion, explain: |       |
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|       |

**IDOT Contact:**

In regards to this specification. Sales calls are prohibited.

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