

# BATCH DRAW WATER CHILLER



CHILLER ILLUSTRATION

## FEATURES

- **BATCH COOLING FOR BATCH MIXING**  
Ensures uniform dough year round
- **WELDED STAINLESS STEEL COOLING TANK**  
Provides storage required for batch draw operation without temperature swing
- **COMPACT CHILLER**  
Mounts on floor with minimum footprint
- **USES HFO REFRIGERANT**  
"Ozone Safe - Low Global Warming Potential (GWP)"

## OPTIONS

- **FOOD GRADE MAKE-UP WATER**  
Pre-filtration reduces turbidity and improves UV efficiency. Purification removes organic odors and tastes. UV sterilization kills water-borne pathogens. No chemicals or harmful byproducts, easy to maintain.

PB-750: FOOD GRADE MAKE-UP WATER	
TASTE MASTER® PURIFIER	STERI FLO® UV STERILIZER
IL20-PFTM	S-30

- **STAINLESS STEEL EXTERIOR**

## CHILLER SELECTION

To properly size a cooler for batch mixing application, determine the amount of ingredient water needed per batch and the number of batches per hour.

PB-750: CAPACITY TABLE*							
WATER PER BATCH	NUMBER OF BATCHES PER HOUR						
	1	2	3	4	5	6	7
gal/ltr	108/409	54/204	36/136	27/102	22/83	18/68	15/57
lb/kg	900/407	450/204	300/136	225/103	180/82	150/68	128/58

\*Based on 80°F [27°C] make-up water and 34°F [1°C] ingredient water

## MODEL ..... PB-750

### DESCRIPTION

A completely packaged water chiller designed for batch draw applications where a large volume of water is required intermittently. Filtrine PB chillers use a unique storage-type evaporator to chill water in batches thereby using less energy than continuous-draw water coolers. A large stainless steel cooling tank with internal evaporator automatically fills with water, which is constantly agitated and chilled to as cold as 34°F [1°C]. When water is drawn off, a solenoid valve shuts off the make-up water, preventing the mixing of warm and chilled water, and ensuring a uniform batch temperature from first drop to last. After the batch is drawn, the cooling tank automatically refills and chills, to be ready for the next batch draw.

### SPECIFICATIONS

COOLING CAPACITY ..... See Table  
Rating Conditions

Water Discharge Temperature ..... 34°F [1°C]

Ambient Temperature ..... 90°F [32°C]

COMPRESSOR HP ..... 7.5

Field serviceable, semi-hermetic type supplied with condenser as specified, high/low pressure stat, freeze control, head and suction gauges, oil pressure switch, pump down solenoid valve, thermostatic expansion valve, refrigerant sight glass and dehydrator.

STANDARD CONDENSERS [Designated by suffix]

**A** Fan cooled, located inside chiller housing

**AR** Remote, air cooled for rooftop mounting

**W** Water cooled for hookup to city or tower water

COOLING TANK & EVAPORATOR

Capacity ..... 160 gal [608 ltr]

Welded all stainless steel shell and immersion coil evaporator. Tank tested at 250# for 125# working pressure. Supplied with automatic air vent. Insulated with closed cell thermo-elastomer with an R factor of 3.7.

PUMP HP ..... 1-1/2

Capacity ..... 25 gpm @ 35 psi [95 lpm @ 2 Bar]

Stainless steel centrifugal pump mounted on rubber pads over a stainless steel condensation tray. All piping Insulated with closed cell thermo-elastomer with an R factor of 3.7. Pump supplied with on/off switch, flow switch, make-up water solenoid valve and bypass for agitation.

THERMOSTAT

Adjustable Range ..... 34° to 90°F [1° to 32°C]

Temperature Stability ..... ±1.5°F [±1°C]

CABINET

White enameled aluminum panels with stainless steel corner legs and top suitable for mounting on floor.

SUPPLY POWER ..... 208-230/60/3 or 460/60/3

FLA Amps Maximum ..... 40, 20

**NOTE:** FLA may vary depending on options. See MCA and MOP ratings on nameplate of as-built unit.

PLUMBING CONNECTIONS IN & OUT ..... 1" [25 mm] MPT

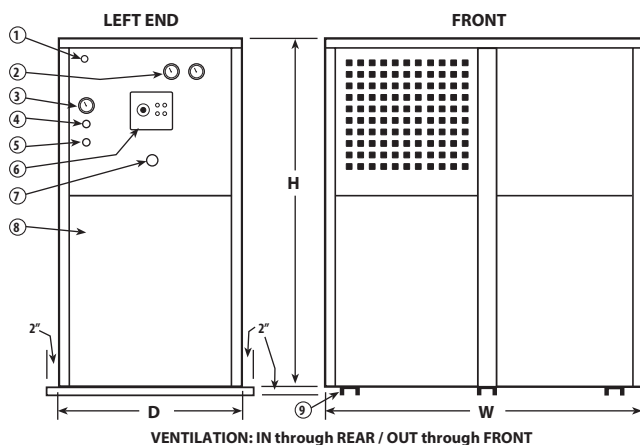
SHIPPING WEIGHT ..... 3200 lbs [1216 kg]

