

## SPECIFICATIONS

### “DOUGLAS” MODEL 1536-N

### RACK, PAN, AND UTENSIL WASHER

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<b>DESIGN AND OPERATION</b>	Designed for batch type operation where the wash rack is loaded with items to be cleaned. After the door is closed, the short, medium or long wash cycle is selected then which initiates a 150° F. recirculating detergent wash followed by a 180° F. final fresh water sanitizing rinse. The final sanitizing rinse water flows into the recirculated wash tank for reuse and freshening causing excess water to overflow to drain. A buzzer and unload light indicates cycle completion. The door is then reopened for unloading and reloading for the next cycle. Booster heaters maintain proper operating temperatures.
<b>CABINET</b>	60” wide x 56 1/2” deep (66 1/2” for pass through option) x 93” high (123” overall clearance height when floor mounted, 110” when used in a pit. Add 6” with gas heated rinse tank). Door Opening: 32” wide x 76 1/2” high. Wash Chamber: 32” wide x 38 1/2” deep x 76 1/2” high. Constructed of #14 gauge, 300 Series STAINLESS STEEL with a #3 finish. All seams are tig or mig welded. Seams, where needed for watertight construction, are continuously welded. All other seams are stitch welded for strength. All welds are cleaned inside, cleaned and buffed outside. Optional continuous welds in lieu of stitch welds available.
<b>DOOR</b>	Constructed of #16 and #18 gauge, 300 Series STAINLESS STEEL with a #3 finish. Door is double skinned with integral framework for additional strength. Standard right hand, or optional left hand swing, equipped with external latch, inside release handle and is interlocked to prevent machine operation while open.
<b>WASHER FLOOR</b>	Constructed of #12 gauge STAINLESS STEEL formed sheets designed to provide maximum strength. Supports constructed of 2” x 2” x 1/4” STAINLESS STEEL angle.
<b>RECIRCULATING WASH TANK</b>	Constructed of #14 gauge, 300 Series STAINLESS STEEL, heated by 18 KW electric immersion heaters (infrared gas, live steam or steam coil options are available). Complete with low water protection, automatic fill, 1 1/4” NPT overflow connection, 2” gate drain valve, thermometer, pressure gauge and is thermostatically controlled. 90 gallon tank capacity (79 if gas heated), sloped to drain.
<b>WASH PUMP</b>	Closed coupled centrifugal wash pump, bronze fitted with cast iron casing. Complete with 15 H.P. ODP motor (optional TEFC or wash down duty motors available). 208/240/480 or optional 575 volt, 3 phase, 60 cycle. Rated for 250 gallons per minute at 35 to 45 PSI. Optional STAINLESS STEEL wet end available.
<b>ROTATING WASH HUB ASSEMBLY</b>	Water driven, STAINLESS STEEL spray arm assembly with STAINLESS STEEL jets, removable end caps and hand operated quick release mechanism for easy cleaning and reassembly.
<b>FILTRATION</b>	Perforated STAINLESS STEEL screen type. Double filter system for increased effectiveness and easy cleaning without emptying wash tank.
<b>SANITIZING RINSE TANK</b>	Constructed of #14 gauge, 300 Series STAINLESS STEEL, heated by 18 KW electric immersion heater (infrared gas or steam coil options are available). Complete with thermometer, pressure gauge and is thermostatically controlled. Uses 12 gallons per 30 second cycle at 20 PSI and has a 20 gallon capacity.

<b>OPTIONAL SANITIZING PUMPED RINSE TANK</b>	Constructed of #14 gauge, 300 Series STAINLESS STEEL, heated by 24 KW electric immersion heaters (infrared gas or steam coil options are available). Complete with low water protection, auto-fill, and thermostatically controlled to provide 12 gallons per 30 second cycle at 20 PSI and has a 36 gallon capacity. Also supplied with a closed coupled centrifugal pump with STAINLESS STEEL casing and impeller. 3/4 H.P. TEFC motor (optional wash down duty motors available) 208/240/480 or optional 575 volt, 3 phase, 60 cycle.
<b>FINAL RINSE PIPING</b>	300 Series STAINLESS STEEL tubing with brass compression fittings and full cone rinse jets. Optional STAINLESS STEEL fittings and jets are available.
<b>CONTROL AND INFORMATION CENTER</b>	Electrical control panel is UL 12 STAINLESS STEEL or optional UL 4X STAINLESS STEEL with Square "D" components. 120 volt control circuit with push pad operation of "POWER ON", "STOP", and "SHORT, MEDIUM, or LONG WASH CYCLES". A digital display indicates "TIME REMAINING" for each cycle. LEDs indicate wash, rinse, and unload functions. A buzzer is also included to provide an audible indication of time to unload. A pre-programmed circuit board allows the push pad to be used as a "DIAGNOSTIC CENTER" by displaying "ERROR CODES" for ease of troubleshooting. Moisture resistant gauges measure temperature and pressure for recirculated wash and final rinse. NOTE: Optional UL 4X STAINLESS STEEL push button control panel and internal adjustable timers is available in lieu of Digital Control and Information Center. Washer will be factory wired in hard aluminum conduit and tested prior to shipment.
<b>EXTERNAL RINSE HOSE</b>	Externally mounted rinse hose with spray gun for easy cleaning and maintenance of machine.
<b>STEAM EXHAUST VENT</b>	Steam exhaust vent 12 7/8" I.D. consisting of #16 gauge rolled collar for PVC pipe connection bolted to the top of the machine. Machine pre-wired with control timer for the addition of a fan.
<b>OPTIONAL EXHAUST FAN</b>	One (1) 12" diameter fan with 12 7/8" I.D. collar mounted on washer to extract excess steam after final rinse cycle. Constructed of STAINLESS STEEL housing and aluminum blade with 1/4 H.P. TEFC or optional wash down duty motor, 120 volt, 1 phase, 1725 RPM, rated 500 CFM at .5" static pressure. Optional 3/4 H.P. fan with STAINLESS STEEL housing and blade is available.
<b>OPTIONAL HOOD AND EXHAUST FAN ASSEMBLY</b>	STAINLESS STEEL hood with a 15" diameter fan mounted over door and activates upon door opening to evacuate steam that escapes. Constructed of STAINLESS STEEL housing and blade with 1 1/2 H.P. TEFC or optional wash down duty motor, 208/240/480 or optional 575 volt, 3 phase, 60 cycle, 3450 RPM, rated for 2450 CFM at .56" static pressure.
<b>RACKS</b>	Customized to hold your specific items. Constructed of STAINLESS STEEL rod and formed angle, mig welded. Supplied with STAINLESS STEEL casters and nylon wheels, fixed front and swiveled rear.
<b>CONNECTIONS</b>	Water Inlet: 1" NPT, 120° F. at 20 PSI Drain: 2" NPT Overflow: 1 1/4" NPT Steam Option: 1/2" NPT or (2) 1/2" NPT with optional steam heated rinse tank Steam Condensate: 1/2" NPT or (2) 1/2" NPT with optional steam heated rinse tank Gas Option: 1/2" NPT or (2) 1/2" NPT with optional gas heated rinse tank Electrical: Two-point connection, except for 575 volt, which is a single-point.
<b>UTILITIES</b>	See attached Utilities Chart for service requirements specific to various combinations of wash and rinse tank heating. Calculations are based on a room temperature of 72° F.



