



State of New Jersey

DEPARTMENT OF THE TREASURY
DIVISION OF PURCHASE AND PROPERTY
PURCHASE BUREAU
P.O. BOX 230
TRENTON, NEW JERSEY 08625-0230

JON S. CORZINE
Governor

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State Treasurer

STATE OF NEW JERSEY

REQUEST FOR INFORMATION (RFI) VACUUMS AND FLOOR MACHINES

November 7, 2008

The State of New Jersey, Department of the Treasury, Division of Purchase and Property is requesting responses from qualified vendors regarding the purchase of vacuums and floor machines for various State Agencies and Cooperative Purchasing Participants.

Interested vendors are requested to review the following technical specifications and provide all information listed under each type of vacuum cleaner and floor machine.

NOTE: This RFI is issued solely for information and planning purposes and does not constitute a solicitation. Responses to this RFI are not offers and cannot be accepted by the State to formal binding contract. Respondents are solely responsible for all expenses associated with this RFI. Responses to this RFI will not be returned. Respondents will not be notified of the results of the State's review.

This information will be used to assist the State in preparing a Request for Proposal (RFP) for this commodity.

Due Date: Wednesday, December 3, 2009
Time Due: 5:00 PM
Location: NJ Department of the Treasury
Division of Purchase and Property
33 West State Street
Trenton, NJ 08625
Attention: Jackie Kemery

Please mark "RFI for Vacuums and Floor Machines" on the front of your return responses.

We look forward to receiving your responses.

Sincerely,

Jackie Kemery
Administrative Analyst 1 Procurement
Division of Purchase and Property

The State requires prospective bidders **MUST** meet the following generic specification to supply the following equipment:

1. UPRIGHT VACUUM (HIGH FILTRATION)

- Body: Durable all-metal or plastic construction
- Motor: 8 amp, direct air with double row ball bearing brush
- Handle: Metal or plastic, 3 position with cord storage hooks
- Bag: Heavy-Duty cloth or vinyl for use with disposable high filtration HEPA-type paper bag. **NOTE: Bidder is to supply five bags with delivery of equipment.**
- Nozzle width: 14" wide cleaning path
- Bumper: Wrap around, non marking
- Wheels: Non marking urethane
- Height Adjustment: Screw adjustment for all types of carpet
- Cord: 50' 3-wire, grounded, UL approved
- Power Switch: Heavy duty handle mounted
- Attachments to be supplied with purchase: Hose, Hose connector adapter, Wands, Crevice tool, Round dusting brush and Upholstery tool.
- Air Volume: 120 cfm
- Operators Manual: A detailed instruction and maintenance manual is to be supplied with the equipment fully outlining proper operation and maintenance procedures including illustrated parts listings.
- Drive Belts: **Bidder is to supply 3 replacement belts drives with the purchase of the equipment.**

Does your product meet the above specifications: ____ Yes ____ No

If not list your product deviations below:

- ❖ _____
- ❖ _____
- ❖ _____
- ❖ _____

2. BACKPAK VACUUM

- Body: Rotational molded, high density, impact resistant polyethylene. 23.5" length top to bottom minimum.
- Bumper Protection: A soft bumper affixed to the bottom of the vacuum for all and furniture protections.
- Filtration: 4-level filtration in include:
 - a. Resusable Micro fiber media
 - b. Filter with integrated rubber seal
 - c. Dome filter with replaceable media filter (covering motor)
 - d. Sound reducing foam and foam air diffuser for exhaust.
- Sound Level: 68 decibels

- Motor: 2 stage, single speed flow through mounted at the bottom of the body
 - a. 8 amp
 - b. 91" water lift.
 - c. 95 CFM airflow
 - d. 928 watts/110-120 volts, 50-60 hz.
- Backpak Assembly: Ventilated two-piece unbreakable frame with padded, adjustable shoulder and sternum straps to better distribute weight. Assembly shall have accessory tool loops attached to padded waist belt.
- Power Cord: 50', 16/3 gauge with molded plug.
- Power Switch: Heavy-duty pole rocker type mounted in a switch box.
- Vacuum Hose: 56" long, 1.5 diameter, static dissipating with swivel cuff and swivel elbow.
- Capacity: Top loading 10 quart.
- Accessories to be included with the purchase of the equipment: Telescopic wand (24" to 40") and extension wand, multi surface floor tool, upholstery tool, crevice tool, round dusting tool.
- UL Listed
- Operators Manual: A detailed instruction and maintenance manual is to be supplied with the equipment fully outlining proper operation and maintenance procedures including illustrated parts listings.

