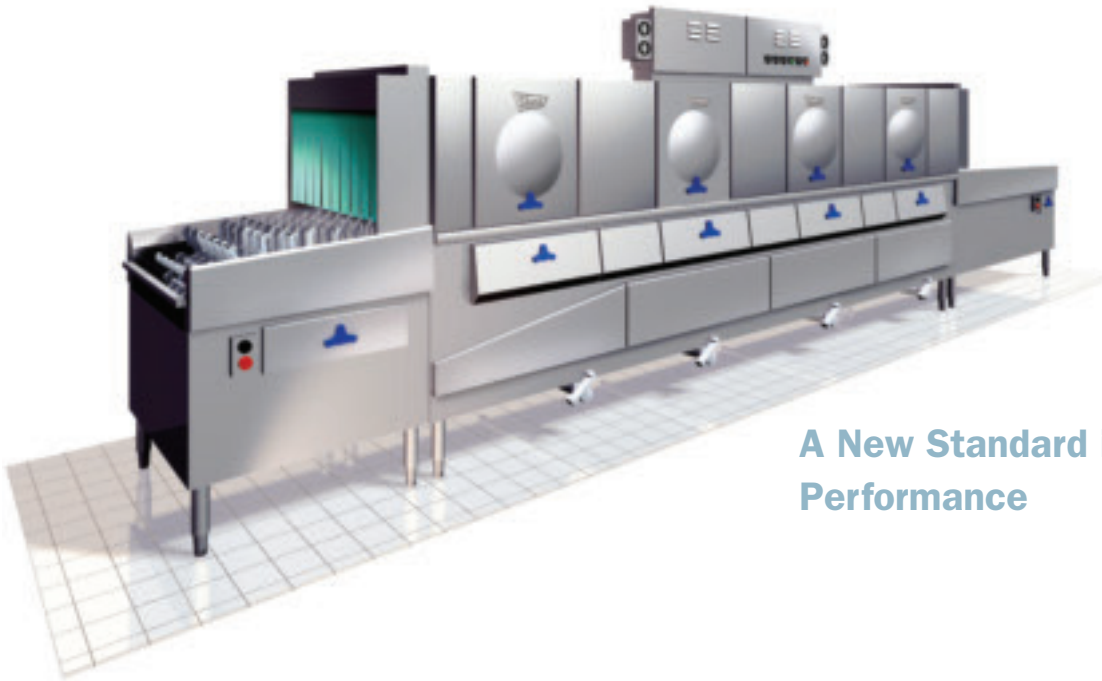


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# STERO STPCW RACKLESS CONVEYOR WASHER



## A New Standard in High Volume Performance

STPCW: RACKLESS MULTIPLE TANK  
CONVEYOR WASHER, HIGH TEMP

FLIGHT-TYPE

### STANDARD FEATURES

**Design:** The extra wide and high, STERO rackless conveyor dishwasher, with its many patented features, has been designed with you in mind.

It's 180° rinse water control is the finest in the field.

It has the largest, most efficient scrap, wash and rinse manifolds in the field.

It has a safety stop at the unload end which positively eliminates ware breakage and pile up.

**Automatic electric tank fills and water level control,** push-button operated to fill all tanks to proper level. If for any reason water levels should drop during operation, this control will automatically operate to restore and maintain the correct waste level. In addition, a separate control is provided with a lockout circuit which will prevent the operation of the pumps until the tanks have been filled.

**Automatic Shut Down:** Shuts down machine operation during idle periods.

**Tanks and hoods** are fully welded 16 gauge, Type 304, 18-8, #4 mill finish stainless steel.

**Conveyor belt framework** is completely stainless steel, cross rods, side and center tension links, springs and pins. It is supported on stainless steel angle tracks by high density polypropylene rollers which provide ideal conveyance.

**Conveyor drive and idler shafts** are 1<sup>7</sup>/<sub>16</sub>" , 18-8 stainless steel. Shaft bearings are Neoprene grease-sealed,

self-aligning, ball bearings, and are mounted on the frame outside the drain pans, with take-up adjustment.

