Stainless Steel Plate Coolers

- Gives a rapid return on investment in energy savings
- Extends bulk tank compressor life
- Prevents mixing of warm milk with cool milk counts
- Can significantly reduce somatic cell

Coburn All-Stainless Steel Plate Coolers use the cool water/heat exchange principle to pre-cool milk before it enters the bulk tank. Units are available in single and dual pass models. Dual pass models bring a fresh charge of cool water as milk passes through second half of the unit, doubling the cooling effect.

Coburn Plate Coolers feature solid sanitary 316 stainless steel end plates, cooling plates and bolts. Fluted edges on the plates guarantee tight fit, perfect alignment and protection from leaks. Nitrile rubber gaskets are resistant to oil and fats. Installed between the receiver and bulk tank, with the milk inlet and outlet on opposite sides for easier in-line placement. Coburn Plate Coolers are designed to be cleaned in place or disassembled for additional cleaning.

After installation, Coburn Plate Coolers may be customized with additional cooling plates to increase capacity.

Models and Specifications

Optimum performance is achieved at approximately a 3:1 water to milk ratio, but lower ratios will still result in significant cooling. Ambient temperature, water temperature, water pressure and other variables may alter results from those shown here. Water pressure should not exceed 87 psi (6 bars).

MINI MODELS
- 15mm thick end plates
- Milk connections are 1.5” ferrule
- Units measure 26” high by 8” wide; depth varies with number of plates.
- All MINI models include heavy duty mounting brackets.
- Optional Solenoid Valve adds the convenience of automatic on/off of water flow with milk pump and also conserves water.

SINGLE PASS  Milk cooled to within 7˚F (about 4˚C) of water temperature.

<table>
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<tr>
<th>No. &amp; Model</th>
<th># of plates</th>
<th>Wt.</th>
<th>Milk Cooled Per Hour</th>
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<tr>
<td>173-11031 MINI</td>
<td>31</td>
<td>89 lbs</td>
<td>502 Gal. (1900 Ltr.)</td>
<td>1439 Gal. (5450 Ltr.)</td>
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DUAL PASS  Milk is cooled to within 5˚F (about 3˚C) of water temperature.

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REPLACEMENT PARTS
- 90225 1.5” S.S. Gasket with #10 Mesh Screen, recommended to filter out solids for easier cleaning.
- 302-501 Brass Solenoid Valve for MINI Models only. 1” NPT, 110V, 2lbs.
- 302-503 Replacement Coil for 110V Solenoid.
- 173-15000 Type 316 S.S. Plate with gasket for MINI models, ea. Wt. .75 lb. Increases cooling by 35 gallons per set of two plates.

Stainless Steel Side Discharge Filters

1-1/2” and 2” Filters

Closed End Side Discharge Filter is used with sock filters rather than tubes, which has several advantages: **“Blow-by” is eliminated even with large pump systems. Sediment leakage is reduced and installation of new filters is easier. Filters come complete with S.S. body, insert, clamp, O-ring, tab, and gasket.**

Closed End Side Discharge Filter comes complete with Stainless Steel body, perforated S.S. insert, 4” heavy duty clamp, O-ring, tab, rubber plug & gasket.

Open End Side Discharge Filter comes complete with Stainless Steel body, perforated S.S. insert, 4” heavy duty clamp, O-ring, tab, rubber plug & gasket.

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XtraFlo® Trough Valve & Float

XtraFlo compact diaphragm valve has full-flow, high volume fill. The valve has a 1” water level differential between opening and closing, reducing pump motor overload. Fully submerged valve is almost indestructible to livestock and models come in standard tail length and long tail length. The top entry model provides an air gap, preventing back-flow. XtraFlo is UV stabilized and corrosion resistant. Working pressure range is 4-175 psi, working water temperature range 34°-140° F.

929-3317 XtraFlo Trough Valve & Float.
929-3817 XtraFlo Trough Valve & Float – Anti-siphon.
929-3407 XtraFlo Long Tail Trough Valve - 3/4”.
929-3410 XtraFlo Long Tail Trough Valve - 1”.
929-3507 XtraFlo Long Tail Top Entry Valve - 3/4”.
929-3607 XtraFlo Trough Valve & Top Entry Float - 3/4”.
929-3610 XtraFlo Trough Valve & Top Entry Float - 1’.

BigAL® Differential Valve

BigAL is a dual level tank valve that is designed to handle high flow rates of up to 330 gal/min on high pressure at 174 psi. Valve allows for a single level or variable minimum and maximum water levels in pump-fed large storage tanks and reservoirs. With soft closing, no water hammer means less parts and less problems. Also works great as a backup water supply control valve for rain harvesting. Working pressure range is 2-175 psi, working water temperature range 34°-140° F.

929-3012 BigAL Differential Valve - 1-1/4”.
929-3020 BigAL Differential Valve - 2”.

Xcess Fast-fill Trough Valve

Xcess Fast-fill Trough Valve is designed for the fast filling of large troughs. The unique cam-lock compatible outlet allows for appropriate water supply for many jobs around the farm. Servicing is easily done without any tools as plunger is serviced without removing float arm. Two sizes in one, 3/4” and 1”, help ensure the proper fit. Valve also features a convenient shut-off pin on arm. Working pressure range is 0-145 psi, working water temperature range 34°-140° F.

929-3810 Xcess 3/4” & 1” Trough Valve with Cord, Nipple and Float Ball.
929-3810-2 Repl. Float Ball for Xcess 3/4” & 1” Trough Valve.

PumpBuddy® Differential Tank Valve

PumpBuddy valve is a differential control device that allows variable minimum and maximum water level settings within a water tank when filling from a pump. Utilizing the dual weight system reduces pump wear and saves electricity. PumpBuddy also works great as a backup water supply control valve for rain harvesting. PumpBuddy Valve is available in standard and long tail for differing tank wall depths. Working pressure range of 8-175 psi, working water temperature range 34°-140° F.

929-3107 PumpBuddy - 3/4”.
929-3207 PumpBuddy with LongTail - 3/4”.
929-3110 PumpBuddy - 1”.
929-3210 PumpBuddy with LongTail - 1”.

RainAid

RainAid valve works with pump filled tanks and is designed to be connected to the main’s water supply on a rainwater collection tank. It provides a needed supply of water in the event of demand exceeding rain supply. No electricity is required, providing the best solution for water tank backup. Working pressure range is 8-175 psi, working water temperature range 34°-140° F.

929-3997 3/4” RainAid.

SpaceSaver Trough Valve

The SpaceSaver is a compact, Acetyl valve made of non-corrosive material making it ideal for hydroponics. Valve and float only measure 10” in length, allowing for small applications with limited space such as calf drinkers. Working pressure range is 0-120 psi, working water temperature range 34°-140° F.

929-3996 3/4” SpaceSaver Trough Valve with Rectangle Float.

929-3998 VisiBall.

VisiBall

VisiBall is a highly visible water level indicator for large tanks and reservoirs. Innovative Uni-Ball Joint will suit any tank installation regardless of roof angle. VisiBall is made from the highest quality UV resistant materials and will not get stuck in one position. Maximum height is 10’.

929-3997 3/4” RainAid.

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