

SPECIFICATIONS FOR 4 CUBIC YARD SELF-CONTAINED PATCHER UNIT WHICH IS PERMANENTLY MOUNTED TO A TRUCK CHASSIS WHICH IS TO BE USED FOR PATCHING WITH HOT ASPHALT

ACCEPTABLE BRANDS/MODELS: PB LOADER MODEL DA-4, STEPP MODEL STPH 4.0 or Equivalent

Unit shall include all manufactures standard equipment unless the standard equipment is specifically exceeded by the specifications listed below.

HOPPER:

Unit shall be 4 cubic yards, minimum double wall construction. Oil jacketed or 2" – 6 lb. density insulation

Unit shall have diesel system evenly distribute heat into the center of material.

The diesel burner fuel shall be supplied from the truck fuel tank. The unit shall have 100% fuel shut off if the burner is extinguished. The hopper shall be of a design shall heat the material evenly as listed in the manufacture's standard equipment.

Heating system shall be designed so that it can thermostatically control the temperature of the material from 100 – 300 degrees.

Hopper shall be covered with insulated hydraulically operated doors. The doors shall open to allow full access for filling. Door operation will be controlled from the rear side of unit and a warning will sound during door operations.

Unit shall have a minimum of a 70-gallon tack tank and 15-gallon solvent tank

Auger must be built from AR400 steel. The auger flighting must be 6" diameter and 1/4" thick.

REQUIRED OPTIONAL EQUIPMENT:

LED Lighting System: Shall be a Whelen Super LED lighting system or equal to include: Stop, Tail, Turn, Rear Amber Strobes, and 2 Mirror Mounted Strobes

Hopper Access Walkways: Dependent on design of the tank, unit shall have front and rear built in steps or a fold down ladder to access platform with fold down or slide out hopper access platform with raised grip tread and non-skid surface.

Compactor Lift Platform: Rear mounted compactor lift/carrier with hydraulic raise and lower for operator safety and convenience and shall have locking device and fold up out of the way when not in use.

Hand Torch: Pilot with valve control, supplied with 25' hose.

Compactor Plate: MBW-AP2000H or Wacker WP1550 or equal with wheel kit for moving.

Asphalt Swing Chute: Folding asphalt chute in place of shoveling pan. Swings left and right and has locking positions.

Hydraulic Power Beyond: Hydraulic power beyond to power hydraulic jackhammer or hydraulic tamper.

Hydraulic Breaker: hydraulic 70# class jack hammer.

Hydraulic Hose Reel: Dual line hose reel for jackhammer with hydraulic quick disconnect couplers.

Solvent Pump: 12 VDC pump connected to solvent tank with 25' hose with wand.

Hose Reels: 3 hose reels to accommodate 25' hoses. Emulsion, Solvent, Hand Torch

Auxiliary Electric Heat: Equipped with electrical heating system for overnight heating. System shall have temperature sensor. Heating elements shall be low density stainless steel.

Spoils Bin: Bottom dump or tilting design to accommodate easy unloading. For operator safety shall be located at rear of patcher on curb side.

Lockable Toolbox: Sized to accommodate hand and breaker tools

Rearview Camera: Rear facing back up camera system within cab switch; TADI Model 90121 or equal.

Rear Mounted Work Lights: Provide two (2) rear facing LED work lights; Ecco 700 lumen within cab switch or equal.

Shovel Cleaning Compartment: Shall have a Shovel Cleaning Compartment constructed of 12-gauge material with splash guard compartments, drain plug, and rubber shovel slots. Shall hold (4) four shovels.

Tool Holder: Provide and install two tool holders mounted at rear of truck.

