

**SUGGESTIONS FOR WRITING BID SPECIFICATIONS FOR
ADVANCE SC900™ Large Walk-Behind Automatic Scrubber
28D, X28D, 34D, X34D, X32C**

GENERAL Machine shall be a battery-powered walk-behind automatic scrubber with the ability to scrub and vacuum hard floor surfaces in one pass and leave the floor clean, dry and safe.

CLEANING PATHS Shall be available in the following configurations:

- 28 inch (71 cm) disc using two 14 inch (36 cm) brushes or pad holders.
- 34 inch (86 cm) disc using two 17 inch (43 cm) brushes or pad holders.
- 32 inch (81 cm) cylindrical using two 31 inch (79 cm) brushes.

ELECTRICAL SYSTEM The machine shall not have a main controller or main control board PCB for the lowest total cost of ownership and reliability, therefore maximizing up time.

The machine shall use a mechanical foot pedal to raise and lower the deck for the lowest possible cost of ownership and reliability.

The machine shall be transported by simple reliable palm switches for the lowest total cost of ownership.

Solution flow rate shall be controlled using a simple ball valve for the highest possible reliability on machines not equipped with an onboard detergent system.

Machine speed shall be controlled by a thumb wheel located on the user interface panel with the ability to change the speed without removing a hand from the user interface for increased safety for the operator, the facility and guests.

Machine shall be equipped with battery gauge, hour meter and have a low voltage cut off feature that protects and preserves the life of the batteries for the lowest cost of ownership.

SCRUB SYSTEM There shall be no fewer than three scrub pressures and each pressure shall have a discrete setting that is repeatable for consistent cleaning results and run time.

Scrub pressures shall be controlled using a mechanical foot pedal rather than an actuator or electrical motor for the lowest cost of ownership and maximum reliability.

SCRUB MOTORS AND PRESSURES Machine shall be equipped with 0.75 hp scrub motors for deep cleaning of heavily soiled surfaces. Disc machines shall have a brush motor speed of 250 RPMs and cylindrical of 900 RPMs.

Scrub pressures for the 28D: 80, 145, 200 lbs.
Scrub pressures for 34D: 80, 145, 200 lbs.
Scrub pressures for 32C: 75, 100, 125 lbs.

POWER SOURCE Machine shall be powered by six, six-volt industrial deep cycle batteries of not less than 242 amp hours. Machine shall have AGM maintenance-free batteries as an option.

BATTERY CHARGING Machine shall come standard with a smart battery charger that is either off board or onboard to protect and preserve the life of the batteries, resulting in the lowest possible cost of ownership.

SOUND LEVEL Sound pressure level shall not exceed 68 dB A for disc machines and 69 dB A for cylindrical machines when measured in accordance with IEC 60704-1/ISO 11201.

DETERGENT CONSERVATION SYSTEM Machine shall have an optional onboard detergent dispensing system (EcoFlex onboard detergent dispensing system) utilizing a 1.3 gallon refillable cartridge that allows the use of any manufacturer's approved auto scrubbing detergent, operates at all flow rates, and allows the quick interchange of multiple detergent cartridges for varied cleaning applications.

Detergent concentration shall be variable between 0-3 ounces per gallon with clear color coded markings for repeatable concentration levels for consistent cleaning results and cost to clean.

Machine shall have a burst of power button that when pressed will increase the solution flow and detergent concentration for 1 minute for powerful spot cleaning of dirtier areas.

OPERATING SYSTEM The operator interface shall have four functional items to control the machine for the utmost in simple operation, reduced complexity and quick and easy operator training:
Key switch, propulsion switch, reverse switch and maximum speed potentiometer.

The vacuum motor shall not have an on/off button on user interface to eliminate operator confusion and reduce training requirements. It shall start when the rear squeegee is lowered to the floor and shall turn off when in the raised position.

The scrub function shall not have an on/off button on user interface to eliminate operator confusion and reduce training requirements. The brush motor shall turn on when the scrub deck is lowered and the palm buttons are depressed.

SOLUTION CONTROL SYSTEM Solution shall be delivered to the scrub deck via gravity without the use of a pump.

The solution flow rate shall be completely variable to precisely match the amount of solution to the cleaning task, thereby maximizing productivity per tankful, lowering the overall cost to clean and reducing its carbon footprint.

SOLUTION TANK	Machine shall be constructed of durable rotomolded polyethylene and have a capacity of 30 gallons.
RECOVERY TANK	Machine shall be constructed of durable rotomolded polyethylene and have a capacity of 32 gallons. Shall have a debris catch cage installed preventing large objects from being emptied down the drain and creating clogs and expensive repair bills.
SQUEEGEE SYSTEM	The machine shall be equipped with a 41.8 inch squeegee with a feature for vertical onboard storage that keeps the squeegee off the floor in storage, decreasing the risk of trip and fall hazards. The squeegee suction hose shall not directly attach to the squeegee tool itself, thereby preventing hose damage and lowering the overall cost to clean.
VACUUM MOTORS	Machine shall be equipped with a 0.95 hp 3-stage vacuum motor that develops a maximum of 71 inches of waterlift and 96 CFM to leave the floor clean, dry and safe.
DRIVE SYSTEM	Shall have one 0.5 hp drive motor powering two gray non-marking tires. The tires shall be solid never go flat tires for the lowest total cost of ownership. Forward transport speed shall not be less than 3.2 mph for high productivity cleaning.
USER DISPLAY	Machine shall have one simple display that indicates the charge level of the batteries and number of hours accumulated on the scrub motors.
SAFETY APPROVALS	Shall be ETL listed for USA and Canada.

MACHINE SHALL BE AN ADVANCE SC900™