Does your product meet the above specifications: ____ Yes ____ No

If not list your product deviations below:

- ❖ _____
- ❖ _____
- ❖ _____
- ❖ _____

3. WET/DRY INDUSTRIAL VACUUM

- Capacity: 15 to 18 gallon tank
- Tank: Shall be stainless steel or polyethylene construction with 24" front mounted squeegee assembly with foot peel operations and/or have capability, and be supplied with, 9' accessory hose, crevice tool, wet/dry floor tools, steel wand(s) and dry filter.
- Motor: 2 stage, 110/115 volt, 60 cycle continuous duty bypass with 100" of water lift and float shut-off to prevent overfilling.
- Cord: 50' - 3 wire
- Wheels: 28" to 10" non-marking, stair climbing rear wheels and 24" minimum non-marking front wheels
- Operators Manual: A detailed instruction and maintenance manual is to be supplied with the equipment fully outlining proper operation and maintenance procedures including illustrated parts listings.

Does your product meet the above specifications: ____ Yes ____ No

If not list your product deviations below:

- ❖ _____
- ❖ _____
- ❖ _____
- ❖ _____

4. CANISTER VACUUM

- Bag Capacity: 1.5 gallons
- Body Construction: Molded Plastic or Stainless Steel
- Cleaning Width: 11”
- Motor:
 - a. 115 volts
 - b. Air Flow 103 cfm
 - c. Watts: 975
- Filtration: High or HEPA
- Sound Level: 65 dba
- Cord: 32’
- Sealed Water Lift: 89”
- Accessories to be included with the purchase of the equipment: Telescopic wand, 8’ foot hose, dust tool, upholstery tool, and crevice tool
- UL Listed
- Operators Manual: A detailed instruction and maintenance manual is to be supplied with the equipment fully outlining proper operation and maintenance procedures including illustrated parts listings.

Does your product meet the above specifications: ____ Yes ____ No

If not list your product deviations below:

- ❖ _____
- ❖ _____
- ❖ _____
- ❖ _____

5. FLOOR POLISHING & SCRUBBING MACHINES – SINGLE BRUSH

All machines in this category MUST meet the minimum generic specifications listed below:

DESIGN & CONSTRUCTION:

The machine described herein shall be of the latest design, convenient to operate and adequate for the purpose intended. The machine shall be of rugged construction capable of withstanding heavy duty commercial use.

ELECTRICAL REQUIREMENTS:

The machine shall operate on a 115 V.A.C.; 60 cycle, single phase power supply. Machine operation shall not be affected by a voltage fluctuation +/- 5% of specified voltage.

MOTOR:

The motor shall be a high torque, continuous duty, capacitor start type of a rating as listed in Table 1 below.

BRUSH DRIVE:

The brush drive shall be a fully enclosed, quiet running positive drive, high torque, speed reducer type transmission which requires no maintenance. All rotating parts shall be mounted in permanently lubricated ball and/or roller bearings.

WIRING:

The power cord shall be minimum 50' length, Type "S" or "SR", 3 conductor style, of the wire gauge size listed in Table 1, complete with 3 prong grounding type plug. Means shall be provided for coiling cord on the handle.

SWITCH:

Switch for starting and stopping the motor shall be quick break type and shall operate easily and reliably through an insulated, dual lever (operable by either hand) conveniently located on the operating handle. The switch shall automatically open the motor circuit immediately on release of the handle by the operator.

OPERATING HANDLE:

A "T" type operating handle shall be provided with suitable, non-metallic handgrip. Means shall be provided for securing the handle in various convenient operating positions and in an upright position for storage.

WHEELS:

The machine shall be mounted on two (2) wheels with a running surface of non-marking, resilient material and shall be of size as listed in Table 1. The equipment shall be designed and constructed to permit convenient transport of the machine on floors and stairs with the

brush off the floor and still allow the full weight of the machine to be applied to the brush during the scrubbing operation.

BRUSH:

Each machine shall be furnished with a polishing brush or a scrubbing brush as stated on the Purchase Order. Brush assembly shall be easily removable and replaceable without the use of tools.

BUMPER:

A replacement non-marking rubber or vinyl plastic bumper shall be securely attached to that portion of the apron flange which may contact baseboards, walls or furniture. The method of holding the bumper in place shall be such that it cannot be readily dislodged during machine operation.