**All tank areas** are completely covered with removable, perforated stainless steel scrap trays.

**Standard frame** is fabricated from 3"x 3"x 1/4" steel angle iron, all joints are welded and ground.

**Stainless steel center fed manifolds** are easily removed with positive indexing. Orifices are round and stricture free with stainless steel deflectors.

**Motors and pumps:** Motors are heavy duty, 1750 RPM, splashproof, grease sealed ball bearing, requiring no maintenance. Motors are integrated with centrifugal pumps through packless, stainless steel and ceramic seal insuring perfect alignment and quiet operation.

**Control Panel:** Centered on hood, top mounted. Hinged front opening complies with the regulations of the California Industrial Accident Commission. Fitted with oil tight pushbuttons and pilot lights. Waterproof stop-start stations for conveyor provided at each end of the machine.

**Magnetic motor starters** with overload and low voltage protection are provided in the control panel for each motor.

**Safety conveyor cut off** is provided at the unload end with limit switch and brake on conveyor drive providing that traveling ware will stop the conveyor if unattended.

**Conveyor drive** is adjustable, variable speed from 2 to 12 feet per minute.

## STANDARD FEATURES *Continued*

**Stainless steel drain valve seats and poppets** with springloaded control shafts, front, externally operated.

**Stainless steel panel skirts:** Both sides, both ends.

**Inspection door and scrap removal door** are provided for each compartment with double access door at rear center of hood.

**Manual adjustable, locking dampers** in 4"x 31<sup>1</sup>/<sub>4</sub>" I.D. vent duct receivers at each end of hood.

**Flow pressure gauge, pressure regulating valve, and shock arrester in final rinse line.**

**Vacuum breakers** in final rinse and fill lines as per code requirements.

**Stainless steel standpipe** with bell type skimmer in wash tank.

**All risers, baffles, stiffeners, side rails and end plates** are Type 304, 18-8 stainless steel.

**Standard internal supply lines** for hot water are 3/4" IPS, Type K copper.

**Standard internal drain line manifold** is 2" IPS, Type K copper.

**Standard feet** are adjustable, stainless steel, sanitary type in compliance with NSF standard #3.

**Internal wiring** is complete in waterproof conduit fittings to a terminal strip in a common junction box, for separate line connections to each electrical component.

**Internal plumbing** is complete with all waste and supply connections manifolded together to the connection schedule shown on inside page.

**Interrupted final rinse water control:** Patented STERO electromagnetic rinse water control uses 180° water only when ware is in the final rinse area. Belt movement does not control rinse water use.

**Peg links:** Exclusive patented STERO design permits the individual replacement of peg links in seconds without the necessity of disassembling the belt.

**Kit 55:** STERO mounts a 3/4" pressure reducing valve, shock-arrestor and flow pressure gauge in the final rinse line prior to the rinse solenoid valve. The shock-arrestor prevents line hammer and will double the life of the valve. The PRV will allow adjustment of the final rinse pressure and the gauge will give visual proof when it is correct.

## REQUIRED TANK HEATING

NSF requires that the water in all power & rinse tanks be maintained at specified temperatures. STERO offers four types of heating equipment to meet this standard. Please specify which option best suits your job conditions.

**The tank heating options for each tank are:**

**Electric:** Five 5 kW stainless steel elements (25 kW total) are mounted in the bottom of the tank. The units are thermostatically

controlled and have STERO's low water protection system. The elements, thermostat, LWP, and contactor are all inter-wired to the control panel.

**Gas:** STERO has developed another first for the industry. A gas fired, infrared tank heating system that will heat the water to the correct temperature and maintain it during operation. Burners are constructed of woven ceramic fiber that are thermostatically controlled and feature a manual off-on valve. STERO's positive low water protection system safeguards the unit in the event of a low water condition.

**Steam Injectors:** Two stainless steel injectors with silencers are mounted in the tank. A thermostat controls a solenoid valve, and maintains the correct temperature.

