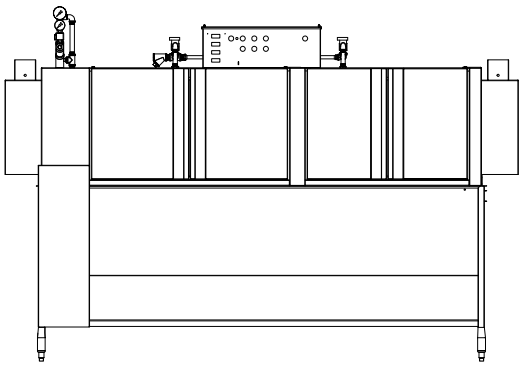
Insinger

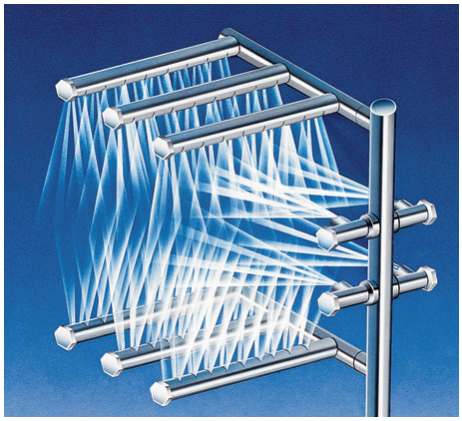
Project _____ CSI - 11400 _____
Item _____ Approval _____
Quantity _____ Date _____

SPEEDER 86-3

Double Tank Rack Conveyor Dishwasher with 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
- CrossFire® Wash System provides superior cleaning
- Error proof replacement with color-coded curtains
- Wide insulated swing-out doors



The patent-pending **CrossFire® Wash System** power sprays water horizontally, as well as, from above and below, cleaning and sanitizing the dirtiest of ware.

STANDARD FEATURES

- Patented CrossFire® Wash System
- Tank heat: 22.5 kW electric immersion heaters or steam injectors
- 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
- Ventilation fan connection provision
- S/S frame, legs and feet
- S/S front enclosure panel
- Automatic tank fill
- S/S low water monitoring system
- Detergent connection provision
- Elevated top mounted NEMA 12 control panel
- Easily-cleaned crowned hood top
- Simplified scrap screen design
- Wide insulated swing-out doors
- Door safety switch
- Standard frame-mounted drip proof motors
- Energy saver
- Override switch for de-liming
- End caps/pipe plugs secured to prevent loss
- Color-coded curtains
- Timing belt conveyor drive

OPTIONS

- ☐ Stainless steel steam coil tank heat
- ☐ Steam booster
- ☐ Electric booster
- ☐ Pressure reduction valve and line strainer
- ☐ Single point electrical connection: motors, controls and tank heat. (Booster requires a separate connection).
- ☐ Vent cowl collar
- ☐ Chemical sanitizer injector package for low temperature operation (Note: pump supplied by others)
- ☐ Security package
- ☐ Totally enclosed motors
- ☐ Rack limit switch
- ☐ Power Loader
- ☐ Power Unloader
- ☐ Door activated drain closers
- ☐ Insulated hood
- ☐ Plastic 20" x 20" racks (flat or peg)

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AUTOQUOTES

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Double Tank Rack Conveyor Dishwasher with Pre-Wash

Capacity Per Hour	277 racks 6925 dishes 300-600 meals
Tank Capacity	8 gals. (pre-wash) 12 gals. (wash) 13 gals. (rinse)
Motor Size	1/2 hp (pre-wash) 1 hp (wash) 1 hp (rinse) 1/15 hp (conveyor)
Electric Usage	8 kW wash tank 15 kW rinse tank 15 kW booster 40° rise 27 kW booster 70° rise
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.	3.7 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	23 gallons/minute
Shipping Weight	1200 lbs.

Machine Electrical		
Motors, Controls, Tank Heat	Steam	Electric
240/1/60	24.1	119.8
208/3/60	13.1	76.9
240/3/60	11.6	67.3
480/3/60	6.0	33.6
380/3/50	7.2	42.2

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 wide die formed 18-8 type 304 s/s front inspection doors hinged with S/S pins. A triple ply leading edge on the door channels made of S/S with no plastic or nylon sleeves or liners used. Door stop built into frame.

CONVEYORS- One S/S roller chain conveyor, with rack driving lugs every sixth link, running along the front of the machine. Fifteen 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.

SPECIFICATIONS (continued)

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 s/s pipe. Spray assemblies removable without the use of tools.

PRE-WASH- One manifold above and one manifold below, each with 3 high pressure cleaning nozzles.

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 float mechanism

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

Existing exhaust connections on previous Insinger or non-Insinger equipment may not match current model. Refer to drawings.

