

**SUGGESTIONS FOR WRITING BID SPECIFICATIONS ON THE
ADVANCE SC2000™ X20D**

GENERAL	<p>Machine shall be the type generally described as a rider automatic floor scrubber and named Advance SC2000™ X20D. It shall wet, scrub and vacuum in one pass.</p> <p>The machine shall have a cleaning path no larger than 20 inches (51 cm) which allows the machine to clean in tight and congested areas and allows cleaning where other machines cannot reach. The machine shall have an EcoFlex™ onboard detergent system standard.</p>
EcoFlex™ DETERGENT SYSTEM	<p>Shall have EcoFlex™ onboard detergent dispensing system compatible with all manufacturers of automatic scrubber detergent. Dilution rate shall be variable and controlled with detergent flow adjustment push button on control panel and flow rate be displayed on multifunction display. Machine shall automatically maintain a constant detergent ratio regardless of the solution flow rate.</p>
BRUSH SYSTEM	<p>Shall be equipped with one heavy-duty 24 Volt permanent magnet DC motor rated at 0.6 horsepower (450 Watt). The machine comes standard with one 20 inch (51 cm) pad holder. The pad holder or brush shall have the capability of being clicked on or off from a button on the control panel.</p> <p>The machine shall have brush off in neutral to protect floors when machine comes to rest.</p>
VACUUM SYSTEM	<p>Shall be equipped with one 24 Volt 0.42 horsepower (310 Watt) 2-stage DC motor with tangential discharge and sound reduction system.</p> <p>The machine shall have two sound levels selectable by the operator. The sound level in standard mode shall not exceed 68 dB A to allow the machine to be used in noise sensitive environments, occupied facilities and be less fatiguing for the operator. The sound level in quiet mode shall not exceed 62 dB A which further protects the operator from fatiguing sound and allows operation in virtually all environments.</p> <p>Vacuum system must be capable of 39 inches of waterlift (inch H₂O).</p>
DRIVE SYSTEM	<p>Shall be a 0.54 horsepower (400 Watt) motor and rear transaxle for improved traction, ramp climbing and safety. Machine shall have a maximum scrub speed of 3.7 mph (6 kph) for increased productivity and labor savings.</p> <p>Machine shall have a fully-variable forward and reverse electronic control. Forward and reverse shall be operated by means of an ergonomic foot pedal. Reverse shall be activated by an ergonomically position paddle under the steering wheel for operator safety.</p>
CONSTRUCTION	<p>Shall be built with corrosion and impact-resistant polyethylene tanks and body, and a sturdy, powder coated and corrosion resistant steel frame.</p>
SOLUTION TANK	<p>Shall have 18.5 gallon (70 L) capacity, constructed of linear high-density rotationally molded polyethylene. Shall have fill port on the rear of the machine so the machine can be dumped and refilled from the rear increasing productivity.</p>
SOLUTION CONTROL	<p>Machine shall come standard with a solution flow system that consistently dispenses a constant flow of cleaning solution per square foot at any operator speed for consistent cleaning performance (SmartFlow). Machine shall have five solution flow levels: Off, 1, 2, 3 and 4 to maximize productivity. Maximum shall be Level 4 with a 0.74 gal/min (2.8 liter/min) flow rate for full cleaning performance. Solution levels 1 through 3 shall be adjustable for optimal cleaning performance at their facility. Machine shall have an automatic solution shut off in neutral to conserve cleaning solution.</p>

