

GENERAL SPECIFICATIONS

“DOUGLAS” MODEL STW-2000

SMOKE TRUCK & SCREEN WASHER

DESIGN AND OPERATION	Designed for batch type operation where two (2) racks are loaded into the cabinet at the same time. After the door is closed the cycle start button is then pushed which initiates a 160° F. recirculating detergent wash and then, after a short dwell, a 180° F. final sanitizing rinse. The major portion of final sanitizing rinse water is routed to drain with an Automatic Rinse Diverter to conserve chemical concentration in the wash tank. The door is then reopened for unloading and reloading for the next cycle. Booster heaters maintain proper operating temperatures. An optional second door is available for pass through operation.
CABINET	79” wide x 118” deep x 126 1/2” high (154” overall clearance height, 161” heated by gas). Door Opening: 45” wide x 84” high. Wash Chamber: 45” wide x 98” deep x 84” high. Constructed of #14 gauge STAINLESS STEEL. All seams are tig or mig welded and continuous. All welds are cleaned inside, cleaned and buffed outside.
WASH TANK	Constructed of #12 gauge STAINLESS STEEL, 385 gallon capacity, heated by gas or steam coil. Supplied with Gould close coupled STAINLESS STEEL centrifugal pump with 40 H.P. wash down duty motor, 208/240/480 or optional 575 volt, 3 phase, 60 cycle. Rated for 350 gallons per minute at 80 PSI, thermostatically controlled, low water protected with auto fill, 3” NPT STAINLESS STEEL gate type drain valve and 2” NPT overflow connection.
WASHER FLOOR	Floor constructed of #12 gauge STAINLESS STEEL designed to give maximum strength, adequate to support the weight of the heaviest item to be washed. Floor supports constructed of 3” x 3” x 1/4” STAINLESS STEEL angle.
RINSE DIVERTER	Automatic rinse diverter routes the major portion of rinse water to drain in order to maintain detergent concentration in the recirculating wash tank. Constructed of #12 gauge STAINLESS STEEL and controlled by air cylinder and heavy duty limit switches.
PUMPED RINSE TANK	Constructed of #304 STAINLESS STEEL, 100 gallon capacity, heated by gas or steam coil. Supplied with Gould close coupled STAINLESS STEEL centrifugal pump with 2 H.P. wash down duty motor, 208/240/480, or optional 575 volt, 3 phase, 60 cycle to provide 32 gallons per 30 second cycle at 20 PSI. Thermostatically controlled, low water protected with automatic fill to provide 180°/190° F. hot sanitizing rinse.
DOOR	Door constructed of #14 and #16 gauge STAINLESS STEEL with integral STAINLESS STEEL frame work. Door is double skinned for additional strength with seams Heliarc welded. Heavy duty door latch with inside release handle and four (4) hinges. Second door available for pass through option.
DOOR SAFETY SWITCH	Heavy duty door safety switch prevents machine from running with door open.
OSCILLATING SPRAY ARM ASSEMBLY	Air cylinder driven, oscillating STAINLESS STEEL spray arms with STAINLESS STEEL high velocity “V” wash jets and threaded end caps. Mounted on a STAINLESS STEEL ball bearing base.

FINAL RINSE PIPING	Type 304 STAINLESS STEEL tubing with STAINLESS STEEL fittings and full cone rinse jets.
FILTERS	Perforated STAINLESS STEEL baskets, which can be removed and cleaned periodically during the day from outside the cabinet near the wash pump.
STEAM EXHAUST VENT	Steam exhaust vent 12 7/8" inside diameter, consisting of #14 gauge, rolled STAINLESS STEEL collar, bolted to the top of the machine. Machine pre-wired with control timer for addition of the fan.
OPTIONAL STEAM EXHAUST FAN	Optional 12" diameter fan, STAINLESS STEEL, mounted on cabinet to exhaust steam after final rinse cycle. 1 H.P. wash down duty motor, 208/230/460 or optional 575 volt, 3 phase, 60 cycle, 3450 RPM rated for 1350 CFM at .69" static pressure.
OPTIONAL HOOD AND STEAM EXHAUST FAN	STAINLESS STEEL hood and 18" diameter fan, STAINLESS STEEL, mounted over door to evacuate steam that escapes when opened. 1 1/2 H.P. wash down duty motor, 208/230/460 or optional 575 volt, 3 phase, 60 cycle, 1725 RPM rated for 4000 CFM at .75" static pressure.
GAUGES	Wash and rinse temperature gauges, 100° F. to 220° F., with STAINLESS STEEL bulb and capillary. Wash pressure gauges, 0-100 PSI, are liquid filled with STAINLESS STEEL fitting to prevent corrosion from harsh detergents. All gauges have plastic lenses and are mounted on a bracket near the control panel.
ELECTRICAL PANEL AND CONTROLS	Electrical control panel is UL listed, NEMA 4X STAINLESS STEEL with Square "D" components. Optional panel disconnect switch with safety lockout is also available. Complete with motor starters, 120 volt control circuit with "RUN" indicator, lighted "POWER ON" switch, "START" and "STOP" buttons plus adjustable short, medium and long "WASH CYCLE SELECTOR" switch. Complete wash, rinse and dwell/fan cycles initiated by "START" button. Wash and rinse cycles fully adjustable. Washer will be factory wired in hard aluminum conduit and tested prior to shipment.
CONNECTIONS	<p>Wash Tank Water Inlet: 1" NPT at 120° F. min. Rinse Tank Water Inlet: 1" NPT at 120° F. min. Wash Tank Drain Valve: 3" NPT Wash Tank Overflow: 2" NPT Steam Option: (2) 3/4" NPT @ 30 PSI min., 80 PSI max. Steam Condensate: (2) 3/4" NPT Gas Option: (1) 1" NPT @ 2 lbs. pressure min. (1) 3/4" NPT @ 1/2 lb. pressure max. Compressed Air: 1/4" NPT, 20 CFM @ 100PSI</p>
SERVICES	<p>Electrical: 208 Volt, 3 Phase, 60 Cycle, 106 Running Amps, 150 Amp Service Breaker 240 Volt, 3 Phase, 60 Cycle, 100 Running Amps, 125 Amp Service Breaker 480 Volt, 3 Phase, 60 Cycle, 51 Running Amps, 70 Amp Service Breaker 575 Volt, 3 Phase, 60 Cycle, 44 Running Amps, 60 Amp Service Breaker</p> <p>Gas Burner Firing Rates: 500,000 BTU per hour for wash tank 240,000 BTU per hour for rinse tank</p> <p>Steam Consumption: 550 lbs. per hour for wash and rinse tanks</p> <p>Please add the following amps to those above for an optional exhaust fan (2.1 at 208 volt, 1.8 at 240 volt, .8 at 480 volt, or .5 at 575 volt) and/or hood exhaust fan (4.9 at 208 volt, 4.2 at 240 volt, 2.1 at 480 volt, or 1.5 at 575 volt) and recalculate service breaker size, which should be at least 125% of total running amps.</p>