State of Illinois

Department of Transportation

Bureau of Business Services

**Specifications and Questionnaire for a Stationary, Heavy-Duty, Cold, Hot Water and Steam High-Pressure Washer**

# February 2018

This specification and questionnaire covers a heavy-duty, cold, hot water and steam high pressure washer for use by Illinois Department of Transportation for the cleaning field equipment.

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:

* The manufacturer of the equipment proposed has been actively involved in the manufacture of the equipment called for in the **Proposal** for a period of not less than 5 years.
* 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.

**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: |       |
| Installation By: |       |
| Address: |       |
|  |       |
|  |       |
| Telephone: |       |
| Contact Name: |       |
| Email: |       |

**Scope of work:**

The proposals submitted must include equipment and components, that meet or exceed these requirements. The quality of installation must also comply with these specifications as well as the local building code and construction code requirements. It will be incumbent on the prospective bidders to visit the locations to determine both utility availability, location, and adequacy.

**To arrange a site visit please refer to the contact info contained in the individual line items under 2.1.2** **of the Contract section of the attached Invitation for Bid (IFB).**

The unit shall be a compact and an enclosed assembly on a sturdy stationary frame using natural gas or propane for a heating source depending on the availability of the location.

Complies: Yes [ ]  No [ ]

The unit shall supply high pressure cold, hot, and steam washing/cleaning functions.

Complies: Yes [ ]  No [ ]

The unit shall be delivered fully assembled and ready for immediate use upon installation.

Complies: Yes [ ]  No [ ]

**Water Pump:**

A positive displacement triplex pump or equal that provides both adjustable flow and pressure shall be provided.

Complies: Yes [ ]  No [ ]

Component:

|  |  |
| --- | --- |
| Make: |       |
| Model: |       |

The pump shall meet the following flow and pressure requirements:

1. Produce a minimum flow rate of 1 gal. per minute.
2. Produce a maximum flow rate of 4 gal. per minute.
3. Pressure adjustable approximately from 100 psi minimum to 3,000 psi minimum pressure.

|  |  |  |  |
| --- | --- | --- | --- |
| Flow adjustment from: |       | to |       |
| Pressure adjustment from: |       | to |       |

|  |  |
| --- | --- |
| If no, describe: |       |
|       |

**Electric Motor:**

The washer pump shall be driven by a minimum 6 H.P., 60 Hz, single or three phase electric motor. Voltage may vary due to availability at the individual location of installation.

Complies: Yes [ ]  No [ ]

|  |  |  |  |
| --- | --- | --- | --- |
| H.P. |       | HZ: |       |

|  |  |
| --- | --- |
| Voltage: |       |
| Rated amperage: |       |

The motor shall include a starting switch and a device to protect against overload and low voltage.

Complies: Yes [ ]  No [ ]

**Burner and Heater:**

The unit shall be equipped with a natural gas (or propane) fired burner and shall be controlled automatically by a thermostat.

Complies: Yes [ ]  No [ ]

The burner shall include an electronic auto pilot style ignition system.

Complies: Yes [ ]  No [ ]

All required safety features for this type of equipment shall be installed and operating.

Shall include, but not limited to:

High Temperature Protection

Over Pressure Protection

Low Water Protection

Complies: Yes [ ]  No [ ]

The heat exchanger coil furnished shall provide adjustable temperature and be constructed of heavy duty schedule 80 coiled piping. The unit shall be capable of cold, hot, and steam water functions. It shall include an infinitely adjustable thermostat and switching mode from hot water to steam function.

Complies: Yes [ ]  No [ ]

|  |  |  |  |
| --- | --- | --- | --- |
| Hot water temperature range: |       | to |       |
| Steam temperature range: |       | to |       |

|  |  |
| --- | --- |
| Describe controls: |       |
|       |

The heat exchanger coil shall be protected with a pressure relief set to discharge in accordance with the manufacture’s rating and recommendations.

Complies: Yes [ ]  No [ ]

The heat exchanger coil may be vertical or horizontal with adequate support provided by the frame of the cleaner. Minimum coil material shall be schedule 80 tubing.

Complies: Yes [ ]  No [ ]

|  |  |
| --- | --- |
| Describe heat exchanger coil: |       |

**Solution Dispensing System:**

The unit shall include a liquid solution draw system from a reservoir. The system shall be compatible with soap or degreasing type solutions.

Complies: Yes [ ]  No [ ]

|  |  |
| --- | --- |
| Describe solution draw and adjustment: |       |
|       |

**Cabinet/Enclosure:**

The unit shall be constructed of corrosion resistant Stainless steel or powder coated steel. Powder coating shall be manufacturer’s standard color.

