ONE-PASS CHILLER

MODEL ................................................. PC-5000-540

DESCRIPTION
A completely packaged liquid chiller designed for applications where the liquid to be cooled passes through the chiller only once before either being added as an ingredient to a product or fouled by the product it is cooling. It is most important that a one-pass chiller be able to chill liquids at high and low flow rates without significant pressure drop or danger of freeze up, and yet have close, accurate temperature control.

Filtrine PC chillers are specifically designed for one-pass cooling. A high transfer immersion coil evaporator supplies maximum capacity at any flow rate with no pressure drop. Storage tank design permits close temperature control without short-cycling.

SPECIFICATIONS

COOLING CAPACITY
- BTU/HR .......................................................... 540,000
- Watts .............................................................. 158,264

Rating Conditions
- Coolant Discharge Temperature ............................. 68°F (20°C)
- Ambient Temperature ....................................... 90°F (32°C)
- Flow rate ......................................................... 50 gpm [190 lpm]

COMPRESSOR HP .............................................. DUAL 25
- Field servicable semi-hermetic type supplied with condenser as specified below, high/low pressure stat, freeze control, head and suction gauges, oil pressure switch, pump down solenoid valve, thermostatic expansion valve, refrigerant sight glass, dehydrator and oil separator.

STANDARD CONDENSERS [Designated by suffix]
- W Water cooled condenser for hookup to city or tower water
- AR Remote air cooled condenser for outdoor installation

COOLING TANK & EVAPORATOR
- Capacity .......................................................... 280 gal [1064 ltr]
- Welded stainless steel shell and immersion coil evaporator.
- Tank tested at 250# for 125# working pressure and insulated with closed cell thermo-elastomer with an R factor of 3.7 and enclosed in rust-proof steel jacket.

THERMOSTAT: Adjustable Range......................... 40°F to 90°F [5°C to 32°C]
- Temperature Stability ........................................ ± 2°F [1°C]

CABINET: Enameled aluminum panels and top with stainless steel corner legs. Panels removable for access to all components.

SUPPLY POWER: ..............................................
- 208-230/60/3 or 460/60/3
- FLA Amps Maximum ........................................ 190 or 96

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

PLUMBING CONNECTIONS IN & OUT ................ 2-1/2" [63 mm] FPT

LIFETIME WARRANTY Consult factory for details.
ONE YEAR WARRANTY All parts covered FOB jobsite for [12] months from start-up date or [15] months from date of shipment, whichever comes first. Consult factory for details.
START-UP and FIRST YEAR SERVICE Filtrine can arrange start-up and first year service on all parts and labor. Regular maintenance, to help prevent costly down-time, is available on a contractual basis. Consult factory for details.

APPLICATONS

<table>
<thead>
<tr>
<th>Application</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Photo Developing</td>
<td>Reverse Osmosis</td>
</tr>
<tr>
<td>Ingredient Make-up</td>
<td>Ice Machines</td>
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<tr>
<td>Poultry Cooling</td>
<td>Spray Washes</td>
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<tr>
<td>Bottling</td>
<td>Beverages</td>
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<tr>
<td>Dispensers</td>
<td>Eye Wash Water</td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td>Boiler Feed Samples</td>
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</tbody>
</table>

FEATURES

Energy Saving Design
- Unlike most process chillers, compressor runs only as needed.
- Storage design provides close temperature control and safety from freeze-up without constant operation.

Complete Temperature Control
- Temperature adjustable range of 40°F to 90°F [5°C to 32°C] and will hold temperature within ± 2°F [1°C] of setting.

Welded Stainless Steel Cooling Tank
- Coolant sealed from the atmosphere, eliminates bacterial build-up and internal corrosion.

Uses HFC Refrigerant
- Eliminates use of ozone-depleting refrigerant as per Montreal Protocol.

Unlimited Options
- Design the perfect cooling system for any application. Over 50 options to meet almost any special need.
- Refer to Bulletin O & A.

TYPICAL CHILLER SHOWN

THERMOSTAT: Adjustable Range......................... 40°F to 90°F [5°C to 32°C]
- Temperature Stability ........................................ ± 2°F [1°C]

CABINET: Enameled aluminum panels and top with stainless steel corner legs. Panels removable for access to all components.
NOTE: Chiller dimensions and shipping wts. may vary depending on options - confirm with factory.

LEGEND
1. Gauges
2. Control Panel
3. Coolant In
4. Coolant Discharge
5. Electrical Connection
6. To Remote Condenser [AR Models]
7. From Remote Condenser [AR Models]
8. Channel Skids

VENTILATION PANELS
Recommend 3 ft. clearance at front for service and 18 in. clear space opposite all ventilation panels.

REMOVABLE SERVICE PANELS
Front & rear on all models

CHANNEL SKIDS
Channel skids project 2" [5 cm] front and rear. Center of mounting holes located 6" [15 cm] from chiller end and 1" [2.5 cm] from chiller edge front and rear. Skids add 2" [5 cm] to overall height.

STANDARD OPERATING CONDITIONS
OUTDOOR AMBIENT
-20° to 100°F [-29° to 38°C]

OPTIONAL OPERATING CONDITIONS
OUTDOOR AMBIENT
Up to 110°F [43°C]
Up to to 120°F [49°C]
Down to -30°F [-34°C]

NOTE: Higher ambient options may affect unit dimensions.

REMOTE CONDENSER
AR model furnished complete w/controls for operating in ambient temperatures to minus 20°F [-29°C]. Connections for remote condenser are at right end of chiller cabinet.

NOTE: Drawing is composite of various models to demonstrate plumbing locations. Confirm footprint with factory.

CHILLER CAPACITY

GPM - CHILLER COOLING CAPACITY

* Agitation pump required

* For outlet temperatures below 34°F - use appropriate antifreeze

CHILLER DIMENSIONS and WEIGHTS

<table>
<thead>
<tr>
<th>FILTRINE</th>
<th>W</th>
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<th>CHANGE IN TEMPERATURE THROUGH CHILLER</th>
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<tr>
<td></td>
<td>5°F</td>
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CHILLER CAPACITY

STANDARD MODELS: Suffix AR and W

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