SIZES:

The State intends to award machines in the following sizes:

<u>Type</u>	<u>Overall Diameter of Brush (Normal) Inch</u>	<u>Brush Speed</u>	<u>Continuous Rating of Motor (Minimum) H.P.</u>	<u>Size of Cord Awg. No.</u>	<u>Wgt. Of Machine with one Brush Lbs. (Minimum)</u>	<u>Wheel Diameter (Minimum) Inches</u>
Standard	13	150 to 180 RPM	1/3	14	58	2-1/2
Standard	15-17	150 to 180 RPM	3/4	14	85	3-1/2
Standard /Heavy Duty	19-21	150 to 180 RPM	1	14	95	4-1/2
Heavy Duty	22-24	150 to 180 RPM	1-1/2	12	117	4
Polishing Only	16-18	250 to 350 RPM	1	14	100	4-1/2
Two-Speed	20	175 to 350 RPM	1-1/2	14	103	4-1/2
Variable Speed	20-21	160 to 350 RFP	1-1/2	14	90	4

Does your product meet the above specifications: ___ Yes ___ No

If not list your product deviations below:

- ❖ _____
- ❖ _____
- ❖ _____
- ❖ _____

6. ULTRA-HIGH SPEED (BUFFER/BURNISHER):

This machine MUST meet the minimum generic specifications listed below:

DESIGN & CONSTRUCTION:

The machine described herein shall be of the latest design, convenient to operate and adequate for the purpose intended. The machine shall be of rugged construction capable of withstanding heavy duty commercial use.

ELECTRICAL REQUIREMENTS:

The machine shall operate on a 115 V.A.C.; 60 cycle, single phase power supply. Machine operation shall not be affected by a voltage fluctuation +/- 5% of specified voltage.

MOTOR:

The motor shall be minimum 1-1/2 hp., capacitor start/capacitor run type or rectified D.C. type.

BRUSH DRIVE:

The brush drive shall be a fully enclosed, quiet running positive drive, high torque, speed reducer type transmission which requires no maintenance. All rotating parts shall be mounted in permanently lubricated ball and/or roller bearings.

WIRING:

The power cord shall be minimum 50' length, Type "S" or "SR", 3 conductor style, of the wire gauge size listed in Table 1, complete with 3 prong grounding type plug. Means shall be provided for coiling cord on the handle.

SWITCH:

Switch for starting and stopping the motor shall be quick break type and shall operate easily and reliably through an insulated, dual lever (operable by either hand) conveniently located on the operating handle. The switch shall automatically open the motor circuit immediately on release of the handle by the operator.

OPERATING HANDLE:

A "T" type operating handle shall be provided with suitable, non-metallic handgrip. Means shall be provided for securing the handle in various convenient operating positions and in an upright position for storage.

WHEELS:

The machine shall be mounted on two (2) wheels with a running surface of non-marking, resilient material and shall be of size as listed below. The equipment shall be designed and constructed to permit convenient transport of the machine on floors and stairs with the brush

off the floor and still allow the full weight of the machine to be applied to the brush during the scrubbing operation.

Transport wheels shall be minimum 4" diameter, so located to permit operator control of pad pressure on the floor.

BRUSH:

Each machine shall be furnished with a polishing brush or a scrubbing brush. Pad assembly shall be easily removable and replaceable without the use of tools.

PAD:

The pad shall be belt driven at a speed of at least 1,000 RPM but no more than 1,500 RPM.

BUMPER:

A replacement non-marking rubber or vinyl plastic bumper shall be securely attached to that portion of the apron flange which may contact baseboards, walls or furniture. The method of holding the bumper in place shall be such that it cannot be readily dislodged during machine operation.

Does your product meet the above specifications: ___ Yes ___ No

If not list your product deviations below:

- ❖ _____
- ❖ _____
- ❖ _____
- ❖ _____

7. SUPER/ULTRA-HIGH SPEED (BURNISHER):

This machine **MUST** meet the minimum generic specifications listed below:

DESIGN & CONSTRUCTION:

The machine described herein shall be of the latest design, convenient to operate and adequate for the purpose intended. The machine shall be of rugged construction capable of withstanding heavy duty commercial use.

ELECTRICAL REQUIREMENTS:

The machine shall operate on a 115 V.A.C.; 60 cycle, single phase power supply. Machine operation shall not be affected by a voltage fluctuation +/- 5% of specified voltage.