Complies: Yes [ ]  No [ ]

|  |  |
| --- | --- |
| Describe construction: |       |
|       |

**Mounting:**

The unit shall be constructed so that it can be stationary mounted above the floor level, out of the “over-spray” area.

Complies: Yes [ ]  No [ ]

**Controls:**

Controls for the following shall be located and easily accessible on the body of the machine:

1. Water volume
2. Water pressure
3. Water temperature
4. Solution metering
5. Mode selection

Complies: Yes [ ]  No [ ]

***Note:*** The control system shall feature a timed delay shut off feature in case operator would step away from unit and leave it unattended.

Controls for the following shall be placed in a remote location easily accessible to the operator:

1. Auto start/stop
2. Mode selection
3. Solution control

Complies: Yes [ ]  No [ ]

**Cleaning Gun:**

The washer shall include two (2) full swivel, quick disconnect type, cleaning guns with trigger type “ON/OFF” control. Each gun shall be insulated, fatigue free, trigger type, and equipped with adjustable nozzles for various spray patterns and functions.

Complies: Yes [ ]  No [ ]

|  |  |
| --- | --- |
| Describe guns: |       |
|       |

The pressure washer shall be equipped with two hoses, one a minimum of 50’ feet in length and the other a minimum of 100’ in length. Both must be heavy-duty, high-pressure hoses with a working pressure rating exceeding the system operating pressure. The unit shall include two (2) hose reels to store the hoses when not in use.

Complies: Yes [ ]  No [ ]

|  |  |
| --- | --- |
| Hose length #1: |       |
| Hose length #2: |       |

**Installation/Delivery:**

The washer shall be completely installed in the Illinois Department of Transportation facilities indicated in 2.1.2 of the Contract section of the attached Invitation for Bid (IFB). An outline of installation requirements are as follows:

1. Natural gas, water, and electrical service will be available at or near the point of installation.
2. Connection to these utilities will be the responsibility of the successful bidder. The connections shall be performed in a safe, competent, professional manner complying with state and local codes.
3. Burner venting is the responsibility of the successful bidder. All vent piping, etc., shall be installed to meet state and local codes and provide for the safe operation of the washer.
4. Questions concerning the installation and coordination for access during the installation shall be made with the contact name listed in the “delivery information” field. This individual will be responsible for the acceptance of the installation upon completion.
5. Washer units shall be elevated to provide clear floor space and to protect the unit. All supports and bracing shall be supplied and installed by the successful bidder.
6. All work on the installation shall be performed during normal Illinois Department of Transportation working hours.
7. If this installation is a replacement, the existing framework may be re-used provided it is deemed substantial and provides the required support of the unit procured by this contract. Unless stipulated by the Department of Transportation contact, no unit is to be floor mounted.
8. Final approval of the installation(s) shall be made by the contact individual prior to payment.

This machine is to be delivered in first-class operating condition with acceptance subject to Department of Transportation inspection and approval. The successful bidder shall include the removal of the existing unit which is to be retained by IDOT, and complete installation of the new unit. Any new required roof openings must be made to maintain the warranty by the roof manufacturer.

Complies: Yes [ ]  No [ ]

**General:**

Three copies of all operator's manuals, parts lists, and warranty information shall be provided at time of delivery to each district receiving one or more units.

Complies: Yes [ ]  No [ ]

***Note:*** The manuals, parts lists, and service or shop manuals listed above may be furnished on DVD in lieu of paper.

Instruction by qualified factory or dealer personnel covering operation and maintenance of the machine shall be provided at time of delivery.

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 components shall not be exceeded.

Complies: Yes [ ]  No [ ]

Standard tool kits shall be supplied.

Complies: Yes [ ]  No [ ]

|  |  |
| --- | --- |
| If NO, explain: |       |
|       |

Manufacturer's standard warranty shall be provided. This shall include at a minimum, one (1) year no charge service for the washer and all parts installed. **Bidder shall attach copy of warranty with bid*.***..

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

Since the continuous operation of this equipment is of the utmost importance and sometimes of an emergency nature, it is necessary that the successful bidder be in a position to render prompt parts and service. Review of the bidder's ability to provide prompt parts and service within the State of Illinois will be considered in the award.

List of parts and service locations:

|  |
| --- |
|       |
|       |
|       |

The vendor or manufacturer of the unit which is seriously considered for award shall, at the request of the State of Illinois, demonstrate this equipment at a location chosen by the state and in the presence of authorized state personnel to prove out any features which may be in question.

Complies: Yes [ ]  No [ ]

**Bid Package:**

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

1. Specification Questionnaire
2. Descriptive Literature

Complies: Yes [ ]  No [ ]

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