MiniMag - Traction Drive

MiniMag 28"-EDGE

GENERAL

Machine shall be of the type generally described as a battery-powered "automatic":	Tomcat
The specific model and size should be:	MiniMag 28"-EDGE
This bid defines a self-propelled machine that wet "scrubs and dry" vacuums a path of:	28"
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:	17 gallons

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:	17 gallons

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:	"Tip Back" feature
Recovery tank must also include "Drain Saver" basket, to collect all liter in the recovery water, to keep discharge water from clogging floor drains. Drain saver basket must be constructed of stainless steel, with 1/4" mesh screen, and be removed without tools or loose fasteners.	17 gallons

BRUSHES/PADS

For preferred maneuverability and productivity the machine shall use:	1 rectangular pad
Scrub brushes/Pads shall be:	Qty: 1 @ 28" x 14"
For preferred cleaning performance the machine's scrub brush/pad should operate at:	2500-rpm (Oscillates 1/4")
To allow a "Stripping" & "Scrubbing" Mode, the unit must have 2 speed settings, with 2nd at:	2000-rpm (Oscillates 1/4")

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 the 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: 1) 1.0 hp / 2500 rpm
For increased peformance, optional "HD" scrub motor available:	

VACUUM MOTOR 650 watts

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:	

SQUEEGEE 35"

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:

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: 350 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. 4-Point Stance

Front drive tires shall be solid, cushion, non-marking and size minimum of: Qty 2: 9" dia x 2" wide

Rear caster wheels shall be solid, low rolling resistant, non-marking and size minimum of: Qty 2: 4" dia x 2" wide

BATTERIES

Scrubber shall include at least 2 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: 155 ah

For extended run time, optional battery upgrade and charger should be quoted in the size of: Trojan 225 ah / 25 amp

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: 12 amps

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 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: 21 seconds

DIMENSIONS

Machine maximum dimensions shall be: (58"L x 26"W x 43"H)

Machines maximum weight (including batteries) shall be: 547 pounds

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: 7-gage (3/16")

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: Stainless Steel

No machine with casters or transaxle mounts that bolt directly to the tanks will be acceptable.

OTHER FEATURES

Non-Marking Tires	Standard
Manager's Lock-out of Down Pressure	Optional
Manager's Lock-out of Solution Flow	Optional
E-Stop	Optional
Remote Spray Hose	Optional
Onboard Soap (SUDS)	Optional
Vacuum Wand	Optional
Sealed Batteries	Optional
Onboard Charger	Optional
Stainless Steel Baffle	Optional
Parking Brake	Optional
Scrub Deck Shrouds	NA
Scrub Deck HD Jaws	NA