

# Champion®

The Dishwashing Machine Specialists

Project \_\_\_\_\_

Item No. \_\_\_\_\_

Quantity \_\_\_\_\_

PRO SERIES RACK CONVEYOR

## STANDARD FEATURES

- Exhaust air energy recovery - reuses waste energy to preheat incoming water
- Perpetual rack advance system, with intuitive jam alert, and drive protection
- Proportional rinse, delivering unmatched total ware coverage, utilizing digital pattern cloning stainless steel nozzles
- 255 Racks per hour
- 100 GPH with energy sentinel (idle pump shut-off)
- Prodigy series HMI display, intuitive condition alerts, with user friendly cleaning and operation visual guidance, multi-lingual, touch control
- Proactive maintenance interface, self-diagnostics, problem recognition, with repair recommendation, from HMI touch screen
- Programmable machine dwell with automatic rack alignment into the optimal wash zone
- Automatic drain valve
- Single-piece hood design
- Single-piece stainless steel upper and lower wash arm manifolds
- Single-point electrical connection
- 20" Standard vertical clearance which accommodates 18" x 26" sheet pans
- Full 180° opening leak proof insulated hinged access doors
- Stainless steel heavy gauge construction including base, legs and feet
- Enclosure panels (front and sides)
- 2 Hp pump motor, with stainless steel impeller
- Factory authorized start-up
- Vent fan control
- **ENERGY STAR® Certified**
- **Made in America**



**Customers save \$1500 per year in energy cost on average when compared to a standard machine!**

## 90 PRO-HD w/Heat Recovery (Electric)

54" Single Tank + 36" Heavy Duty Prewash  
High Temperature Electric Rack Conveyor  
Dishwashing Machine



*Photo is for general visual representation only. Please refer to specifications for the latest detailed product information.*

## SPECIFIER STATEMENT

Specified unit will be Champion Model 90 PRO-HD w/ Heat Recovery Option (Electric) high temperature rack conveyor dishwashing machine. Features top mounted Prodigy HMI user interface controls with proactive maintenance software, proportional rinse, using only 100 GPH, built-in 21 kW booster, progressive anti-jam drive system, energy sentinel (idle pump shut-off), 255 racks per hour, single-piece hood design, single-piece stainless steel upper & lower wash arms manifolds, full 180° opening leak proof insulated hinged access doors.

1 Year parts and labor warranty.

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## 90 PRO-HD w/Heat Recovery Option (Electric)

54" Single Tank + 36" Heavy Duty Prewash  
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### OPTIONS

- Two-point electrical connection, separate for machine and booster (field convertible)
- 33" Blower dryer – electric
- Direct link connectivity solution
- Direct link plus+ connectivity solution

### ACCESSORIES

- Drain water tempering kit (unmounted)
- Table limit switch, unmounted (recommended on all rack conveyor installations) (unmounted)
  - Whisker style
  - Button style
- Vent cowl, stainless steel with 7" stacks & locking dampers
- Flanged feet (unmounted)
- Water hammer kit (unmounted)
- Chemical pump kit (detergent and rinse aid, mounted and interwired)
- Water pressure regulating valve (unmounted) (standard with booster)
- ION scale prevention device (unmounted) for HW & CW lines
- Water softening system (manufactured, warranted and serviced by Kinetico)
- Dish racks:
  - Peg rack
  - Flat rack
  - Sheet pan rack
- Splash shields (load end only)
- Cantilever sideloader (without hood) for 90° load operation
  - 24" Sideload
  - 30" Sideload (accepts sheet pans)
- Model PRO-90B loader or unloader (90° corner conveyor table)
- Model RCT 64 or RCT 84 roller conveyor table (see factory for custom length)
- Stainless steel rear enclosure panels
- Correctional package (contact factory)



**NEW PRO-90B**  
90° Corner Conveyor  
table (shown)  
Loader or Unloader



**Cantilever Sideloader**  
(no hood)



**Model RCT 64 or  
RCT 84**

Roller conveyor  
table

# 90 PRO-HD w/Heat Recovery Option (Electric)

54" Single Tank + 36" Heavy Duty Prewash  
High Temperature Electric Rack Conveyor  
Dishwashing Machine



Utilities	
<b>1</b>	<b>Electrical Connection</b> Machine electrical connection and booster electrical connection
<b>2</b>	<b>Hot Water</b> 25 PSI machine with built-in booster Main connection 1/2" NPT
<b>3A</b>	<b>Cold Water</b> 30 PSI Connection 1/2" NPT; 55° Minimum
<b>5A</b>	<b>Drain</b> Connection 1-1/4" NPT Drain Max Flow Rate (g/min) 15
<b>8</b>	<b>Vents</b> <b>A</b> Stack connection - load end 150 CFM @ 1/4" static pressure <b>B</b> Stack connection - unload end 200 CFM @ 1/4" static pressure

**Warning:** Plumbing and electrical connections should be made by qualified personnel who will observe all the applicable plumbing, sanitary, safety codes and the National Electrical Code.