MOTOR:

The motor shall be a high torque, continuous duty, capacitor start type of a rating as listed in Table 1 below.

BRUSH DRIVE:

The brush drive shall be a fully enclosed, quiet running positive drive, high torque, speed reducer type transmission which requires no maintenance. All rotating parts shall be mounted in permanently lubricated ball and/or roller bearings.

WIRING:

The power cord shall be minimum 50' length, Type "S" or "SR", 3 conductor style, of the wire gauge size listed in Table 1, complete with 3 prong grounding type plug. Means shall be provided for coiling cord on the handle.

SWITCH:

Switch for starting and stopping the motor shall be quick break type and shall operate easily and reliably through an insulated, dual lever (operable by either hand) conveniently located on the operating handle. The switch shall automatically open the motor circuit immediately on release of the handle by the operator.

OPERATING HANDLE:

A "T" type operating handle shall be provided with suitable, non-metallic handgrip. Means shall be provided for securing the handle in various convenient operating positions and in an upright position for storage.

WHEELS:

The machine shall be mounted on two (2) wheels with a running surface of non-marking, resilient material and shall be of size as listed in Table 1. The equipment shall be designed and constructed to permit convenient transport of the machine on floors and stairs with the brush off the floor and still allow the full weight of the machine to be applied to the brush during the scrubbing operation.

BRUSH:

Each machine shall be furnished with a polishing brush or a scrubbing brush as stated on the Purchase Order. Brush assembly shall be easily removable and replaceable without the use of tools.

PAD:

Pad shall be driven at a minimum speed of 2,000 RPM.

BUMPER:

A replacement non-marking rubber or vinyl plastic bumper shall be securely attached to that portion of the apron flange which may contact baseboards, walls or furniture. The method

of holding the bumper in place shall be such that it cannot be readily dislodged during machine operation.

Does your product meet the above specifications: ___ Yes ___ No

If not list your product deviations below:

- ❖ _____
- ❖ _____
- ❖ _____
- ❖ _____

8. ULTRA HIGH SPEED BURNISHER WITH DUST COLLECTION SYSTEM:

This machine MUST meet the minimum generic specifications listed below:

DESIGN & CONSTRUCTION:

The machine described herein shall be of the latest design, convenient to operate and adequate for the purpose intended. The machine shall be of rugged construction capable of withstanding heavy duty commercial use.

ELECTRICAL REQUIREMENTS:

The machine shall operate on a 115 V.A.C.; 60 cycle, single phase power supply. Machine operation shall not be affected by a voltage fluctuation +/- 5% of specified voltage.

MOTOR:

The motor shall be a high torque, continuous duty, capacitor start type of a rating as listed in Table 1 below.

BRUSH DRIVE:

The brush drive shall be a fully enclosed, quiet running positive drive, high torque, speed reducer type transmission which requires no maintenance. All rotating parts shall be mounted in permanently lubricated ball and/or roller bearings.

WIRING:

The power cord shall be minimum 50' length, Type "S" or "SR", 3 conductor style, of the wire gauge size listed in Table 1, complete with 3 prong grounding type plug. Means shall be provided for coiling cord on the handle.

SWITCH:

Switch for starting and stopping the motor shall be quick break type and shall operate easily and reliably through an insulated, dual lever (operable by either hand) conveniently

located on the operating handle. The switch shall automatically open the motor circuit immediately on release of the handle by the operator.

OPERATING HANDLE:

A "T" type operating handle shall be provided with suitable, non-metallic handgrip. Means shall be provided for securing the handle in various convenient operating positions and in an upright position for storage.

WHEELS:

The machine shall be mounted on two (2) wheels with a running surface of non-marking, resilient material and shall be of size as listed in Table 1. The equipment shall be designed and constructed to permit convenient transport of the machine on floors and stairs with the brush off the floor and still allow the full weight of the machine to be applied to the brush during the scrubbing operation.

BRUSH:

Each machine shall be furnished with a polishing brush or a scrubbing brush as stated on the Purchase Order. Brush assembly shall be easily removable and replaceable without the use of tools.

PAD:

Pad shall be driven at a minimum speed of 1,500 RPM.

DUST COLLECTION:

The machine must have a dust collection system.

