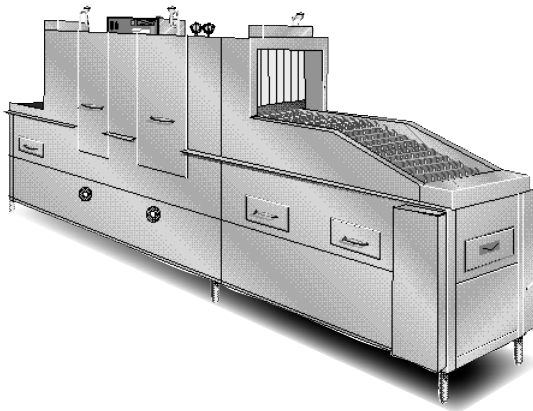


## DEFENDER

### AUTOMATIC DOUBLE TANK RACKLESS CONVEYOR



#### DESIGN

Automatic conveyor, flight type two tank dishwasher with recirculating prewash and wash zones and fresh hot water final rinse. Capacity is 8,861 dishes per hour with a conveyor speed of 7.1ft. per minute. Designed for left or right hand conveyor travel, as specified.

#### STANDARD EQUIPMENT

- Exclusive CrossFire® Wash System (patented)
- Wash tank heat: 40KW electric immersion heaters or steam injectors
- Capillary thermometers for prewash and wash tanks and final rinse
- Final rinse pressure gauge
- Vacuum breakers on all incoming water lines
- Manifold cleanout brush
- Inspection and cleanout doors
- Polypropylene belt with removable rack sections
- SureFire™ Start-Up and Check-Out Service
- Simplified scrap screen design
- Exhaust connections with adjustable dampers
- Steam booster
- Interior work lights
- S/S frame, legs and feet
- S/S front enclosure panel
- Provision for detergent dispenser and rinse agent injector connection
- Top mounted NEMA 12 control panel
- Automatic tank fill with low water protection
- Door safety switches
- Energy saver override switch for delimiting
- Conveyor reversing switch
- Conveyor safety stop bar
- Standard frame, drip proof motors
- Color-coded curtains

#### OPTIONAL ACCESSORY EQUIPMENT

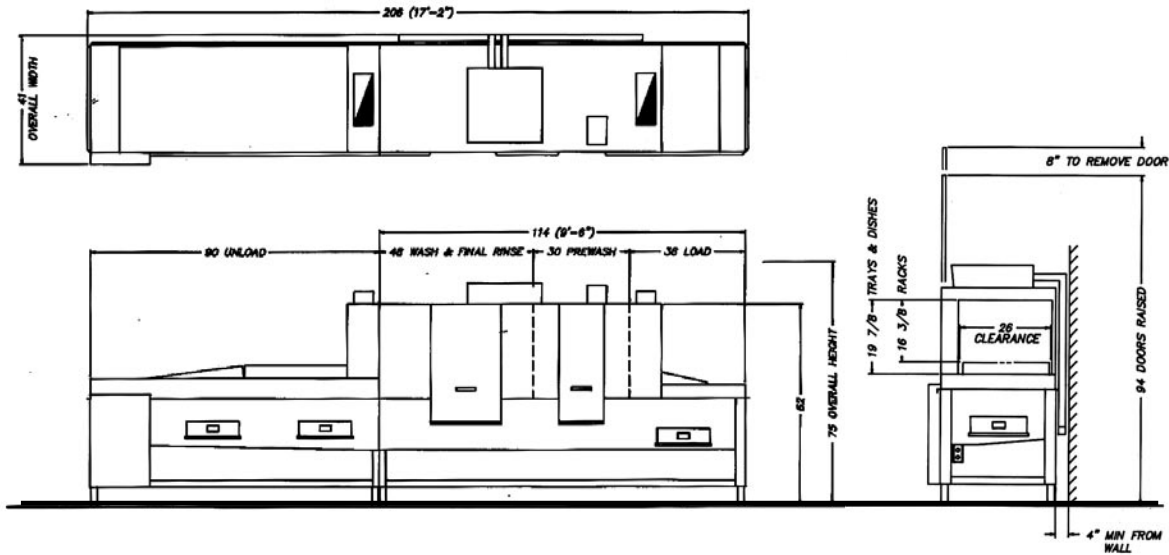
- Stainless steel steam coil tank heat
- Pressure reduction valve and line strainer
- Electric booster
- Stainless steel belt with removable rack sections
- Single electrical connection: motors, controls, and heaters
- Security package
- S/S panels all sides
- Insulated hood and doors
- Totally enclosed motors
- 5 inch wide conveyor section for washing flatware
- Totally enclosed motors



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CSI - 11400



Note: For all rough in connections see Installation and Layout Detail Drawing.