**Steam Coils:** STERO designed and built stainless steel steam coils are mounted in the tank. Steam coils allow the condensed steam to be returned to the steam generator, a decided advantage when there is a question of purity of steam. A thermostat controls a steam solenoid valve and maintains the correct temperature. A steam trap is mounted on the steam return line.

## AVAILABLE OPTIONS

**Cold water Aquastat,** keeps scrapper water tempered with cold water, thermostatically controlled.

**Circuit breakers in panel** permitting complete final connection for entire electrical requirements of the machine with one 3 wire circuit. In addition to greatly reducing installation costs, this feature provides complete control of the electrical service at the machine.

**Final rinse water booster heater,** steam operated, electrically controlled, sized to raise incoming hot water supply from 140° to 180°-190°, completely integrated with the internal plumbing and electrical systems of the machine.

**Final rinse water booster heater,** 45 kW, electrically operated, and sized to raise incoming hot water from 140° to 180°-190°, completely integrated with internal plumbing and electrical systems of the machine.

**Hose bib** plumbed into the 140° hot water supply line with 25' hose and pistol nozzle to facilitate clean up procedures on the machine and the soiled dish tables.

**Steam or electrically heated blower system** over drying section.

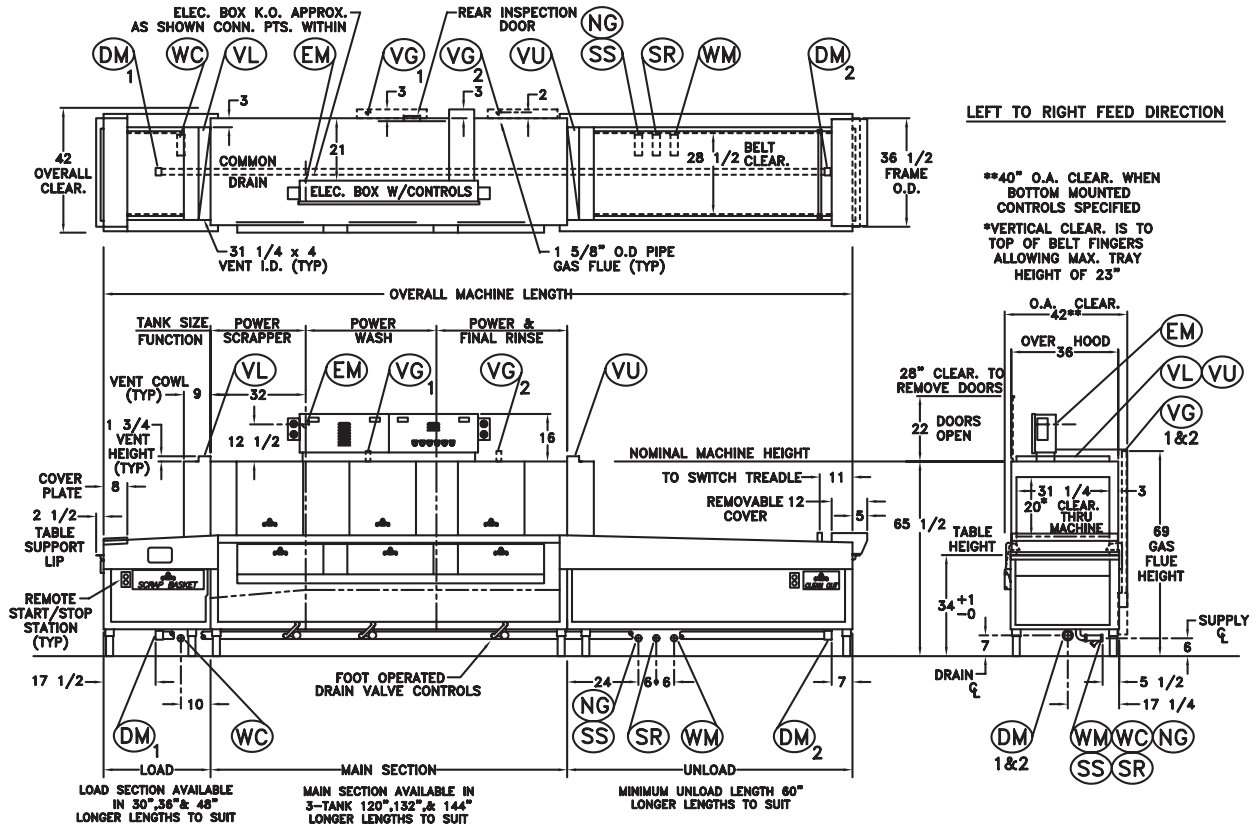
**Stainless steel frame,** all welded construction using mill shapes, angle and channel.