**NOTE:** Chiller weight and dimensions may vary due to condenser and options specified.

## ENERGY SAVING OPTIONS

**Reduce chiller energy consumption and lower operating costs.**  
**Contact Filtrine for complete details.**

## CHILLER SCHEMATIC



### LEGEND

- 1 ..... Air vent
- 2 ..... Refrigerant gauges
- 3 ..... Thermometer
- 4 ..... Make-up water
- 5 ..... Cold water out
- 6 ..... Control panel
- 7 ..... Electrical connection
- 8 ..... Removable access panel
- 9 ..... Channel skids - 3" [8 cm] W x 2" [5 cm] H

CHILLER DIMENSIONS						
MODEL	W		D		H	
	in	cm	in	cm	in	cm
PB-750-A	102	259	39	99	80	203
PB-750-AR	102	259	34	86	70	178
PB-750-W	102	259	34	86	70	178

### VENTILATION PANELS

Standard model air intake at right end and air discharge at rear. Manufacturer recommends 24" [61 cm] minimum clear space opposite all ventilation panels.

### SERVICE PANELS

Removable – front and rear on all models. Manufacturer recommends 36" [91 cm] at left end and 36" [91 cm] clearance at front for service.

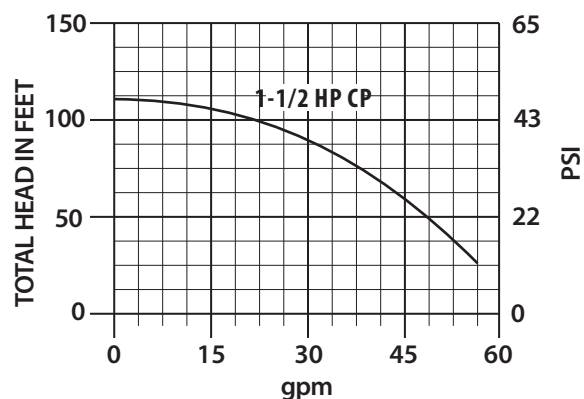
### OPTIONS and ACCESSORIES

- DT **DIAL THERMOMETER:** Specify for make-up and/or discharge
- PG **PRESSURE GAUGE:** Specify for make-up and/or discharge
- WR **WATER-RESISTANT DESIGN:** Cabinet built as a water-resistant model; permits complete wash down
- RFS **REMOTE FLOW SWITCH:** For closed loop operation
- DUP **DUAL PUMPS:** Provide complete backup. Available with automatic switchover in case of failure
- ADJ **ADJUSTABLE LEGS:** Stainless steel, up to 6" [46 cm] high
- DISC **FUSED DISCONNECT SWITCH:** On power supply
- SSC **STAINLESS STEEL CABINET:** Panel, corner legs and top constructed of #304 stainless steel

### FOOD GRADE MAKE-UP WATER

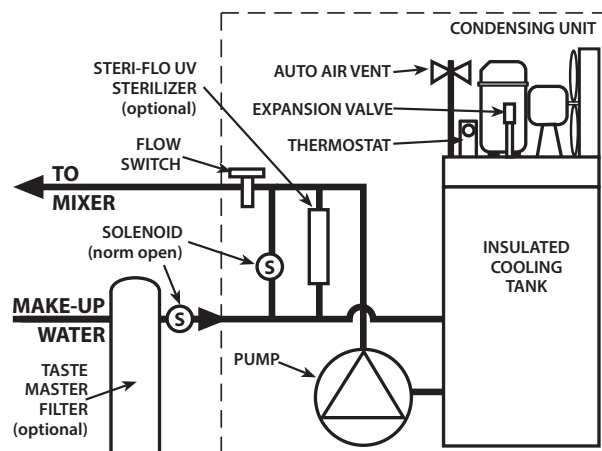
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## PUMP CAPACITY



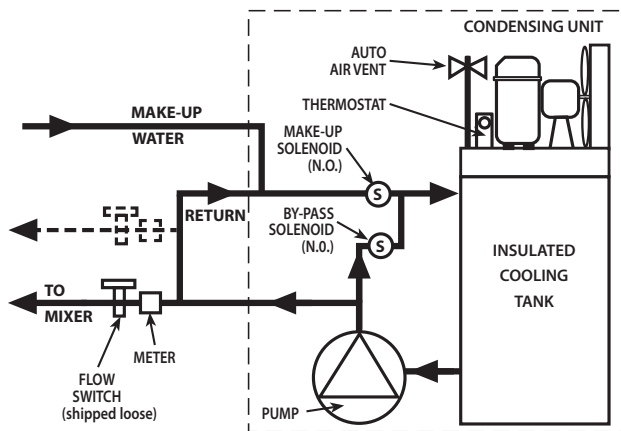
## PLUMBING SCHEMATIC

Showing optional Taste Master® sediment/taste/odor filter and Steri Flo® UV Sterilizer.



## OPTIONAL CLOSED LOOP SYSTEM

Where the mixer outlet[s] are a long distance from the chiller, a recirculating loop may be installed to keep the water in the piping cold. The flow switch[es] are shipped loose for installation at the meter[s].



## WARRANTY

All parts are covered F.O.B. factory for 15 months from date of shipment.