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

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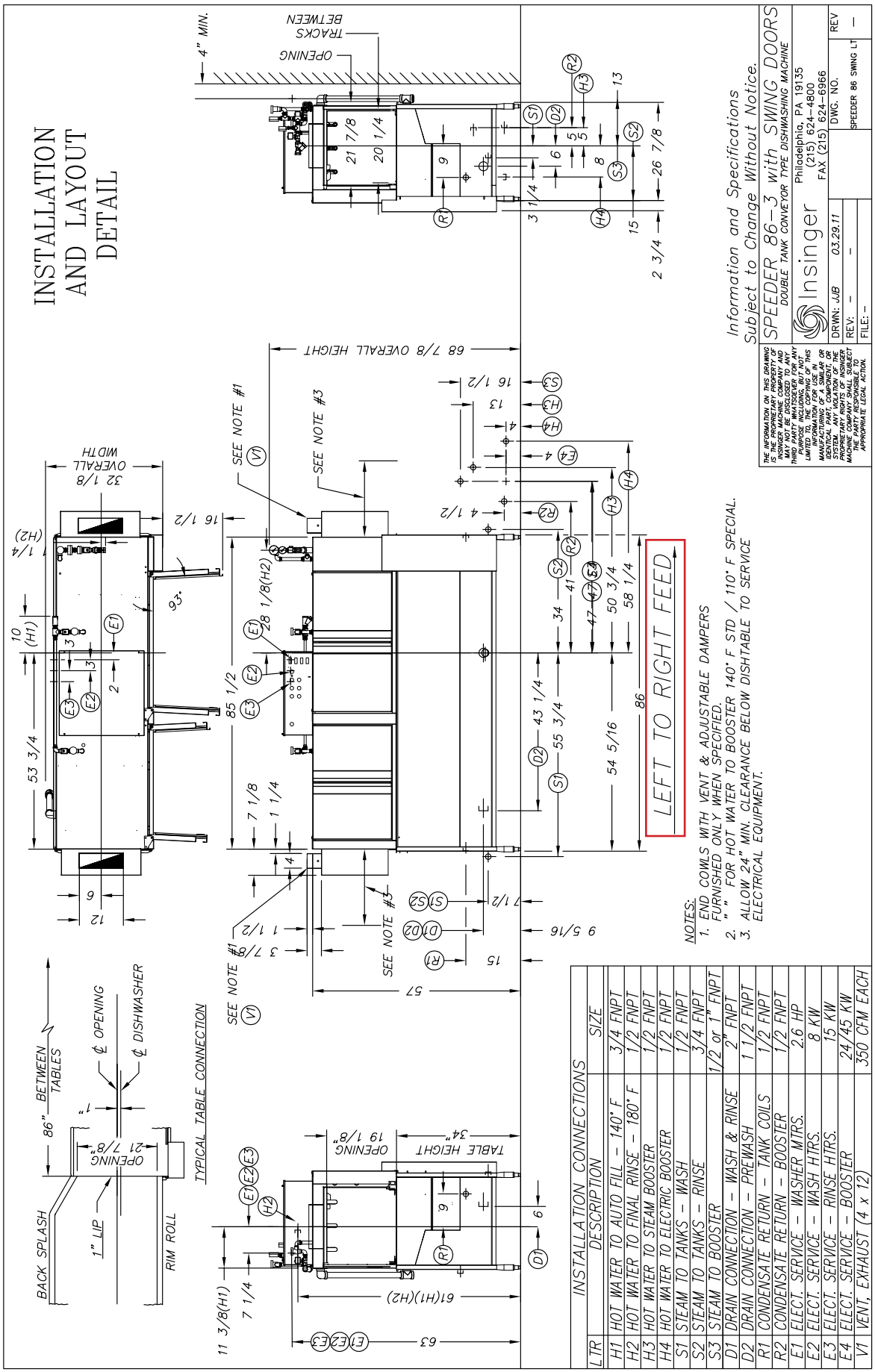

LTR	INSTALLATION CONNECTIONS DESCRIPTION	SIZE
H1	HOT WATER TO AUTO FILL – 140° F	3/4 FNPT
H2	HOT WATER TO FINAL RINSE – 180° F	1/2 FNPT
H3	HOT WATER TO STEAM BOOSTER	1/2 FNPT
H4	HOT WATER TO ELECTRIC BOOSTER	1/2 FNPT
S1	STEAM TO TANKS – WASH	1/2 FNPT
S2	STEAM TO TANKS – RINSE	3/4 FNPT
S3	STEAM TO BOOSTER	1/2 or 1" FNPT
D1	DRAIN CONNECTION – WASH & RINSE	2" FNPT
D2	DRAIN CONNECTION – PREWASH	1 1/2 FNPT
R1	CONDENSATE RETURN – TANK COILS	1/2 FNPT
R2	CONDENSATE RETURN – BOOSTER	1/2 FNPT
E1	ELECT. SERVICE – WASHER MTRS.	2.6 HP
E2	ELECT. SERVICE – WASH HTRS.	8 KW
E3	ELECT. SERVICE – RINSE HTRS.	15 KW
E4	ELECT. SERVICE – BOOSTER	24/45 KW
V1	VENT, EXHAUST (4 x 12)	350 CFM EACH