CAB & CHASSIS SPECIFICATIONS:

- 1) All standard equipment as listed by the manufacturer and the additional equipped required to meeting specifications.
- 2) GVWR to govern all components of 35,000 GVWR
- 3) It shall be the successful bidder to verify the correct WB & CA as recommended by the truck and the asphalt patcher manufacturer.
- 4) The successful vendor whose name appears on the purchase order is ultimately responsible for compliance
- 5) Frame to meet GVWR of 35,000 lbs.
- 6) **Axle:** Front (suspension), minimum 12,000 lb. capacity – Rear minimum 23,000 lb. capacity single speed. Axle's ratio to provide a top governed speed of 68 mph minimum and 72 mph maximum based on manufacturer's engine RPM rated governed speed.
- 7) **Engine & Accessories:** Cummins ISL9 or Paccar PX-9 Diesel Turbocharged 8.9L sleeved engine or equal, minimum of 300 HP gross @ manufactures rated RPM, minimum 860 gross torque @ manufactures rate RPM. Accessories to be included: Fuel water separator with inspection glass
- 8) **Automatic Transmission:** Allison 3500 RDS or equal 6 – speed with PTO drive gear.
- 9) **Cab:** 4 door crew cab configuration; exterior color shall be bright white; interior color shall be light grey; grab handles on exterior of cab, factory installed air conditioning, heater and defroster. Mfg. standard, no deletions of any standard features.
- 10) **Air Dryer:** Bendix AD-IS heated OR equal
- 11) **Air Compressor:** Cummins OR Meritor WABCO OR Equal 18.7 CFM-minimum
- 12) **Air Tank:** Aluminum; SUCCESSFUL BIDDER MUST WORK WITH BODY BUILDER ON MOUNTING LOCATION
- 13) **BRAKE SYSTEM:** Bendix OR Meritor WABCO OR Equal 4S/4M antilock brake system, S-Cam. MUST BE DESIGNED FOR VEHICLE WEIGHT RATING, SUSPENSION AND SPEED
- 14) **AIR BRAKES, FRONT:** Bendix OR Meritor OR Equal brakes, cast drums, to include slack adjusters. Must be designed for vehicle weight rating, suspension and speed.
- 15) **BRAKE CHAMBERS:** Must be correct size for the proper operation of the Bendix 4S/4M antilock brake system and must be designed for the vehicle weight rating, suspension and speed.
- 16) **AIR BRAKES REAR:** Bendix, Meritor OR Equal brakes, cast drums, to include slack adjusters
- 17) **BRAKE CHAMBERS:** Must be of correct size for the proper operation of the Bendix 4S/4M antilock brake system. MUST BE DESIGNED FOR THE VEHICLE WEIGHT RATING, SUSPENSION AND SPEED.
- 18) **DRAIN VALVE:** Bendix DV-2, automatic with heater OR equal; for air tank. With pull chains for all air tank drains, mounted for easy access of pull chains.
- 19) **CAB:** Conventional, Aluminum with steel reinforcements or Galvanized; to Include:

Coat hook – required; 2 ea. Cup holders; Dome light; Glass, all windows – Tinted; 2 ea. Grab Handles on each side; Steps – Both sides.

- 20) **CREW CAB INTERIOR TRIM:** to include: "A" PILLAR COVER-Molded Plastic; Cab interior trim panels-Molded Plastic; Lower dash closeout panel-Molded Plastic; Console overhead or dash -Molded Plastic; Door trim panels-Molded Plastic; Floor covering-Vinyl, black; Headliner-Soft Padded Cloth or Vinyl; Instrument Panel trim-Molded Vinyl; Storage pocket-Door or Back of Cab, Molded Plastic; Sun visors-Padded Vinyl, Driver & Passenger Side