BUMPER:

A replacement non-marking rubber or vinyl plastic bumper shall be securely attached to that portion of the apron flange which may contact baseboards, walls or furniture. The method of holding the bumper in place shall be such that it cannot be readily dislodged during machine operation.

Does your product meet the above specifications: ___ Yes ___ No

If not list your product deviations below:

- ❖ _____
- ❖ _____
- ❖ _____
- ❖ _____

9. AUTOMATIC SCRUBBING MACHINE, FLOOR, BATTERY POWERED

All machines in this category MUST meet the minimum generic specifications listed below:

DESIGN AND CONSTRUCTION:

The machine shall be battery powered, self propelled pedestrian type with scrubbing brush(es), squeegee, vacuum pick up, solution and recover tanks and cabinet enclosure.

The machine shall be of rugged construction, capable of withstanding heavy duty commercial use. Design shall permit easy disassembly for service and replacement of parts, handles, with grips, shall be provided for guiding the scrubber.

Materials used shall be suitable for the purpose intended and shall be furnished with a durable paint, lacquer or plating or be made of corrosion resisting material as appropriate.

MOTORS:

The motors shall be heavy duty industrial type with a high starting torque and designed for operation on not less than 24 volts DC, and shall be either semi-enclosed and protected, or totally enclosed.

The main drive motor shall propel the machine and drive the scrubbing brush(es). Separate motors for propulsion and brush drive are acceptable. The main drive motor shall be capable of propelling the machine at a speed continuously variable from 0 to at least 120 feet per minute, but not more than 240 feet per minute on smooth level floors with the brushes rotating to scrub the floor. Unit shall be capable of transporting itself up grades of up to 10 percent with the brushes raised.

Brush speed shall be such as to provide maximum cleaning efficiency without throwing dirt and water from the cleaning path or causing difficulty in operation of the equipment.

VACUUM PRODUCER:

The vacuum producer shall be a long life, heavy duty unit conforming to horse power and vacuum requirements as listed in Table II. The vacuum system shall be designed to pick up all water and soil, collected by the squeegee and deposit it in the recovery tank.

WHEELS:

The machine shall be mounted on two (2) wheels and one (1) or two (2) casters. All wheels shall be equipped with non-marking rubber tires. Wheels and casters shall be so positioned and of such design as to permit low effort mobility and maximum stability under all conditions of use.

DRIVE MECHANISM:

The machine shall be propelled by either a V-belt, gear or chain drive, or a combination thereof connected to the two wheels through a differential drive. A suitable clutch/brake device shall be incorporated in the drive system, with a "dead man" type control at the operator's position.

BRUSH HOUSING:

The brush housing shall be heavy duty, affording adequate protection for the rotating brush(es). A readily replaceable non-marking rubber or vinyl plastic bumper shall be securely attached to that portion of the housing which may come into contact with baseboards, wall or furniture. The housing and bumper shall not interfere with effective floor scrubbing to the base of walls, posts, cabinets, etc. The housing shall be provided with suitable baffles or curtains to prevent the throwing or splashing of water beyond the sides of the machines.

BRUSH MOUNTING:

The brush holder design shall permit convenient and secure brush attachment and detachment without the use of tools. Brush raising and lowering mechanism shall be provided and shall be controlled from the operator's position. When lowered, all brush bristles shall be in contact with the floor and the brush load on the floor shall be as listed in the attached table. When raised, all brush bristles shall be clear of the floor and the brush shall remain in the raised position until lowered by the operator. The brush holder shall be self adjusting to uneven floors.

SQUEEGEE:

The squeegee shall be located at the rear of the machine and shall contact the floor to gather dirty water and feed it to the vacuum pickup. The squeegee shall be of non-marking, oil and detergent resistant, flexible material and shall protrude on each side of the machine not less than ½ inch beyond the path of the brush. The squeegee holder shall be spring loaded to maintain contact with the uneven floors. The holder shall be as designed to permit easy replacement of squeegee without removing the assembly from the machine. A control shall be provided at the operator's position to raise and lower the squeegee. The squeegee shall automatically remain in the raised position until lowered by the operator.

WATER TANKS:

The capacity of the tanks shall be as specified in the attached table. The tanks shall be constructed of metal with a corrosion-resistant coating or of heavy duty polyethylene (or equal) and shall be designed to minimize the possibility of liquid splashing out of the tanks while the machine is in operation.

The flow from the cleaning solution tank to the brush shall be controlled from the operator's position. A strainer shall be provided in the feeder line, accessible for convenient cleaning.