Contact Insinger Sales at 800-344-4802 for an Installation Drawing Specific to Your Application
This drawing is available on the Insinger Web stie at www.insingermachine.com

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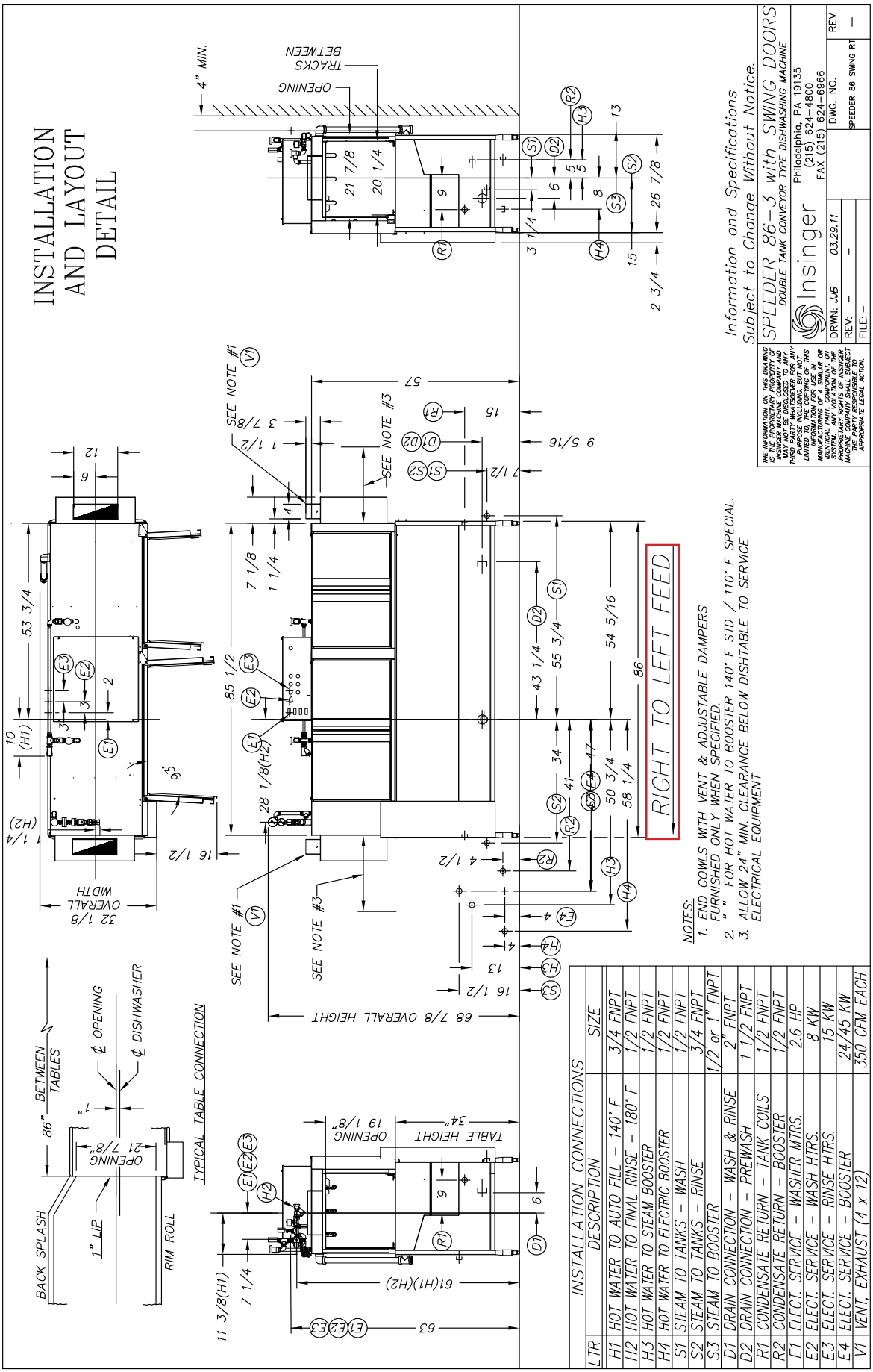

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