

Bou-Matic Plate Coolers

Quick cooling for quality milk

The Bou-Matic plate cooler cools milk, with well water and/or chilled water, before the milk reaches the tank. This provides quick cooling and ensures the quality of the milk you produce.

Warm milk passes across alternate stainless steel plates in one direction while water passes in the opposite direction. Each plate has a special herringbone configuration that causes the milk or water to “roll” across the plate. This rolling action maximizes contact between the liquid and the plate surfaces for a highly efficient heat transfer.

For Pre-Cooling

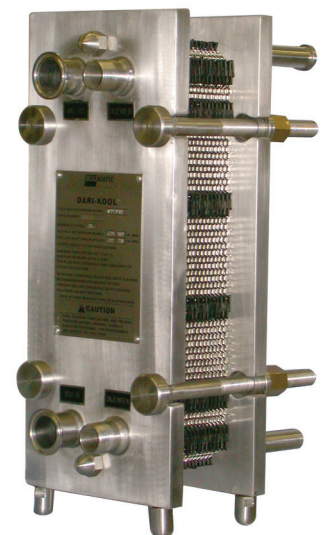
The plate cooler uses well water to assist in cooling milk before it reaches the tank. When the milk reaches the tank, it is partially cooled so the tank blend temperature stays lower - less cooling time and agitation is required in the bulk milk cooler. The warmed well water is then typically supplied to cows.

For Total Instant Cooling

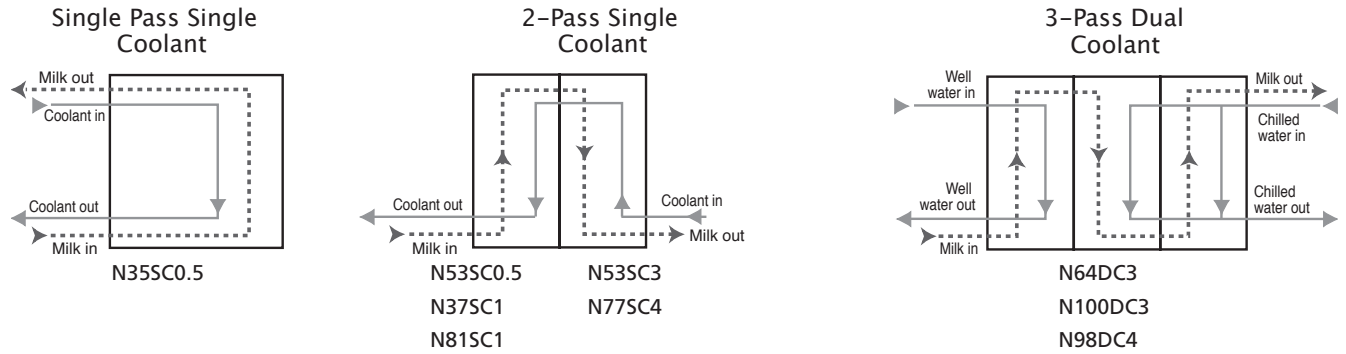
The plate cooler instantly cools milk before it reaches the tank. The Bou-Matic plate cooler can be used with both well water and a chilled water glycol coolant from the chiller to instantly cool milk. As milk enters the plate cooler, well water begins cooling the milk in the first cooling section. When milk enters the last section of the plate cooler, the chilled coolant supplied from the chiller instantly cools milk to 38°F.

Benefits

- The plate cooler cools milk before it enters the tank.
- Helps keep the blend temperature low.
- Reduces the opportunity for bacterial growth.
- Reduces agitation and compressor run time.
- In the pre-cooling application, the plate cooler lessens the cooling load on the milk cooler.
- In total instant cooling applications, milk can be cooled to 38° or lower.
- Adaptable and expandable.
- Easy cleaning and inspection.



9 Bou-Matic N-Series Plate Cooler Models to Meet Your Cooling Needs



N-Series Plate Cooler Performance Data

N35SC0.5			
Maximum 800 Lbs./Hr. or 352 Lph Milk Flow			
Coolant Temperature	Coolant to Milk Flow Ratio		
	.5:1	1:1	2:1
	Degree Reduction of Milk Temperature		
50° F / 10° C	18 / 10	24 / 13.3	28 / 15.6
60° F / 15.6° C	14 / 7.8	19 / 10.6	22 / 12.2
70° F / 21.1° C	11 / 6.1	14 / 7.8	16 / 8.9

N37SC1			
Maximum 2500 Lbs./Hr. or 1100 Lph Milk Flow			
Coolant Temperature	Coolant to Milk Flow Ratio		
	.5:1	1:1	2:1
	Degree Reduction of Milk Temperature		
50° F / 10° C	22 / 12.2	33 / 18.3	39 / 21.7
60° F / 15.6° C	18 / 10	26 / 14.4	31 / 17.2
70° F / 21.1° C	14 / 7.8	20 / 11.1	24 / 13.3

N53SC0.5			
Maximum 1620 Lbs./Hr. or 713 Lph Milk Flow			
Coolant Temperature	Coolant to Milk Flow Ratio		
	.5:1	1:1	2:1
	Degree Reduction of Milk Temperature		
50° F / 10° C	22 / 12.2	32 / 17.8	39 / 21.7
60° F / 15.6° C	18 / 10	25 / 13.9	30 / 16.7
70° F / 21.1° C	14 / 7.8	18 / 10	22 / 12.2

N81SC1			
Maximum 6000 Lbs./Hr. or 2641 Lph Milk Flow			
Coolant Temperature	Coolant to Milk Flow Ratio		
	.5:1	1:1	2:1
	Degree Reduction of Milk Temperature		
50° F / 10° C	22 / 12.2	33 / 18.3	39 / 21.7
60° F / 15.6° C	18 / 10	26 / 14.4	31 / 17.2
70° F / 21.1° C	14 / 7.8	20 / 11.1	24 / 13.3

Bou-Matic Plate Cooler Features:

- Stainless steel construction
- Clip-on gaskets
- Use for partial pre-cooling or 100% instant cooling
- Designed for milking systems with as few as 4 units to more than 100 units
- Get "free" cooling when well water you already use is run through the plate cooler
- Easy to disassemble for inspection
- More efficient than tube coolers
- Expandable
- Internal flow pattern ensures maximum heat transfer and lower pressure drop for maximum milk cooling

Please consult your Bou-Matic Dealer for custom and dual coolant model and size recommendations.

