

GENERAL BID SPECIFICATIONS
BATTERY POWERED RIDER SCRUBBER
34/40 in (86/102 cm) Disc or 36 in (91 cm) Cylindrical

SCRUBBING SYSTEM:

- Offset scrub deck for edge cleaning
- Brushes automatically turn-on when scrub deck is lowered and machine is propelled in forward or reverse
- Brushes and solution flow turn-off when machine is not moving for floor protection and simplified usage
- Scrub brush pressure is precisely controlled via electronic current sensing offering three different levels of scrubbing power up to the rated maximum power of the scrub motors
- Individual working load for each scrub motor is independently monitored to ensure no single motor can fail due to overload condition
- Scrub deck and side skirts are protected by steel doors with rollers to reduce the risk of impact damage

Disc Decks

- 34 inch (86 cm) disc scrub path deck with two 1 hp (750 W) motors turning two 17 inch (43 cm) disc brushes rotating at a minimum 250 rpm
- 40 inch (102 cm) disc scrub path deck with two 1 hp (750 W) motors turning two 20 inch (51 cm) disc brushes rotating at a minimum 250 rpm

Cylindrical Decks

- 36 inch (91 cm) cylindrical scrub path deck with two 1 hp (750 W) brush drive motors turning two counter-rotating cylindrical brushes at a minimum of 760 RPM
- Removable corrosion-proof polyethylene debris hopper

SWEEPING (CYLINDRICAL MODELS):

- Optional right side broom for models provides edge cleaning and anti-fouling protection for side skirts and rear squeegee
- 43 inches (109 cm) total cleaning path single side broom 16 inches (40 cm) diameter
- Broom automatically raises and lowers with scrub system activation/deactivation. May be deactivated manually by operator.
- 0.12 hp (90 W) motor per side broom (direct drive)
- Debris hopper constructed of durable, light weight, corrosion proof polyethylene, capacity 0.43 ft³ (12.2 L)

VACUUM RECOVERY SYSTEM:

- Standard single vac motor 0.8 hp (0.6 kW) providing up to 57 inches (145 cm) waterlift
- Optional dual vac motors 0.8 hp (0.6 kW) each providing up to 63 inches (160 cm) waterlift
- Fully sealed float switch provides vac motor water ingestion protection with automatic electric shutdown
- Vacuum motors shall continue to operate for 10 seconds after squeegee is lifted to clear the vac hose of excess dirty water

SQUEEGEE DESIGN:

- Parabolic squeegee
- Roller wheels at squeegee tips to prevent snagging or damage
- Break away protection to prevent squeegee tool damage
- Recovery hose is attached to the squeegee tool holder and prevents hose damage when squeegee tool is disengaged by impact
- Squeegee automatically raises in reverse
- Standard squeegee blades constructed of Linatex® rubber material

POWER SYSTEM:

- 36 volt power system
- Powered by six 6 Volt 310 Ah C20 wet lead acid batteries
- Powered by six 6 Volt 420 Ah C20 wet lead acid batteries
- Powered by six 6 Volt 312 Ah C20 AGM batteries
- Equipped with a low voltage shutdown system to protect batteries
- Brushes automatically shut-off when low voltage is detected. Battery gauge indicates when recharge is required.

PROPULSION SYSTEM:

- AC brushless drive motor system for low maintenance and high reliability and efficiency
- 1.6 hp (1.2 kW) minimum peak power output
- Variable operating speed up to 5.6 mph (9 km/hr)
- Transport gradeability at operating weight up to 16% (9°)

BRAKING SYSTEM:

- Automatic spring-applied/electrically released front wheel parking brake
- Inherent dynamic braking from propulsion system on any incline up to rated gradeability
- Unit must be capable of holding the braking position without the attention of operator on incline equal to or less than rated gradeability

SOLUTION/RECOVERY TANKS:

- Constructed of durable, light weight, corrosion-proof roto-molded polyethylene
- 50 gallon (190 L) minimum capacity, capable of handling solution up to 150° Fahrenheit
- Recovery tank drain hose with a flexible end allowing an operator to meter water flow by means of pinching the hose without the need for a separate valve that can plug
- Recovery tank full monitoring with large sealed float switch with automatic vacuum motor shut-down