Any special requirement in overall length due to space limitations can be met by alteration of the unload section. Additional drying area can be provided by lengthening the unload section.

**Shipment** in two or three sections as required to facilitate delivery and placement on the job.

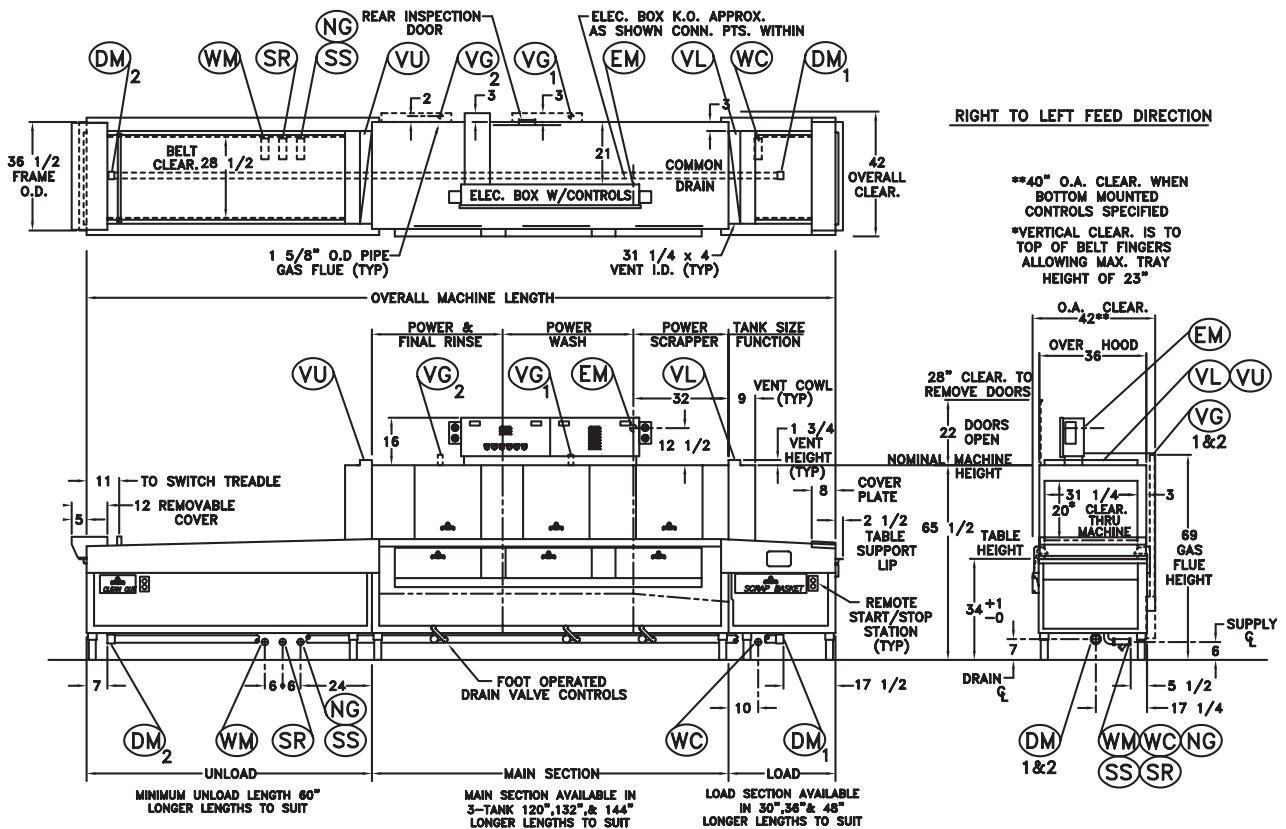
# STERO STPCW CONVEYOR WASHER

Product Specification Sheet



LEFT TO RIGHT FEED DIRECTION

\*\*40" O.A. CLEAR. WHEN BOTTOM MOUNTED CONTROLS SPECIFIED  
\*VERTICAL CLEAR. IS TO TOP OF BELT FINGERS ALLOWING MAX. TRAY HEIGHT OF 23"



RIGHT TO LEFT FEED DIRECTION

\*\*40" O.A. CLEAR. WHEN BOTTOM MOUNTED CONTROLS SPECIFIED  
\*VERTICAL CLEAR. IS TO TOP OF BELT FINGERS ALLOWING MAX. TRAY HEIGHT OF 23"



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## STERO STPCW

STEAM HEAT WITH BOOSTER			STEAM HEAT WITHOUT BOOSTER		
DM	2" NPT (F)	DRAIN, MACHINE WASTE: CONNECT TO EITHER END LEAVE UNUSED PORTS PLUGGED	DM	2" NPT (F)	DRAIN, MACHINE WASTE—CONNECT TO EITHER END, LEAVE UNUSED PORTS PLUGGED