MUST INCLUDE ALL INTERIOR CAB TRIM.NO DELETE OPTIONS ALLOWED

- 21) **GAUGE CLUSTER / INSTRUMENT PANEL/DATA CENTER** to include:
English With Electronic Speedometer; Engine Oil Pressure (Electronic), Water Temperature (Electronic), Fuel (Electronic), Tachometer (Electronic), Voltmeter, ODOMETER DISPLAY, Miles, Trip Miles, Engine Hours, Fault Code Readout. WARNING SYSTEM: Low Fuel, Low Oil Pressure, High Engine Coolant Temp, and Low Battery Voltage (Visual and Audible): Fuel economy, Trip information, Diagnostics, Warning alarm will sound when headlights are left on. GAUGE, AIR PRESSURE Located in Instrument Cluster: PARKING BRAKE CONTROL Yellow Knob, Located on Instrument Panel; DEF Level Gauge and Warning Lamp; Oil temperature gauge
- 22) **BODY INTG, REMOTE POWER MODULE:** Mounted inside cab on back wall of cab or floor behind seats and mounted so as not to interfere with control console and to have ease of accessibility. Truck manufacturer must work with body builder for location. 6 Outputs & 6 Inputs, Max 20 Amp. Per Channel, Max. 80 Amp Total (Includes 1 Switch Pack with Latched Switches) May Be Mfr. Or Mfrs. Mod Shop Dealer Installed, Or May Be Supplied by the Body Builder
- 23) **SEAT, DRIVER:** Full Bench with orange 3-point seat belt (lap belt for center seat)
- 24) **SEAT, PASSENGER:** Full Bench with orange 3-point seat belt (lap belt for center seat)
- 25) **MIRROR, CONVEX, LOOK DOWN:** Right Side; Approx. 8 1/2" x 4 7/16"
- 26) **MIRRORS:** 2) Styled, Heated Thermostatic Controlled, Rectangular, Approx. 7" x 13". Convex Both Side Approx. 5"x7". Mirrors Set for 102" Load Width, Breakaway Type
- 27) **AIR CONDITIONER:** Blend-Air with Integral Heater & Defroster w/Recirculation Switch
- 28) **GRILLE/HOOD:** Fiberglass tilting hood required. Stationary chrome grill required.
- 29) **PAINT:** Single Color, standard factory white; Includes: Paint type Base Coat/Clear Coat
- 30) **STEERING COLUMN:** Tilt and Telescopic
- 31) **STEERING WHEEL:** 2-Spoke Minimum, Black preferred
- 32) **EXHAUST SYSTEM:** Single, RH under cab OR under step with single RH side of cab vertical tailpipe for clear BOC required. Muffler tailpipe guard to be bright finish. DPF mounted under passenger side of cab. Successful vendor must include picture of exhaust system with bid.
- 33) **ELECTRICAL SYSTEM:** 12-Volt, Standard Equipment to Include:

- Data Link Connector for Vehicle Programming and Diagnostics in cab; Fuses, Electrical SAE Blade-Type or Circuit Breaker; Hazard switch Push On/Push Off, Located on Top of Steering Column Cover or Dash; Headlight dimmer switch Integral with Turn Signal Lever; Headlight (2) Sealed beam halogen, approx. 5" X 7" rectangular, with chrome plated bezels; Horn, electric single; Jump start stud mounted for easy access; Parking light integral with front turn signal and rear tail light; Running light (2) Daytime, Included With headlights: Starter Switch Electric, Key Operated : Stop, Turn, Tail & B/U Lights Dual, Rear, Combination with Reflector; Turn Signal Switch Self-Canceling; Turn Signals, Front Includes Reflectors and Auxiliary Side Turn Signals, Solid State Flashers; Flush Mounted; Windshield Wiper Switch 2-Speed with Wash and Intermittent Feature, Integral with Turn Signal Lever; Windshield Wipers Single Motor, Electric, Cowl Mounted
- 34) **WIRING CHASSIS:** Colored or Numbered wires
NOTE: A DEDUCT FOR LESS EXPENSIVE WIRE HARNESS WILL NOT BE ACCEPTED AND WILL BE CONSIDERED NOT IN COMPLIANCE
- 35) **POWER PORT:** 12 Volt, Independent of Cigarette Lighter
- 36) **ALTERNATOR:** 160 Amp minimum Brush Type
- 37) **BATTERIES:** 3 each minimum maintenance free with threaded post to accomplish 2850 CCA
- 38) **BATTERY BOX:** 3 battery capacity minimum; TRUCK DEALER MUST WORK WITH BODY BUILDER FOR LOCATION
- 39) **RADIO:** AM/FM Stereo with Weather band, Clock, Includes two (2) Dual Cone Speakers in cab
- 40) **BACK-UP ALARM:** Electronic safety alarm, solid state dual function, 87-112 decibels, adjusts automatically to produce 10 decibels above the surrounding noise up to 112 decibels maximum – Preco 1040 or Equal
- 41) **BODY BUILDER WIRING:** Rear of frame with sealed connectors for Tail/Amber, Turn/Marker, Backup/Accessory, Power/Ground and Stop/Turn.
- 42) **HORN, AIR:** Single, Air Solenoid Operated.
- 43) **CLEARANCE/MARKER LIGHTS:** (5) Truck Lite amber LED lights or equal, factory installed on cab or sunshade
- 44) **ACCESSORY WIRING, SPECIAL:** Ground Speed Wire Coiled Under Instrument Panel or on firewall for Customer Use with 2' extra wire. Wire must be labeled SUCCESSFUL VENDOR MUST WORK WITH BODY BUILDER FOR APPLICATION AND LOCATION
- 45) **ENGINE SHUTDOWN:** Automatic; with approx. 30 Second Delay. To be applied for: Low Coolant, High Coolant Temperature, Low oil pressure, Low Oil Level
- 46) **INDICATOR, LOW COOLANT LEVEL:** With audible alarm (may be dealer installed)
- 47) **BLOCK HEATER, ENGINE:** 120 Volt/1000 Watt; block heater socket receptacle type; Mounted below driver's door
- 48) **RADIATOR:** Aluminum or Brass/Copper Mfrs. largest available radiator as needed to accomplish designed operating temperatures. To Include: Mfrs. recommended,