SOLUTION SYSTEM:

- Solution is dispensed proportional to travel speed reducing water and chemical usage up to 50 percent as compared to fixed flow rate systems
- Three speed proportional water flow settings plus maximum flood mode
- Flood mode with flow rate up to 2.5 gpm (9.5 LPM) for high speed scrubbing or rough floor applications
- Integrated brush pressure and solution flow rate settings with override capability
- Electric solenoid valve for precise on/off control and proportional metering
- Automatic solution shut-off when stationary
- Externally removable in-line filter screen plus manual shut-off valve for solution tank allowing filter cleaning while tank is full. Protects solution solenoid valve from contamination

USER INTERFACE:

- Adjustable tilt column
- Smart key technology defining user types and machine level access control: User and SuperUser (supervisor)
- Integrated machine impact protection linked with unique SmartKey user ID to reduce operator induced damage to machine with three modes of operation
 - Off
 - Logs impact and inhibits scrubbing, requiring supervisor reset
- Paddle controls around steering wheel
 - Horn
 - Intermittent solution off
 - Intermittent aggressive cleaning mode (EcoFlex models)
- Membrane control panel for machine control with OLED display and IPX3 environmental rating
- Hour meter
- Battery state of charge indicator
- Brush pressure setting indicator
- Solution flow rate setting indicator
- Solution tank level
- Recovery tank full indicator
- One-touch scrub on/off button
- Two independently programmable detergent dilution ratios (EcoFlex models)
- Fully embedded machine diagnostics for fault detection and simplified service

DETERGENT DISPENSING SYSTEM (Optional EcoFlex):

- A 1.3 gal (5 L) refillable cartridge that allows the use of any manufacturer's detergent and allows quick interchange of multiple detergent cartridges for varied cleaning applications using an air-break type connection to prevent spillage
- Detergent dispensing operates at all available solution flow rates
- Detergent dispensing may be turned off to use only plain water
- Minimum and maximum detergent concentration settings can be programmed for normal cleaning at any flow rate or brush pressure selected by the operator
- Operator may temporarily engage a more aggressive cleaning mode using a single button that provides increased detergent concentration, solution flow rate, and brush pressure. Aggressive cleaning mode will remain active 60 seconds default or programmable up to 300 seconds) unless disengaged by the operator beforehand after which point it will revert back to the prior mode of cleaning minimizing waste of water, detergent, brush wear, and energy consumption.
- Onboard detergent system shall be capable of accurately diluting detergents at the following ratios at any flow rate.
 - 400:1, ¼ oz/gal, 0.25%
 - 300:1, - oz/gal, 0.3%
 - 256:1, ½ oz/gal, 0.4%
 - 200:1, - oz/gal, 0.5%
 - 150:1, - oz/gal, 0.7%
 - 128:1, 1 oz/gal, 0.8%
 - 100:1, - oz/gal, 1.0%
 - 64:1, 2 oz/gal, 1.5
 - 50:1, 2.5 oz/gal, 2%
 - 32:1, 4 oz/gal, 3%

MACHINE CONSTRUCTION:

- Welded tubular steel frame with powder coated finish
- Exterior body panels using roto-molded polyethylene
- Full scrub deck and side skirt protection with steel doors and rollers
- Corrosion resistant fasteners

WHEELS:

- Solid or equivalent, non-marking polyurethane wheels to protect floor surface
- Maximum static wheel loading not to exceed 128 psi (8.99 kg/cm²)
- Rear wheel bearings protected from water by cap in wheel and shaft seal on axle

DIMENSIONS & OPERATING CHARACTERISTICS:

- Minimum aisle turn not to exceed 79.5 inches (202 cm)
- Front wheel steer/drive configuration

Model	34 Disc	36 Cylindrical	40 Disc
Length	70 in (178 cm)		
Width	39 in (99 cm)	46 in (117 cm)	
Height	62.3 in (158 cm)		

SOUND:

- 69 dB A (ISO 11201, ISO 4871, EN 60335-2-72) (LpA)

WARRANTY: 2 years labor, 6 months travel, 3 years/2,000 hours parts, 8 years roto molded parts

APPROVALS: Certified to UL553 standard, marked and approved by a recognized independent certifying body such as ETL or equivalent. Type UL type ES available as option