**Note:** Water Hammer Arrestor (meeting ASSE-1010 standard or equivalent) to be supplied (by others) in common water supply line at service connection.

**Plumbing Note:** Because of the variation in house-supplied steam and water pressures, steam and water pressure regulating valves (PRVs) may be needed. (Water PRV is standard on machines with booster.) The PRVs can either be purchased from Champion or obtained locally.

Recommended water hardness of 3 grains/US Gal (0.83 Imp Gal) - 5.3 Mg/L or less

**Venting Note:** Fabricated duct size: 3-7/8" x 15-7/8" (outside dimensions), direct venting is not required if used under a canopy vent.

**Note:** Freezing air must not be allowed to be drawn down into the heat recovery coil when building vent fan is off if direct vent ducting is connected to the machine.

**Optional Drain Tempering:** 1/2" NPT cold water connection required. 1/2" NPT drain connection from back flow preventer to house drain. (FIELD INSTALLED and PLUMBED).

### Single Tank PRO Rack Machine and Booster Rating

The tables below give the ratings for each model. The ratings include the requirements of the 21 kW booster heaters when they are used.

### Machines with a single point electrical connection:

90 PRO-HD w/Heat Recovery Option (Electric) Tank Heat, 21 kW 70° Booster			
Electrical Specifications	Rated Amps	Minimum Supply Circuit Ampacity	Maximum Overcurrent Protective Device
208/60/3	116	150	150
240/60/3	101	150	150
480/60/3	50	70	70
575/60/3	42	60	60

## SPECIFICATIONS

### Capacity

Racks per hr. (NSF rated).....	255
Wash tank (US gal.).....	17
Prewash tank (US gal.).....	17
Conveyor speed (ft./min.).....	7.1
Conveyor speed Pot/Pan Mode (ft./min.).....	5.4
(only one rack at a time in pot/pan)	

### Motor Horsepower

Drive .....	1/6
Wash .....	2
Prewash .....	2

### Water Consumption

US Gal. per hr. (max use) .....	100
US Gal. per rack .....	.39

### Heating

Tank Heat, electric (kW) .....	15
Electric booster (built-in) (kW supplied for 70°F rise) .....	21

*Booster heaters completely inter plumbed, controls are interwired.*

### Venting

Load end (minimum CFM) .....	150
Unload end (minimum CFM) .....	200

### Standard 20" X 20" rack complement

Peg .....	1
Flat .....	1

### Machines with a dual point electrical connection:

90 PRO-HD w/Heat Recovery Option (Electric), 21 kW Booster Only			
Electrical Specifications	Rated Amps	Minimum Supply Circuit Ampacity	Maximum Overcurrent Protective Device
208/60/3	59	80	80
240/60/3	51	70	70
480/60/3	26	35	35
575/60/3	22	30	30

90 PRO-HD w/Heat Recovery Option (Electric), Machine Only			
Electrical Specifications	Rated Amps	Minimum Supply Circuit Ampacity	Maximum Overcurrent Protective Device
208/60/3	58	80	80
240/60/3	50	70	70
480/60/3	25	35	35
575/60/3	21	30	30

**Note:** Machine ships as a single point electrical connection standard. Easily converted to a dual point connection by a qualified electrician.

