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## Speeder 86

# **Double Tank Conveyor Dishwasher** with Recirculating Pre-wash

- Automatic conveyor, rack type, double tank dishwasher with recirculating pre-wash, wash, rinse and fresh water final rinse
- 0.52 gallons/rack final rinse consumption
- Capacity is 277 (20" x 20") racks per hour or 6,925 dishes per hour
- Error proof replacement with color-coded curtains



CrossFire Wash System power sprays water horizontally, as well as, from above and below, cleaning and sanitizing the dirtiest of ware.

#### STANDARD FEATURES

- CrossFire Wash System
- Color-coded curtains
- Tank heat:
- Electric immersion heater
- Steam injector
- Capillary thermometers for wash and rinse
- In-line thermometer for final rinse
- Vacuum breaker on all incoming water lines
- Manifold clean-out brush
- SureFire Start-Up & Check-Out Service
- Inspection door
- Ventilation fan connection provision
- S/S frame, legs and feet
- S/S front enclosure panel
- Automatic tank fill
- Low water protection
- Detergent connection provision
- Elevated top mounted NEMA 12 control panel
- Easily-cleaned crowned hood top
- Simplified scrap screen design
- Door safety switch
- Standard frame drip proof motors
- Energy saver
- Override switch for deliming
- End caps/pipe plugs secured to prevent loss
- Timing belt conveyor drive

#### **OPTIONS**

- ☐ Stainless steel steam coil tank heat
- ☐ Steam booster
- ☐ Electric booster
- ☐ Single point electrical connection: motors, controls and tank heat. (Booster requires a separate connection)
- ☐ End cowls with vent and adjustable damper controls
- ☐ S/S splash guards
- □ Security package
- □ Totally enclosed motors
- ☐ Rack limit switch
- □ Power Loader
- □ Power Unloader
- □ Door activated drain closers
- Insulated hood and door
- ☐ Plastic 20" x 20" racks (plate or silver)

#### SPECIFIER STATEMENT

Specified unit will be an Insinger Speeder 86 double tank rack conveyor dishwasher with pre-wash. Features include CrossFire Wash System, capillary thermometer for wash and rinse, in-line thermometer for final rinse, vacuum breaker, SureFire Start-Up & Check-Out service, inspection door automatic tank fill, low water protection, door safety switch, energy saver, timing belt conveyor drive, and 304 stainless steel construction.











### **Additional Information**

Capacity Per Hour	277 racks 6925 dishes 300-600 meals		
Tank Capacity	12 gals. (wash) 13 gals. (rinse) 25.5 gals. (gas wash) 26 gals. (gas rinse)		
Motor Size	1 hp (wash) 1 hp (rinse) 1/15 hp (conveyor)		
Electric Usage	7.5 kW wash tank 15 kW rinse tank 15 kW booster 40° rise 27 kW booster 70° rise		
Gas Consumption	90,000 BTUH 88 CFH nat. gas 36 CFH propane		
Steam Consumption at 20 psi min.	81 lbs./hour tank 51 lbs./hour booster 40° rise 90 lbs./hour booster 70° rise		
Final Rinse Peak Flow at 20 psi min.	2.4 gallons/minute		
Final Rinse Consumption at 20 psi min.	144 gallons/hour 0.52 gallons/rack		
Exhaust Hood Requirement	350 CFM Load 350 CFM unload		
Peak Rate Drain Flow	14 gallons/minute		
Installation distance from vertical combustible service	2"		
Shipping Weight	1200 lbs.		

Machine Electrical					
Motors, Controls, Tank Heat	Steam	Gas	Electric		
240/1/60	9.7	20.2	112.8		
208/3/60	10.7	11.9	73.1		
240/3/60	9.8	10.9	63.9		
480/3/60	4.9	5.4	31.9		
380/3/50	5.9	6.6	40.0		

Note: Due to product improvement we reserve the right to change information and specifications without notice.

