SUGGESTIONS FOR WRITING BID SPECIFICATIONS FOR ADVANCE 2800 ST, 3400 ST

GENERAL

Machine shall be a three wheel battery-powered ride on automatic scrubber with cab forward design and the ability to scrub and vacuum in one pass.

CLEANING PATHS

Shall be available in the following configurations:

- 28 in (71 cm) disc using two 14 in (36 cm) brushes or pad holders
- 34 in (86 cm) disc using two 17 in (43 cm) brushes or pad holders

SOUND LEVEL

Sound pressure level shall not exceed 66.7 dB A when measured in accordance with IEC 60704-1/ISO 11201.

WATER CONSERVATION SYSTEM

Machine shall come standard with a calibrated low solution flow rate setting (Smart Solutions™) that consistently and repeatably sets a low solution flow rate not to exceed 0.33 gal/min (1.4 L/min). This allows the machine to consistently clean the floor for 85 minutes before it has to be refilled.

OPERATING SYSTEM

Machine shall have a mechanically operated deck with one lever on the right hand side to raise and lower the deck to the floor.

Two scrub pressure settings shall be available

- 28 in deck: 85 lb (37 kg) or 180 lb (82 kg)
- 34 in deck: 105 lb (46 kg) or 205 (93 kg)

Machine shall use one lever located on the steering column to raise and lower the rear squeegee, and the vacuum motor shall automatically turn on when the squeegee is lowered to the floor and the foot pedal is pressed.

SOLUTION CONTROL SYSTEM

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

Shall have three discreet flow rates:

- 0.33 gal/min (1.4 L/min)
- 0.66 gal/min (2.5 L/min)
- 1.0 gal/min (3.8 L/min)

SOLUTION TANK

Shall have a minimum capacity of 28 gal (106 L) and be constructed of roto-molded polyethylene.

RECOVERY TANK

Shall have a minimum gross capacity of 29 gal (110 L) and be constructed of roto-molded polyethylene.

Shall require no tools to lift off the recovery tank for service access to batteries and squeegee assembly.

VACUUM MOTORS	Machine shall operate with either one vacuum motor or two motors simultaneously. Each vacuum motor shall not be less than 0.75 hp (560 W) 3-stage generating a sealed waterlift of 63 in (15.7 kPa) and 66 cubic feet per minute with a 2 in (5 cm) orifice.
SQUEEGEE SYSTEM	Shall come standard with a perforated rear squeegee blade with six ¼ in evenly spaced holes below the vacuum port to provide safer and dryer floors. On machines with a 28 in (71 cm) cleaning path the rear squeegee shall be no wider than 32.6 in (83 cm). On machines with a 34 in (86 cm) cleaning path the rear squeegee shall be no wider than 41.4 in (105 cm). Squeegee pitch shall be adjustable without the use of tools. Shall be a break-away design with the raise and lower controlled by a mechanical lever. Shall have an anti-snag devise incorporated on each end and be able to hang on the rear of the machine to dry. Squeegee blade shall have four working edges and be removable without the use of tools.
SIDE SKIRTS	Shall use dual squeegee blades on each side skirt to ensure superior wiping, and shall be height adjustable without the use of tools to accommodate brushes, pads and wear.
POWER SOURCE	Machine shall be powered by four, 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 be available with either a stand alone shelf charger for wet-acid batteries or an onboard charger compatible with maintenance-free gel or AGM batteries.
DRIVE SYSTEM	Shall have one 1.05 hp (780 W) drive motor with integrate electromagnetic brake. Shall use a non-marking high traction urethane tire 9.84 in (25 cm) in diameter with a width of 3.15 in (80 cm). Forward transport speed shall not be less than 3.91 mph (6.30 kph). Reverse speed shall not be less than 2.61 mph (4.2 kph) The scrub speed shall be set at 80% of the transport speed and programmable from 50% to 100% of the transport speed in 10% increments to suit the operator's needs.
SCRUB MOTORS	Disc scrub motors shall not be less than 0.64 hp (480 W) and rotate at 260 RPMs.

CONTROLS, GAUGES AND OTHER FUNCTIONS

- Solution ON/OFF, + and - buttons
- Horn button
- Battery discharge gauge
- Troubleshooting diagnostics showing any overloads

Other Controls and functions

- Security key switch
- Foot operated throttle pedal (forward and reverse)
- Emergency shut off switch
- Vacuum delay shut off of 10 seconds
- Selectable low voltage cut off for wet-acid and maintenance-free batteries
- Resettable circuit breaker protection against drive and scrub brush motor overloads
- Operator presence safety seat switch
- Electromagnetic parking brake
- Tool-free adjustable steering wheel

GRADEABILITY Shall be a minimum of 16% (9^0) for transport mode and 9% (5^0) in cleaning mode.

SAFETY APPROVALS Shall be ETL listed for USA and Canada

KEY SPECIFICATIONS

- Gross weight shall not exceed 1,450 lb (658 kg)
- PSI of any wheel shall not exceed 175 PSI (12.3 kg/sq cm)
- Sound pressure shall not exceed 63.7 dB A
- Aisle turn around width for a 28 in (71 cm) machine shall not exceed 63 in (160 cm)
- Aisle turn around width for a 34 in (86 cm) machine shall not exceed 67.5 in (171 cm)
- Body height shall not exceed 51.7 in (1,332 cm)
- Body width without squeegee shall not exceed 27.5 in (70 cm)
- Body length shall not exceed 60 in (153 cm)
- Protection grade shall not be less than IPX3

MACHINE SHALL BE AN ADVANCE
2800 ST or 3400 ST