The recovery tank shall be provided with an automatic cut-off mechanism which will prevent overfilling. Both tanks shall be provided with means for rapid draining.

BATTERY COMPARTMENT:

The battery compartment shall securely house the batteries and shall be constructed so that the batteries can be readily inspected, serviced, removed, and installed.

BATTERY:

The machine shall be delivered with fresh, fully charges batteries. The batteries shall be heavy duty, deep cycle, industrial type, supplied in units to provide a 24 or 36 volt energy source with an amp hour rating as listed in Table II and based on a 24 volt potential.

BATTERY CHARGER:

A battery charger shall be furnished with each machine. The charger may be mounted on the machine or may be a separate wall mount type. It shall have a capacity of not less than 20 amperes and be equipped with a self-resetting thermal overload relay and a battery condition meter. The charger shall be designed to prevent overcharging the battery.

SIZES:

The State intends to award machines in the following sizes:

<u>Scrubbing Width (Nominal) INS.</u>	<u>Tank Capacities SOL. (Min.) GALS.</u>	<u>Tank Capacities REC. (Min.) GALS</u>	<u>Power Drive Motor (Min.) HP</u>	<u>Vac. Motor (Min.) HP</u>	<u>Battery Capacity 20 HR. Rate (Min.) AMP. HR.</u>	<u>Brush Load (Min.) LBS.</u>
20-21	10	10	¾	¾	200	75
24-28	15	15	¾	¾	200	80
30-32	20	20	¾	¾	275	100
20-21	10	10	N/A	.6	105	70 – (3-Brushing Floating)

Does your product meet the above specifications: ___ Yes ___ No

If not list your product deviations below:

- ❖ _____
- ❖ _____
- ❖ _____

10. FLOOR MACHINE, SCRUBBER, AC ELECTRIC POWERED

The machine in this category **MUST** meet the minimum generic specifications listed below:

GENERAL DESCRIPTION:

The scrubber shall be manually propelled, pedestrian type complete with AC electric motor powered scrub brushes and vacuum pick-up, squeegee, solution and recovery tanks,

operating handle and conveniently located controls. The machine shall be of rugged construction designed to withstand heavy duty commercial use.

MOTORS & DRIVES:

Motors shall be heavy duty type designed for continuous operation. Electrical requirements shall be 115 volts AC, 60 Hz. Motor operations shall not be affected by a voltage fluctuation of +/- 5% of the specified voltage.

Minimum horsepower ratings of the drive and vacuum motors shall be listed in Table III. A single motor with a rating equal to the combined output requirement as listed will be considered.

The brush drive shall be a maintenance – free, speed reduction type providing an optimum brush speed for maximum cleaning efficiency and safe, convenient operator control.

The vacuum producer shall be a by-pass type suitable for wet pick-up application.

BRUSH HOUSING:

The brush housing shall be heavy duty design providing adequate protection for the brush assembly. A readily replaceable, non-marking rubber or vinyl plastic bumper shall be securely attached to that portion of the housing which may come into contact with baseboards, walls or furniture. The housing and bumpers shall not interfere with effective floor scrubbing contiguously to the base of walls, posts, cabinets, etc. The housing shall be provided with suitable baffles or curtains to prevent the throwing or splashing of water beyond the sides of the machines.

BRUSH MOUNTING:

The brush holder design shall permit convenient and secure brush attachment and detachment without the use of tools. A brush raising and lowering mechanism shall be provided and shall be controlled from the operator's position. When lowered, all brush bristles shall be in contact with the floor and the brush pressure on the floor shall be as listed on Table III. When raised, all brush bristles shall be clear of the floor and the brush shall remain in the raised position until lowered by the operator. The brush holder shall be self adjusting to uneven floors.

SQUEEGEE:

A squeegee shall be located at the rear of the machine and shall contact the floor in such a manner as to gather all of the dirty water and feed it into the vacuum pick-up. The squeegee shall be on non-marking, oil and detergent resistant, flexible material and shall protrude on each side of the machine at least ½ inch beyond the path of the brush. The squeegee holder shall be spring loaded to maintain contact with uneven floors and shall be designed to permit easy replacement of the squeegee head. A squeegee raising and lowering mechanism shall be provided with a convenient control at the operator's position.