EM	ELEC. REQ.	ONE (1) FEEDER SIZED FOR 1. SCRAPPER PUMP MOTOR-----2 HP 2. WASH PUMP MOTOR-----3 HP 3. RINSE PUMP MOTOR-----3 HP 4. 1/2HP CONVYR. MTR. & CONT. CIRC.	EM	ELEC. REQ.	ONE (1) FEEDER SIZED FOR 1. SCRAPPER PUMP MOTOR-----2 HP 2. WASH PUMP MOTOR-----3 HP 3. RINSE PUMP MOTOR-----3 HP 4. 1/2HP CONVYR. MTR. & CONT. CIRC.
WM	1" NPT (F)	WATER SUPPLY: 140° F. MIN. AT 20 PSI FLOW PRES. CONSUMPTION = 336 GAL./HR.	WH	3/4" NPT (F)	WATER SUPPLY: 180° F. MIN. AT 20 PSI FLOW PRES. CONSUMPTION = 336 GAL./HR.
WC	3/4" NPT (F)	WATER SUPPLY: COLD AS AVAILABLE	WC	3/4" NPT (F)	WATER SUPPLY: COLD AS AVAILABLE
SS	2" NPT (F)	STEAM SUPPLY: 15 TO 40 PSI, CONS. IN LBS/HR TANK HEAT:170 BOOSTER:150	SS	1-1/4" NPT (F)	STEAM SUPPLY: 15 TO 40 PSI, CONS. IN LBS/HR TANK HEAT:170
SR	3/4" NPT (F)	STEAM RETURN:	SR	3/4" NPT (F)	STEAM RETURN
VL	4x31 1/4 VENT I.D.	VENT, LOAD END: RECOM. MIN. DRAW = 500 CFM	VL	4x31 1/4 VENT I.D.	VENT, LOAD END: RECOM. MIN. DRAW = 500 CFM
VU	4x31 1/4 VENT I.D.	VENT, UNLOAD END: RECOM. MIN. DRAW = 1000 CFM	VU	4x31 1/4 VENT I.D.	VENT, UNLOAD END: RECOM. MIN. DRAW = 1000 CFM
VG	1 5/8" O.D. PIPE	VENT, NATURAL GAS FLUE: VENT TO ATMOSPHERE W/AIR GAP	NG	1" NPT (F)	NATURAL GAS SUPPLY: CONSUMPTION = 184,000 BTU

