# *MiniMag Traction Drive*

MiniMag 28"-D

**GENERAL**

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| Machine shall be of the type generally described as a battery-powered "automatic": | Tomcat |
| The specific model and size should be: | MiniMag 28"-D |
| 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**

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| 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**

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| 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**

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| For preferred maneuverability and productivity the machine shall use: | 2 disk brushes |
| Scrub brushes shall be: | Qty: 2 @ 14" each |
| For preferred cleaning performance the machine's scrub brushes should operate at: | 265 rpm |

**BRUSH HEAD**

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| 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**

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| The scrub motor shall be heavy duty, permanent-magnet DC: | (Qty: 2) 0.75 hp / 265 rp |

**VACUUM MOTOR**

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| 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: | 650 watts |

**SQUEEGEE**

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| 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: | 35" |

**DRIVE SYSTEM**

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| 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**

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| 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**

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| 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**

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| 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

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| 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**

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| Machine maximum dimensions shall be: | (58"L x 26"W x 43"H) |
| Machines maximum weight (including batteries) shall be: | 547 pounds |

**CONSTRUCTION**

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| 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**

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| Non-Marking Tires | Standard |
| Manager's Lock-out of Down Pressure | Standard |
| Manager's Lock-out of Solution Flow | Standard |
| 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 | Standard |
| Scrub Deck HD Jaws | Optional |