#### **SPECIFICATIONS**

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

DOORS- Extra large die formed 18-8 type 304 S/S front inspection door 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 door.

CONVEYORS- One S/S roller chain conveyor, with rack driving lugs every sixth link, running along the front of the machine. Eleven free spinning rollers placed along the back wall of the machine. Conveyor accommodates all standard 20" racks. Conveyor drive system includes direct drive gear motor with frictionless, trouble-free clutch system, spring-loaded and automatically re-engaging. Racks conveyed automatically through washing and rinsing systems, powered by an independent 1/15 hp drive motor.

PUMP- Centrifugal type "packless" pump with a brass petcock drains. 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. 1 hp motor for each wash and rinse pump: standard horizontal C-face frame, drip proof, internally cooled with ball-bearing construction.

CONTROLS- Top mounted NEMA 12 control enclosure, with 3.5 inch air gap between hood and enclosure, housing motor overload protection, contactors, transformers and all other dishwasher controls. All controls safe low voltage 24 VAC.

ENERGY SAVER- Rack actuated lever automatically operates the final rinse solenoid only when a rack passes, saving water and energy. The lever also activates an adjustable timer control. If no ware passes during the set time, the machine shuts down.

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

WASH- Upper and lower manifolds with the patented CrossFire® Wash System. One manifold above with 3 power wash arms, each with 9 high pressure cleaning slots and one manifold below with 3 power wash arms, each with 9 high pressure cleaning 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® Wash System provides 4 horizontally spraying high pressure nozzles.

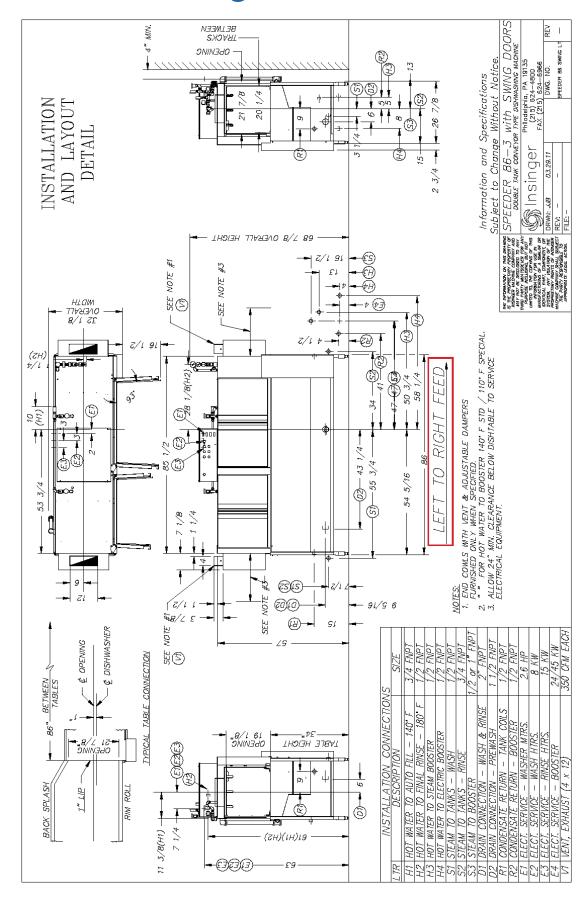
RINSE- Upper and lower manifolds. One manifold above with 3 power rinse arms, each with 9 high pressure rinsing slots and one manifold below with 3 power rinse arms, each with 9 high pressure rinsing slots. The slots are precision milled for water control producing a fan spray. Rinse arms are fillet welded to the S/S manifold.

FINAL RINSE- Six nozzles above and three nozzles below threaded into S/S schedule 40 pipes. Nozzle assemblies produce a fan spray reducing water consumption, maximizing heat retention.

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

Note: Exhaust requirements are for pant leg connections only. For hood type, CFM requirements vary, consult hood manufacturer for specific sizing.

# **Technical Drawings**



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