TANKS:

The scrubber shall be equipped with a solution tank and a recovery tank of a size as listed in Table III. The tanks shall be constructed of metal with corrosion-resistant coating,

stainless steel or high density polyethylene and shall be designed to minimize the possibility of liquid splashing out during machine operations.

The flow from the solution tank to the brush shall be controlled from the operator's position. A strainer shall be provided in the feed line and shall be accessible for convenient cleaning.

The recovery tank shall be provided with an automatic shut-off device which will prevent overfilling.

Both tanks shall be provided with means for complete draining.

WHEELS:

The machine shall be mounted on two wheels and one or two swivel casters. Wheels shall be equipped with low-friction bearings and non-marking rubber tread surface.

POWER CORD:

The machine shall be provided with a minimum 75' long, 3 conductor power cords with heavy duty plastic insulations and a grounding type plug.

SIZE:

The State intends to make an award for the following size:

<u>Scrubbing Width</u>	<u>Tank Capacities</u>		<u>Power</u>		<u>Brush Load</u>	<u>Appox. Weight</u>
	<u>Solution</u>	<u>Recovery</u>	<u>Brush Drive</u>	<u>Vacuum</u>		
20"	8 gal.	8 gal.	¾ hp.	¾ hp	70 lbs.	195 lbs.

Does your product meet the above specifications: ___ Yes ___ No

If not list your product deviations below:

- ❖ _____
- ❖ _____
- ❖ _____
- ❖ _____

11. FLOOR MACHINE, COMPACT SCRUBBER/WASHER

The machine in this category **MUST** meet the minimum generic specifications listed below:

GENERAL DESCRIPTION:

The scrubber-washer shall be manually propelled, bi-directional pedestrian type vertical machine complete with AC electric-motor-powered scrub brushes

MOTOR AND CORD:

The scrubber-washer shall have a 120v, 60-cycle, minimum 850 watts vacuum motor and a 200 watts brush motor as in Table IV. This brush motor shall generate a minimum 200 RPM brush speed. Power cord shall be a 3-wire grounded minimum 25' length.

BRUSHES AND SQUEEGEES:

Shall have a minimum of a 13.5" cleaning path.

SIZE:

The State intends to award the machine in the following size:

<u>Scrubbing Width</u>	<u>Tank Capacities</u>		<u>Power</u>		<u>Brush Load</u>	<u>Appox. Weight</u>
	<u>Solution</u>	<u>Recovery</u>	<u>Brush Drive</u>	<u>Vacuum</u>		
15"	3 gal.	3 gal.	200 watts	850 watts	20 lbs.	48 lbs.

Does your product meet the above specifications: ___ Yes ___ No

If not list your product deviations below:

- ❖ _____
- ❖ _____
- ❖ _____
- ❖ _____

12. FLOOR MACHINE SCRUBBER-EDGER:

The machine in this category **MUST** meet the minimum generic specifications listed below:

GENERAL DESCRIPTION:

The scrubber-edger shall be manually propelled, pedestrian type vertical scrubber-edger with AC electric-motor-powered scrub brush.

MOTOR AND CORD:

The scrubber-washer shall have a 120v, 60-cycle, minimum ¼ hp, 1.6 amp motor as in Table V. The motor shall generate a minimum 1,000 RPM brush speed. Power cord shall be 3-wire grounded, minimum of 20' length.

BRUSH:

The brush shall have a minimum of 8" vertical cleaning path with minimum 2" floor cleaning capability at the bottom. Brush shall have 3-way vertical operation, right, center and left. Brush alignment shall be lockable.

SIZE:

The State intends to award the machine in the following size:

<u>Scrubbing Width</u>	<u>Brush Power (Minimum)</u>	<u>Brush RPM (Minimum)</u>	<u>3-Wire Grounded Cord Length (Minimum)</u>
8"	1.6 AMP	1,000	20 ft.

Does your product meet the above specifications: ___ Yes ___ No

If not list your product deviations below:

- ❖ _____
- ❖ _____
- ❖ _____
- ❖ _____

13. SCRUBBING MACHINE, ORBITAL FLOOR, AC ELECTRIC POWERED

The machine in this category **MUST** meet the minimum generic requirements listed below:

DESIGN & CONSTRUCTION:

The machine shall be battery powered; self-propelled pedestrian type with scrubbing pad(s), squeegee, vacuum pick up, solution and recovery tanks and cabinet enclosure.

The machine shall be of rugged construction, capable of withstanding heavy duty commercial use. Design shall permit easy disassembly for service and replacement of parts, handles, with grips, shall be provided for guiding the scrubber.