RECOVERY TANK	<p>Shall have 18.5 gallon (70 L) capacity constructed of linear high-density rotationally molded polyethylene. Recovery tank shall include removable cover and gasket, debris tray, float vacuum shut-off system to prevent tank overflow and to protect the vacuum for a lower total cost of ownership (TCO) and variable flow drain hose.</p> <p>Recovery tank must have a large opening to allow operator to inspect and access all geometry inside the recovery tank for proper cleaning and maintenance. Recovery tank shall hinge open to allow full access of internal components such as batteries and the EcoFlex™ detergent cartridge.</p>
BRUSH/PAD SYSTEM	<p>Included with the machine shall be a 20 inch (51 cm) pad driver to cover a 20 inch scrubbing path. A variety of brushes shall be available for any cleaning application. Brush shall be put on or removed without tools or by using “Click-On/Click-Off” functionality from the dash board.</p> <p>Scrub deck shall be raised and lowered by an electronic actuator.</p>
BRUSH PRESSURE	<p>The machine shall have no more than two brush pressure settings: 33 lb (15 kg) and 66 lb (30 kg) that clean effectively while protecting delicate floor surfaces from damage.</p> <p>Brush pressure shall be changed with one touch button on control panel.</p>
SQUEEGEE	<p>Shall be a 28.4 inch (72 cm) wide curved (parabolic) style squeegee constructed of durable and lightweight plastic reducing the total cost of ownership (TCO) while making maintenance easier. Squeegee mounting bracket must have a break-away design to prevent machine or facility damage when immovable objects are contacted. The squeegee suction hose shall not be connected to the squeegee tool directly so if the squeegee breaks away, damage to the hose shall not occur and this will reduce the total cost of ownership (TCO). The squeegee tool must automatically rise when the machine is placed into reverse thereby lessening squeegee wear and reducing the total cost of ownership.</p>
DRIVE WHEELS	<p>The machine shall have rear wheel drive via a transaxle for improved traction, ramp climbing and operator safety. The rear wheels shall be constructed of high traction polyurethane and be non-marking gray.</p>
DIMENSIONS	<p>Machine dimension shall be no larger than follows:</p> <p>Length 50 inches (127 cm), width 22 inches (56 cm) and height 40 inches (102 cm) to increase productivity and maneuverability.</p>
POWER SOURCE	<p>24 Volt System: Shall have the option of (2) 12 Volt / 130 Ah wet-acid batteries or (2) 12 volt/140 Ah maintenance-free AGM batteries.</p> <p>Machine shall be equipped with a low voltage cutout feature that can be set for the battery type (80% discharge for wet-acid; 70% discharge for maintenance-free AGM).</p>
CHARGER	<p>Shall have on-board charger as standard equipment: 24 VDC, 13 Amps.</p>
WEIGHT	<p>Gross Machine weight shall not exceed 754 lb (342 kg) to provide easy elevator transport and be gentle on delicate floor surfaces.</p>
APPROVALS	<p>Shall be marked with ETL, CSA and CE symbols for safety.</p>

OPERATING SYSTEM

Machines shall have a multifunction LCD graphical display on the control panel and serve as the interface for displaying parameters and current configuration including: hours worked, battery type, battery charge level working and while charging, vacuum mode, brush work mode, detergent solution flow quantity, detergent percentage quantity, percentages of detergent in the solution water, Burst of Power override timer with auto shut-off timer.

Machine shall have a burst of power switch that instantly increases cleaning performance and aids in controlling both the overall cost to clean as well environmental sustainability. Engaging the burst of power shall increase brush pressure to the maximum level, increase the solution flow rate to the next available level, increase detergent strength to the strong setting and increase the vacuum power to maximum for 60 seconds, by default, or by a specified time adjusted by the user. When the time interval expires, the machine shall revert back to the previous cost effective and environmentally sustainable mode of operation.

Control panel shall have a vacuum mode switch to control the sound level of the machine (standard sound, quiet and off mode) to reduce operator fatigue and allow for daytime cleaning of occupied facilities. Sound level shall be depicted on the multifunction display.

Control panel shall have a solution flow push-button to switch between: no solution, level 1, level 2, level 3 and level 4. Level 4 is disabled by default. The rate of solution flow at each level shall be adjustable.

Control panel shall have a detergent ratio push-button to switch between chemical free cleaning, weak detergent strength mode (level 1) and strong detergent strength mode (level 2). Detergent ratio shall be depicted on the multifunction display.

Machine shall have One-Touch™ scrub ON/OFF push-button to activate the scrub deck systems. Pressing the One-Touch™ scrub button will lower the deck up/down indicated by a flashing green LED. A solid green LED shall indicate the system is active. Holding One-Touch™ scrub button for two seconds shall apply maximum pressure indicated by a red LED for maximum cleaning performance and productive one pass cleaning in dirtier areas.

The Machine Shall Be an Advance SC2000™ X20D