ELECTRIC HEAT WITH BOOSTER			ELECTRIC HEAT WITHOUT BOOSTER		
DM	2" NPT (F)	DRAIN, MACHINE WASTE—CONNECT TO EITHER END, LEAVE UNUSED PORTS PLUGGED	DM	2" NPT (F)	DRAIN, MACHINE WASTE—CONNECT TO EITHER END, LEAVE UNUSED PORTS PLUGGED
EM	ELEC. REQ.	THREE (3) FEEDERS SIZED FOR:	EM	ELEC. REQ.	THREE (3) FEEDERS SIZED FOR:
		FEEDER NO.1 1. SCRAPPER PUMP MOTOR-----2 HP 2. WASH PUMP MOTOR-----3 HP 3. RINSE PUMP MOTOR-----3 HP 4. 1/2HP CONVYR. MTR. & CONT. CIRC.			FEEDER NO.1 1. SCRAPPER PUMP MOTOR-----2 HP 2. WASH PUMP MOTOR-----3 HP 3. RINSE PUMP MOTOR-----3 HP 4. 1/2HP CONVYR. MTR. & CONT. CIRC.
		FEEDER NO.2 1. WASH TANK HEAT-----25 KW			FEEDER NO.2 1. WASH TANK HEAT-----25 KW
	THREE FEEDERS REQUIRED	FEEDER NO.3 1. RINSE TANK HEAT-----25 KW		THREE FEEDERS REQUIRED	FEEDER NO.3 1. RINSE TANK HEAT-----25 KW
EB	ELEC. REQ.	ONE FEEDER SIZED FOR: 1. BOOSTER HEATER-----45 KW	WM	3/4" NPT (F)	WATER SUPPLY: 140° F. MIN. AT 20 PSI FLOW PRES. TANK FILL
WM	1" NPT (F)	WATER SUPPLY: 140° F. MIN. AT 20 PSI FLOW PRES. CONSUMPTION = 336 GAL./HR.	WH	3/4" NPT (F)	WATER SUPPLY: 180° F. MIN. AT 20 PSI FLOW PRES. CONSUMPTION = 336 GAL./HR.
WC	3/4" NPT (F)	WATER SUPPLY: COLD AS AVAILABLE	WC	3/4" NPT (F)	WATER SUPPLY: COLD AS AVAILABLE
VL	4x31 1/4 VENT I.D.	VENT, LOAD END: RECOM. MIN. DRAW = 500 CFM	VL	4x31 1/4 VENT I.D.	VENT, LOAD END: RECOM. MIN. DRAW = 500 CFM
VU	4x31 1/4 VENT I.D.	VENT, UNLOAD END: RECOM. MIN. DRAW = 1000 CFM	VU	4x31 1/4 VENT I.D.	VENT, UNLOAD END: RECOM. MIN. DRAW = 1000 CFM

- NOTE 1. WC NECESSARY ONLY WHEN COLD WATER AQUA-STAT SPECIFIED  
 2. SINGLE POINT ELECTRICAL CONNECTION AVAILABLE WHEN MOUNTED CIRCUIT BREAKERS SPECIFIED  
 3. 132" MAIN SECTIONS USE 3 HP SCRAPPER PUMP MOTOR.  
 4. VG, NG NECESSARY ONLY WHEN INFRARED NATURAL GAS TANK HEAT SPECIFIED.

STANDARD EQUIPMENT FEATURES	BENEFIT
Full perimeter frame	Long machine life
Auto fill	Proper water fill level at start up and during ongoing operation
Center fed manifolds	Even distribution of wash water for uniform and consistent results
Outboard scrap catchment	Complete removal of food soil from machine reduction of chemical usage
OPTIONAL EQUIPMENT FEATURES	BENEFIT
Mounted circuit breakers	Individual circuit protection for motors and tank heat
Cold water aquastat	Regulated scrap tank water temperature to avoid food soil adhesion
Custom belt configuration	Taylor the conveyor belt to suit customer's individual needs