Materials used shall be suitable for the purpose intended and shall be finished with a durable paint, lacquer or plating or be made of corrosion resisting material as appropriate.

MOTORS:

The motors shall be heavy duty industrial type with a high starting torque and designed for operation on not less than 24 volt DC, and shall be either semi-enclosed and protected, or totally enclosed.

The main drive motor shall propel the machine and drive the scrubbing pad(s). Separate motors for propulsion and brush drive are acceptable. The main drive motor shall be capable of propelling the machine at a speed continuously variable from 0 to at least 120 feet per minute, but not more than 250 feet per minute on smooth level floors with the pads agitating to scrub the floor. Unit shall be capable of transporting itself up grades of up to 6 degree incline with the pads raised.

Pad speed shall be such as to provide maximum cleaning efficiency without throwing dirt and water from the cleaning path or causing any difficulty in operation of the equipment.

VACUUM PRODUCER:

The vacuum producer shall be a long life, heavy duty unit conforming to horse power and vacuum requirements as listed in Table VI. The vacuum system shall be designated to pick up all water and soil, collected by the squeegee and deposit it in the recovery tank.

WHEELS:

The machine shall be mounted on two (2) wheels. All wheels shall be equipped with non-marking rubber tires. Wheels shall be so positioned and of such design as to permit low effort mobility and maximum stability under all conditions of use.

DRIVE MECHANISM:

The machine shall be propelled by either a V-belt, gear or chain drive, or a combination thereof connected to the two wheels through a differential drive. A suitable clutch/brake device shall be incorporated in the drive system, with a "dead man" type control at the operator's position.

PAD MOUNTING:

The pad holder design shall permit convenient and secure pad attachment and detachment without the use of tools. Pad raising and lowering mechanism shall be provided and shall be controlled from the operator's position. When lowered, the pad load on the floor shall be as listed in the attached table. When raised, all pad(s) shall be clear of the floor and the pad shall remain in the raised position until lowered by the operator.

SQUEEGEE:

The squeegee shall be located at the rear of the machine and shall contact the floor to gather dirty water and direct it to the vacuum pick up. The holder shall be as designed to permit easy replacement of squeegee without removing the assembly from the machine. A

control shall be provided at the operator's position to raise and lower the squeegee. The squeegee shall automatically remain in the raised position until lowered by the operator.

WATER TANKS:

The capacity of the tanks shall be as specified in the attached table. The tanks shall be constructed of metal with a corrosion-resistant coating or of heavy duty polyethylene (or equal) and shall be designated to minimize the possibility of liquid splashing out of the tanks while the machine is in operation.

The flow from the cleaning solution tank to the brush shall be controlled from the operator's position. A strainer shall be provided in the feeder line, accessible for convenient cleaning.

The recovery tank shall be provided with an automatic cut-off mechanism which will prevent overfilling. Both tanks shall be provided with means for rapid draining.

BATTERY COMPARTMENT:

The battery compartment shall securely house the batteries and shall be constructed so that the batteries can be readily inspected, serviced, removed, and installed.

BATTERY:

The machine shall be delivered with fresh, fully charged batteries. The batteries shall be heavy duty, deep cycle, industrial type, supplied in units to provide a 24 or 36 volt energy source with amp hr. rating as listed in Table VI and based on a 24 volt potential.

BATTERY CHARGER:

A battery charger shall be furnished with each machine. The charger may be mounted on the machine or may be a separate wall mount type. It shall have a capacity of not less than 20 amps and be equipped with self-resetting thermal overload relay and a battery condition meter. The charger shall be designed to prevent overcharging the battery.

SIZE:

The State intends to award the machine in the following size:

<u>Scrubbing Width</u>	<u>Tank Capacities</u>		<u>Power</u>		<u>Battery Capacity 20 hr. Rate (min) amp hr.</u>	<u>Pad Load (Min.) lbs.</u>
	<u>Solution</u>	<u>Recovery</u>	<u>Brush Drive</u>	<u>Vacuum</u>		
26"-28"	20 gal.	20 gal.	¾ hp.	¾ hp	250	120 lbs.

Does your product meet the above specifications: ___ Yes ___ No

If not list your product deviations below:

- ❖ _____
- ❖ _____
- ❖ _____

All information provided will be used by the State to develop an appropriate RFP which will be advertised for competitive bidding.