

BATCH DRAW WATER CHILLER



FEATURES

- BATCH COOLING FOR BATCH MIXING Insures 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
 Eliminates ozone-depleting refrigerants per the Montreal Protocol and has low 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-300: FOOD GRADE MAKE-UP WATER	
TASTE MASTER® PURIFIER	UV STERILIZER
IL15-PFSTMS	S-15

• 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-300: COOLING CAPACITY TABLE*						
WATER		NUMBE	R OF BAT	CHES PER	RHOUR	
PER BATCH	1	2	3	4	5	6
gal/ltr	48/182	26/198	17/129	12/46	10/38	8/30
lb/kg	400/180	217/977	142/64	100/45	83/34	67/30

^{*} Based on 80°F make-up water and 34°F ingredient water

MODEL PB-300 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. 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	
Ambient Temperature	90°F [32°C]
COMPRESSOR HD	3

Lifetime lubricated, welded hermetic type supplied with condenser as specified below, mounted on vibration absorbers and provided with internal overload, adjustable thermostat, freeze control, 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

make-up water solenoid valve and bypass for agitation.

COOLING TANK & EVAPORATOR

Capacity 75 gal [285 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	
Capacity	20 gpm @ 30 psi [76 lpm @ 2 Bar]
Stainless steel centrifugal pump mou	nted on rubber pads over a stainless steel
condensation tray. All piping Insulate	d with closed cell thermo-elastomer with
an R factor of 3.7. Pump supplied v	with manual on/off switch, flow switch,

THERMOSTAT

Adjustable Range	34° to 9	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	15, 8

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

PLUMBING CONNECTIONS IN & OUT	3/4" FPT [19 mm]
SHIPPING WEIGHT	1900 lbs [855 kg]

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

ENERGY SAVING OPTIONS

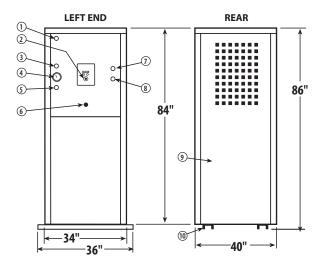
Reduce chiller energy consumption and lower operating costs.

Contact Filtrine for complete details.





CHILLER SCHEMATIC



LEGEND

1	Automatic air release
2	Pump On/Off
3	Cold water out
4	Dial Thermometer
5	Make-up water
	Electrical connection
7	To remote condenser - AR models
8	From remote condenser - AR models
9	Removable access panel
10	Channel skids - 3"W x 2"H

VENTILATION PANELS

Standard model air intake at right end and air discharge at rear. Allow 12" clearance opposite.

SERVICE PANELS

Removable - front and rear on all models. Allow 16" at left end and 22" at front for service.

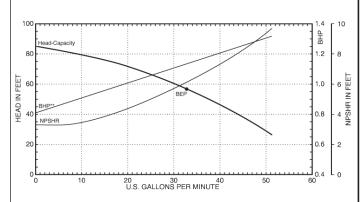
OPTIONS and ACCESSORIES

- **DIAL THERMOMETER**: Specify for make-up and/or -DT
- -PG PRESSURE GAUGE: Specify for make-up and/or discharge
- WATER-RESISTANT DESIGN: Cabinet built as a -WR 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" 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

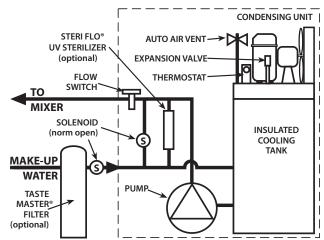
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STANDARD PUMP CAPACITY



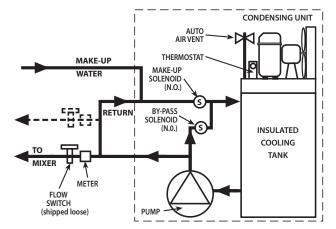
PLUMBING SCHEMATIC

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.



