

CUSCO DOT DURAVAX Combo Unit

COMBO SPECS

- Tank Capacity - 3200 USG + 3% Outage
- Head Capacity - 0.3125 SA516-70
- Shell Material - 0.3125 SA516-70
- Tank Diameter - 78" OD
- Operating Temperature -20 to 200 degrees F
- Hydrostatic Test Pressure - 40.0 PSIG
- Pressure Relief - 4" SS Girard pressure vent, 25 PSIG setting mounted top of tank
- Primary Shut-Off - 6" Internal shut-off with 12" SS float ball and cage assembly with neoprene rubber seat top front of tank.
- Baffle - One anti surge baffle mounted on reinforcing pads.
- Rings - Circumferential reinforcement rings with tank support feet
- Overturn Protection - Front, 2 center, and rear 4" pipe construction overturns with reinforcement pads and gussets
- Sample Port - 6" sample port installed on top of tank with vent valve
- Liquid Level Indicator - Stainless Steel construction rotary float gauge with 6" float ball assembly located on front driver side with grab handle and up position tie back.
- Rear Door - Hydraulic full opening rear door assembly with 6 heavy duty wing clamps, neoprene rubber rear door gasket, double acting hydraulic cylinders and safety brace.
- Suction Valve - One 6" ANSI Betts air open/spring close valve and Betts actuator with 6" sand pipe / deflector plate assembly, aluminum Kamlok fittings at 4' o'clock position. One 4" ANSI Betts air open/spring close valve and Betts actuator with aluminum Kamlok fittings mounted at 8:00 o'clock position. Note the 4" valve does not include a sand pipe assembly.
- Discharge Valve - 6" ANSI Betts air open/spring close valve and Betts actuator with aluminum Kamlok fittings mounted on rear head.
- Isolation Valve - 6" air operated butterfly valve between primary and secondary shut-off controlled by manual air switch.
- Filtration System - Cusco 20" diameter final filter assembly installed for protection of blower with 16" diameter stainless steel 100 micron filter.
- Cyclone - High capacity cyclone assembly with 12" diameter drop box with bottom mounted clean out door, and 2" brass gate valve, Kamlok and cap. Cyclone installed on front of head of tank curbside.
- Silencers - 6" intake and exhaust silencer with exhaust line c/w 6" aluminum Kamlok.
- Piping - Single 6" diameter no disconnect piping to allow tank to dump with vacuum system connected, with 6" 4 way valve for vacuum loading and pressure unloading, and dual 6" inline check valve assemblies.
- Drive - Hydraulically driven from air shift PTO mounted on transmission with hydraulic pump, motor and oil cooler.
- Gauges - Duravac gauge panel assembly with tank vacuum/pressure gauge, filter element vacuum gauges, tachometer, throttle control, diesel flush control and cooler override. Panel located on the driver side of unit near hydraulic controls.
- Side Trays - Western style full length side boxes for hose storage / fender assembly with: heavy duty out riggers, anti-sail mud flaps.
- Trim - Ladder assembly on water tank portion with 6-point attachment for access to water tank manway, four numbered placards, and 50' static line.
- Lighting - DOT LED moisture proof lighting, (3) lower lamp assembly, clearance lamps, reflectors, (3) in a row clearance markers, (1) rear amber strobe beacon. Six total flood lights: (4) rear facing rectangular halogen flood lights (2 on rear door and 1 on each side of tank at front), (1) at blower area, and (1) at wash system work area.

COMBO SPECS

- Bumper - DOT rear bumper for protection of external valves with grated platform/step assembly and rear dirt shield.
- Water Tank - 1000 USG (approx 4 cube) steel water compartment front of waste tank, sandblasted and coated on interior with heavy duty sealant, with 20" manway, 3" air operated heat BF drain valve, supply line with water shut-off valve, stainless steel construction rotary float gauge with 6" float ball assembly located on front passenger side with grab handle and 3" brass fill port on curb side with line to top of compartment with kamlok and cap connection.
- High Pressure Wash System - CAT 3560 water pump with suction strainer, pressure relief valve, Two (2) steam rated Hannay hydraulic rewind hose reels c/w 75' 3/8" high pressure hose. Complete wash pump and reels mounted on passenger side, in a painted steel cross box with polished SS doors installed behind truck cab with light. Includes handgun and steam wand.
- Water Pump Drive - Water pump to be driven via load sensing hydraulic system with adjustable pressure and speed controls.
- Wash System Operation - Wash system have dedicated steam hose reel and hot water hose reel. Wash to be set-up to run one or both hose reels at the same time for hot water only, not steam. Water system to be set to maximum 3000 PSI and 20 GPM. Note water pump to operate at same time as blower.
- Hot Water System - 980,000 BTU/hr burner with steam kit and 3000 Watt 110 volt inverter with additional outlet in burner cabinet. Diesel fuel filter system with water separator. Water supplied from wash system. Burner mounted in the center of cross box, exhaust stack for burner.
- Toolbox - One 72" toolbox mounted on driver's side side tray, spaced up 1" from checker plate for cleaning. Note: side swing doors.
- Doors - All doors to be polished SS
- Fire Extinguisher - 30 lb. ABC fire extinguisher mounted on driver's side
- Installation - Complete system installed on 2014 Western Star 4900 SB, Cummins ISX 15, 500 HP, Eaton Fuller RTLO-16918B Manual Transmission

BLOWER SPECS

- Hibon VTB-820, 1400 CFM free air rating, 1100 CFM @ 18"Hg, 27"Hg maximum vacuum.
- Flush System - Diesel fuel supply line with valve from separate diesel fuel tank.

HYDRAULIC SPECS

- Reservoir - Mounted on hydraulic dump sub-frame with suction strainer, diffuser, fill cap, hydraulic oil filters and sight glass.
- Dump System - Full length hydraulic dump sub-frame with 20 ton Mailhot single acting dump cylinder, rear dump pivot assembly and safety brace.
- Vibrator - Assembly mounted bottom of tank with reinforcing pad, heavy duty mounting channel, and pressure relief valve.
- Controls - 3-spool valve body for control of Blower/Vibrator. Rear door and hydraulic dump located on the driver side of unit near control panel.

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DESIGN

Design shall withstand 25 PSI internal pressure and 15 PSIG external pressure and shall meet all the requirements of Section VIII Division 1 of the A.S.M.E. Boiler and Pressure Vessel Code. National Board Registered. Tank designed and constructed in full compliance with Transportation Specifications DOT 407/412 and TC 407/412