Extended Life Coolant anti-freeze (-34 Degrees minimum), Fill/Surge Tank, Premium hoses with heavy duty clamps

- 49) **AIR CLEANER:** Dry-type, single element, firewall or cowl mounted
- 50) **GUAGE, AIR CLEANER RESTRICTION:** Dash mounted
- 51) **FUEL/WATER SEPARATOR:** Heated and Must Include Water in Fuel Sensor
- 52) **FUEL TANK:** 50 Gallon Minimum Non-Polished Aluminum with Anti Siphon Device on Filler Neck. Mounted on Left Hand Side under Cab
- 53) **DEF TANK:** 7.0 Gallon Minimum Located on Left Hand Side Under Cab. Must be Capable of Two Diesel Tank Fills Minimum to One Fill of DEF
- 54) **LABELING:** "Diesel fuel only", "DEF only"-Red letters on white background. Letters must be 2 inches tall minimum. Must be mounted as close to filler necks as possible on appropriate tanks.
- 55) **WHEELS, FRONT:** Steel, Accuride or Equal 22.5" Steel 2-Hand Hole Minimum Hub Pilot Mount
- 56) **WHEELS, REAR DUAL:** Steel, Accuride or Equal 22.5" Steel 2-Hand Hole Minimum Hub Pilot Mount
- 57) **PAINT, FRONT WHEELS:** White Powder Coat Paint
- 58) **PAINT, REAR WHEELS:** White Powder Coat Paint
- 59) **TIRE, REAR:** (4) Tires; Rear (4) radial 11R22.5 14PR, (Goodyear G622 RSD Traction Tread OR equal). TIRES MUST BE RATED FOR OUR TOP GOVERNED SPEED OF 75 MPH
- 60) **TIRE, FRONT:** Front, two (2) 11R22.5 14PR, (Goodyear G647 HWY OR equal. TIRES MUST BE RATED FOR OUR TOP GOVERNED SPEED OF 75MPH.

PARTS & SERVICE – Chassis Provider: Chassis provider must have a mfg. owned or mfg.'s franchised authorized parts & service facility located within four (4) hours of F.O.B. delivery location to be considered for award. This must be a full-service facility, which includes; field representatives, manufacturer's required specialized tools, parts, fully equipped service trucks, and factory trained technicians.

WARRANTY: One (1) year on workmanship and manufactured equipment.

Manufacturer must have a full franchised servicing dealer within the State of Tennessee. The dealership agreement must have been in place before notice of bid solicitation.