**Magnum Traction Drive**

**GENERAL**
Machine shall be of the type generally described as a battery-powered "automatic": Factory Cat
The specific model and size should be: Magnum 27-C
This bid defines a self-propelled machine that wet "scrubs and dry" vacuums a path of: 27"
For expedited parts delivery, machine shall be made in: United States
The machine contains separate tanks for solution and recovery water, with a minimum capacity in each tank of:

**SOLUTION TANK**
The solution tank shall be made of heavy gage (.360") polyethylene plastic. Dual fill ports, with one at the front of the machine and a second at the rear. Solution screen must be stainless steel and located, with the check valve, on the scrub deck permitting top access. The solution tank specifically must hold a minimum of:

**RECOVERY TANK**
Recovery tank shall be made of polyethylene, that is a minimum thickness of (.360"). Tank shall be designed to be easy to clean, with complete access to the recovery tank's floor, wherein the entire inside and floor of the tank is visible and reachable. A heavy duty, discharge control, 1.5" diameter drain hose shall be supplied, made of latex rubber. To simplify access for planned maintenance, tank must include:

**BRUSHES/PADS**
For preferred maneuverability and productivity the machine shall use:
2 cylindrical brushes
Scrub brushes shall be:
Qty: 2 @ 25" each
For preferred cleaning performance the machine's scrub brushes should operate at:
750 rpm

**BRUSH HEAD**
To reduce the stress on the operator, the machine's brush head shall be raised and lowered by an electric actuator with a minimum capacity of:
500 lbs.
To achieve consistent performance and reduce damage to the floor, the machine's scrub pressure control shall be automatic, with a LCD readout showing the:
5 Pressure Settings
To restrict unauthorized changes to scrubbing pressure, the "Manager's Lockout" must be:
Standard
To restrict unauthorized changes to the solution flow, the "Manager's Lockout" must be:
Standard

**BRUSH MOTOR**
The scrub motor shall be heavy duty, permanent-magnet DC:
(Qty: 2) 0.75 hp / 350 rpm
For heavy duty scrubbing an optional scrub deck upgrade must be available to motors of:
(Qty: 2) 1.0 hp / 340 rpm

**VACUUM MOTOR**
The vacuum motor is to be protected with a ball and stainless screen system wherein the ball reacts to the level of foam inside the tank and shuts off air flow to the vacuum motor. The vacuum motor must be 3-stage and rated at:
650 watts

**SQUEEGEE**
Squeegee shall be curved, with four usable edges on the rear blade. It shall move when the machine turns to control water. It shall be protected against impact with "Non-Marking" 4" diameter, side wheels, and a breakaway feature. For preferred water recovery, the squeegee shall have a minimum width of:
35"

**DRIVE SYSTEM**
Machine shall have an “all-gear” transaxle, that powers “two wheel drive” for improved traction and stability. Single tire or chain drive units will not be acceptable. Traction system shall be infinitely variable in speed and shall include a (PWMC) motor control, with speed cut to 50% for reverse. The traction motor shall be rated at a minimum of:
450 Watts
TIRES / CASTERS
For preferred machine stability, only machines with a 4-point stance will be acceptable. Machines will 3-point stance will not be considered.
Front drive tires shall be solid, cushion, non-marking and size minimum of:
Rear caster wheels shall be solid, low rolling resistant, non-marking and size minimum of:

BATTERIES
Scrubber shall include at least 4 batteries, to form a minimum of 24-volt DC system. Batteries must be located in a 14” tall, plastic battery tray to contain any and all fluids. The battery size must be a minimum of:
For extended run time, optional battery upgrade and charger should be quoted in the size of:
Battery brand must be:

CHARGER
Standard Charger shall be "shelf mounted", and fully automatic type, running on 110-volt / 60-Hz / AC power. It shall provide a minimum of 24-volt DC output of:

CONTROLS
A button control system shall be situated within the metal handlebar, arranged to allow operator to engage forward speed with the fingers of either hand. For operator ease and more stable control, the speed control must be a separate control, located on the dashboard. Twist grip controls which govern direction change along with speed, will not be considered.
The instrument panel shall include an LCD-Type display with an "Operating Mode" and icons for battery gauge, scrubbing pressure, scrub On, vacuum On, water flow On. It shall also include a "Maintenance Mode", with 4 hour meters for Key On, Vacuum On, Scrub On, Traction Drive On
The squeegee shall be lifted and lowered by a simple lever, with the vacuum automatically operating whenever the squeegee is lowered. To more completely dry the squeegee hose, and reduce discharge back onto the floor, the vacuum shall have a timer that engages when the squeegee is lifted to the off position that operates for:

DIMENSIONS
Machine maximum dimensions shall be:
Machines maximum weight (including batteries) shall be:

CONSTRUCTION
For preferred durability and longevity the scrubber’s main frame shall be made of a steel, powder-painted to resist corrosion, and of a thickness of at least:
This heavy gage frame shall fully support the weight of the batteries, the tanks, hold the scrub deck rigid and locate the casters and transaxle. For future ease of service, all of the fasteners on the scrubber shall be made of:

OTHER FEATURES / OPTIONS
Non-Marking Tires  Standard
Solid HD Tires (P7 Rubber / Non-marking black)  Optional
Manager’s Lock-out of Down Pressure  Standard
Manager’s Lock-out of Solution Flow  Standard
E-Stop  Optional
Remote Spray Hose  Optional
Onboard Soap (SUDS)  Optional
Vacuum Wand  Optional
Sealed Batteries  Optional
Onboard Charger  Optional
Stainless Steel Baffle  Optional
Stainless Steel Disk Scrub Deck  Optional
Parking Brake  Optional
Scrub Deck Shrouds  NA
Scrub Deck HD Jaws  NA