### SPECIFICATIONS

**CONSTRUCTION** - Hood and tank constructed of 16 gauge 18-8 type 304 S/S. Hood unit of all welded seamless construction. S/S frame, legs and feet. All internal castings are non-corrosive nickel alloy, bronze or S/S investment.

**DOORS**-Two extra large die formed 18-8 type 304 S/S front inspection doors riding in all S/S channels. A triple ply leading edge on the door channels made of S/S with no plastic or nylon sleeves or liners used. Two intermediate S/S door-safety stops on each door.

**CONVEYOR** - Removable polypropylene or S/S rack sections on S/S belt with Hi-D rollers. Conveyor drive system includes large speed reducer with cut gears operating in oil bath and frictionless, trouble-free overload release system. Dishware conveyed automatically through all washing and rinsing systems and is driven by an independent 1/2 HP motor. A stop bar sits at the end of the unload section. This will shut off the conveyor if any ware reaches the bar. A reversing switch is provided to assist in removing jams in the belt.

**PUMPS** - Centrifugal type "packless" pump with a brass petcock drain. Construction includes ceramic seal and a balanced cast impeller on a precision ground stainless steel shaft, extension or sleeve. All working parts mounted as an assembly and removable as a unit without disturbing pump housing. 2HP prewash pump and 3HP wash pump, standard horizontal C-face frame, drip proof, internally cooled with ball-bearing construction.

**CONTROLS** - Top-mounted control cabinet, NEMA 12 rated with heat insulation provided between hood and control cabinet, housing motor controls and overload protection, transformer, contactors and all dishwasher integral controls. All controls safe low voltage 24 VAC.

**ENERGY SAVER** - Electric photo-eye automatically operates the final rinse solenoid only when ware passes, saving water and energy. The photo eye also activates an adjustable timer control. If no ware passes during the set time, the machine shuts down.

**SPRAY SYSTEM** - Spray arms are made of 18-8 type 304 stainless steel pipe. Spray assemblies removable without the use of tools.

**PREWASH** - Upper and lower manifolds. One manifold above with 3 power wash arms, designed with 6, 5 & 6 high pressure action cleansing slots and one manifold below with 4 power wash arms, each designed with 5 high pressure action cleansing slots. The slots are precision milled for water control, producing a fan spray. Prewash arms are fillet welded to the S/S manifold.

**WASH** - Upper and lower manifolds & the CrossFire® Wash System (patented). One manifold above with 3 power wash arms designed with 7, 6 & 7 high pressure action cleansing slots and one manifold below with 4 power wash arms, each designed with 7 high pressure action cleansing slots. The slots are precision milled for water control producing a fan spray. Wash arms are fillet welded to the S/S manifold. The CrossFire® system provides 2 horizontally spraying high pressure nozzles.

**FINAL RINSE** - Four nozzles above and five nozzles below threaded into S/S pipes. Nozzles produce a fan spray reducing water consumption, maximizing heat retention.

**DRAIN** - Drain valves externally controlled. Overflow assembly with skimmer cap is removable without use of tools for drain line inspection. Heaters protected by low water level control.

Capacity per hour	Tank capacity	Motor size	Electric usage	Steam consumption at 20 psi min.	Final rinse peak flow at 20 psi min.	
8861 dishes 600-1000 meals	20 gals. (prewash) 39 gals. (wash)	2 hp (prewash) 3 hp (wash) 1/2 hp (conveyor)	40 kw wash tank 36 kw booster 40° rise 54 kw booster 70° rise	145 lbs./hr tank 109 lbs./hr booster 40° rise 190 lbs./hr booster 70° rise	5.1 gals./min.	
Final rinse consumption at 20 psi min.	Exhaust hood requirement	Peak rate drain flow	Shipping weight	Current draw amps	Steam	Electric w/o booster
306 gals./hr.	500 CFM load 1000 CFM unload	15 gals./min.	2500 lbs.	208/3/60.....	21.5.....	132.9
				240/3/60.....	19.5.....	116.1
				380/3/50.....	11.9.....	72.7
				480/3/60.....	9.8.....	57.8