## 90 PRO-HD w/Heat Recovery (Electric)

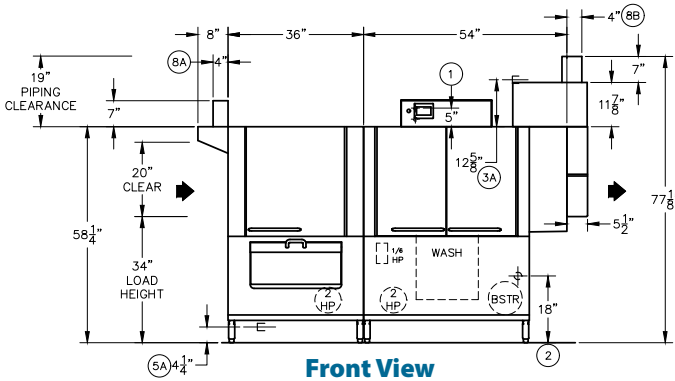
54" Single Tank + 36" Heavy Duty Prewash  
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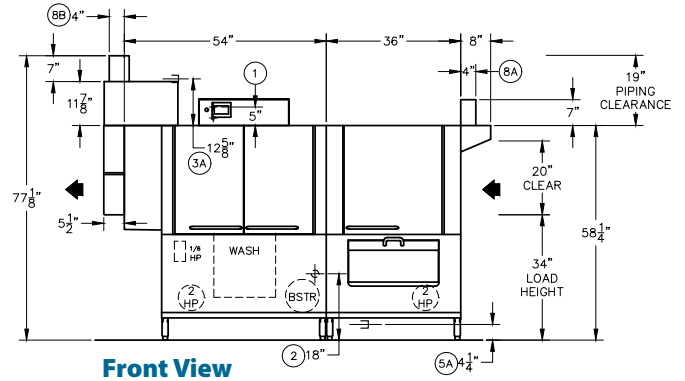
### 90 PRO-HD w/Heat Recovery (Electric)

Shipping weight crated: **1075 lbs.**

Dimensions shown in inches [mm]

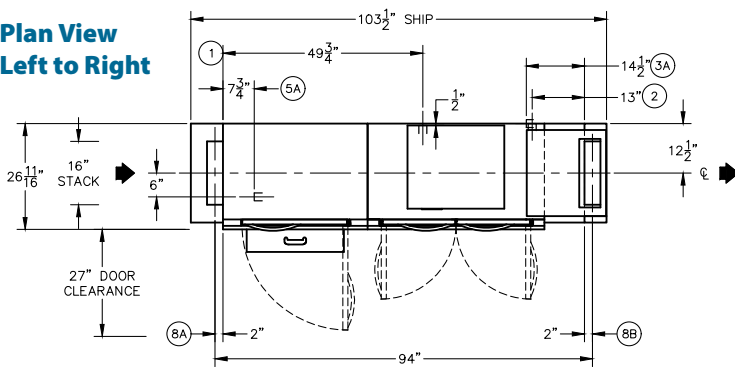


**Front View  
Left to Right**

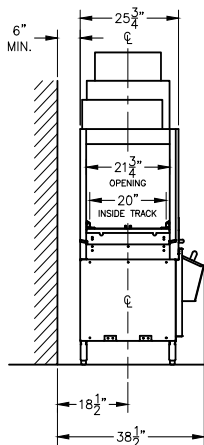
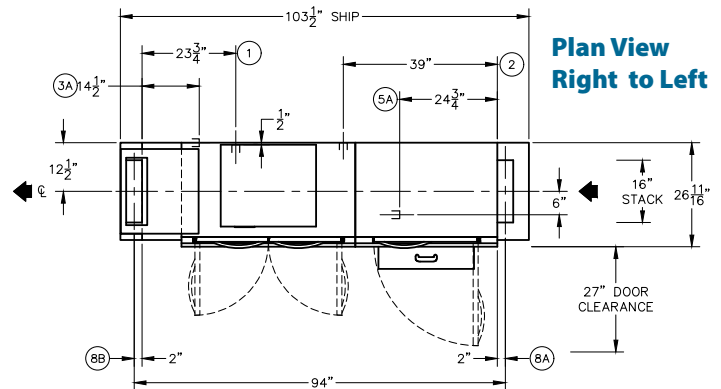


**Front View  
Right to Left**

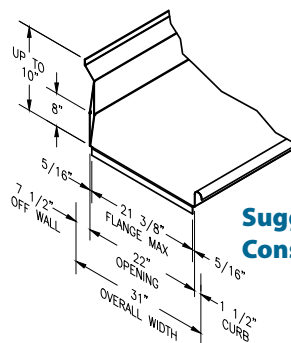
**Plan View  
Left to Right**



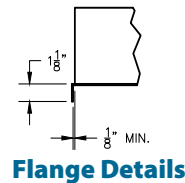
**Plan View  
Right to Left**



**End View**



**Suggested Table  
Construction**



**Flange Details**