## UTILITY CHART

### “DOUGLAS” MODEL 1536-N

### RACK, PAN, AND UTENSIL WASHER

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**120 Volt - 1 Phase, 5 Running Amps, 15 Amp Service Breaker plus one of the following (except for 575 volt, which is a single point connection):**

**ELECTRIC HEATED  
WASH TANK,  
ELECTRIC HEATED  
RINSE TANK**

208 Volt - 3 Phase, 139 Running Amps, 175 Amp Minimum Service Breaker  
240 Volt - 3 Phase, 123 Running Amps, 175 Amp Minimum Service Breaker  
480 Volt - 3 Phase, 62 Running Amps, 80 Amp Minimum Service Breaker  
575 Volt - 3 Phase, 52 Running Amps, 70 Amp Minimum Service Breaker

**INFRARED GAS  
HEATED WASH TANK,  
ELECTRIC HEATED  
RINSE TANK**

208 Volt - 3 Phase, 89 Running Amps, 125 Amp Minimum Service Breaker  
240 Volt - 3 Phase, 80 Running Amps, 100 Amp Minimum Service Breaker  
480 Volt - 3 Phase, 40 Running Amps, 50 Amp Minimum Service Breaker  
575 Volt - 3 Phase, 34 Running Amps, 45 Amp Minimum Service Breaker

Gas Consumption: 90,000 BTUs per hour. Supply Pressure: Minimum 7” w.c. for natural, 11” w.c. for propane and 14” w.c. maximum.

**INFRARED GAS  
HEATED WASH TANK,  
INFRARED GAS  
HEATED RINSE TANK**

208 Volt - 3 Phase, 39 Running Amps, 50 Amp Minimum Service Breaker  
240 Volt - 3 Phase, 36 Running Amps, 45 Amp Minimum Service Breaker  
480 Volt - 3 Phase, 18 Running Amps, 25 Amp Minimum Service Breaker  
575 Volt - 3 Phase, 17 Running Amps, 25 Amp Minimum Service Breaker

Gas Consumption: 150,000 BTUs per hour. Supply Pressure: Minimum 7” w.c. for natural, 11” w.c. for propane and 14” w.c. maximum.

**STEAM HEATED  
WASH TANK,  
ELECTRIC HEATED  
RINSE TANK**

208 Volt - 3 Phase, 89 Running Amps, 125 Amp Minimum Service Breaker  
240 Volt - 3 Phase, 80 Running Amps, 100 Amp Minimum Service Breaker  
480 Volt - 3 Phase, 40 Running Amps, 50 Amp Minimum Service Breaker  
575 Volt - 3 Phase, 34 Running Amps, 45 Amp Minimum Service Breaker

Steam Consumption: 105 lbs. per hour at 15 PSI minimum.

**STEAM HEATED  
WASH TANK,  
STEAM HEATED  
RINSE TANK**

208 Volt - 3 Phase, 39 Running Amps, 50 Amp Minimum Service Breaker  
240 Volt - 3 Phase, 36 Running Amps, 45 Amp Minimum Service Breaker  
480 Volt - 3 Phase, 18 Running Amps, 25 Amp Minimum Service Breaker  
575 Volt - 3 Phase, 17 Running Amps, 25 Amp Minimum Service Breaker

Steam Consumption: 195 lbs. per hour at 15 PSI minimum.

For single-point connection option for 208, 240, or 480 volt, add 2 running amps to total and recalculate service breaker size, which should be at least 125% of total running amps.

Please add the following running amps to those noted above for an optional pumped rinse system. Gas/Steam Heating: 2.4 at 208 volt, 2.3 at 240 volt, 1 at 480 volt, and .75 at 575 volt or Electric Heating (19 at 208 volt, 16.7 at 240 volt, 8.2 at 480 volt, and 6.8 at 575 volt) and/or hood and fan assembly (4.9 at 208 volt, 4.2 at 240 volt, 2.1 at 480 volt, and 1.5 at 575 volt) and recalculate service breaker size, which should be at least 125% of total running amps.