

ACCU-THERM®



MUELLER®

THE MILK COOLING SYSTEMS SPECIALISTS™

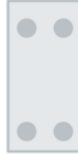
Mueller® Accu-Therm®

Use Your Existing Water Supply to Reduce Refrigeration Costs!

A Mueller® Accu-Therm® plate heat exchanger lets you use your existing water supply to precool warm milk before putting it in your milk cooler. An Accu-Therm plate heat exchanger can cut the operating time of your refrigeration system up to 50% by precooling milk and reducing the temperature by up to 30°F (17°C). You will save energy and money while enhancing your milk quality.

Accu-Therm plate heat exchangers consist of a series of stainless steel plates compressed in a frame. The plates are separated by gaskets that form flow channels on opposite sides of each plate. Cool water flows down the channel on one side while warm milk flows up the other side.

The milk's temperature drops as it transfers its heat to the cool water on the opposite side of the plate. The plate heat exchanger's design provides extremely efficient performance for fast precooling.



Accu-Therm plate heat exchangers can be matched to your dairy operation with model options of single-pass, dual-pass, or multi-pass multi-duty. The single-pass and dual-pass units are designed for well water pre-cooling. The multi-pass multi-duty units are designed for well water pre-cooling and chilled water instant cooling. A pre-cooling only multi-pass unit is also available.

Features and Benefits

- Saves up to 50% on energy costs by using municipal or well water to precool milk, significantly reduce operating time and wear-and-tear of your cooler's refrigeration system.
- Durable, rust resistant, type 304 stainless steel end frames and stainless steel compression bolts are maintenance free with no paint to crack or peel.
- All AT20 models have snap-in gaskets for ease of inspection.
- Top quality, type 316 stainless steel plates for sanitary milk contact surface.
- Clean-in-place system helps keep maintenance low.
- An Accu-Therm plate heat exchanger, in conjunction with a Mueller chiller, can cool milk down to 37°F (2.8°C) in less time, which maintains high milk quality and impedes bacteria growth.



Mueller Accu-Therm Wall-Mount Model Specifications

Part No.	Model	No. of Plates	NO. OF PASSES				Shipping Weight (lbs.)
			Well Water Milk	Well Water Water	Chilled Water Milk	Chilled Water PG ³	
SINGLE-PASS							
9816135	AT4DW-21	21	1	1	—	—	85
9816136	AT4DW-31	31	1	1	—	—	95
DUAL-PASS							
9816137	AT4DWD-51	51	2	2	—	—	110
9816138	AT4DWD-61	61	2	2	—	—	120
9816144	AT10DWD-30	30	2	2	—	—	245
9816145	AT10DWD-40	40	2	2	—	—	263
MULTI-PASS, MULTI-DUTY ¹							
9816146	AT10DWM-50	50	1	1	2	1	284
MULTI-PASS, SINGLE DUTY ⁴							
9861033	AT10DWD-52	52	—	—	2	1	287

Mueller Accu-Therm Floor-Mount Model Specifications

Part No.	Model	No. of Plates	NO. OF PASSES				Shipping Weight (lbs.)
			Well Water Milk	Well Water Water	Chilled Water Milk	Chilled Water PG ³	
MULTI-PASS, MULTI-DUTY ¹							
9816148	AT10DFM-91	91	1	1	3	1	530
9831128	AT20DFM-91	91	1	1	5	1	1,407
9831129	AT20DFM-130	130	2	1	4	1	1,605
HIGH-EFFICIENCY, MULTI-PASS, MULTI-DUTY ¹ , PORTED TERMINAL							
9830581	AT20DFM "P"-76	76	2	2	2	1	1,485
9830608 ²	AT20DFM "P"-76	76	2	2	2	1	1,485
9831117	AT20DFM "P"-96	96	2	2	4	1	1,547
9831116 ²	AT20DFM "P"-96	96	2	2	4	1	1,547
HIGH-EFFICIENCY, PRE-COOLING ONLY, MULTI-PASS							
9830605	AT20DF-48	48	4	4	—	—	1,152

Accu-Therm plate heat exchangers for other applications and flows available upon request.

¹For use with well water and chilled water.

²All connections are clamp-type fittings.

³Propylene glycol.

⁴For use with chilled water only.

Mueller® Accu-Therm® Energy Savings and Payback Worksheet

Use this worksheet to estimate the yearly energy savings provided by a Mueller Accu-Therm plate heat exchanger and to figure the payback time needed to recoup your initial investment cost.

Present Cooling Cost

1. Pounds milk production per day \div 1,000 = _____

2. Kilowatt-hours used per day (Line 1 x 6 kW-hrs / 1,000 lbs.) = _____

3. Daily cooling cost (Line 2 x kilowatt-hours cost) = _____

Proposed Savings

4. Accu-Therm degree drop (from degree-drop chart) = _____

5. Percent run-time reduction (line 4 \div 60 degrees) = _____

6. Expected daily savings (line 5 x line 3) = _____

7. Yearly savings (line 6 x 365 days/year) = _____

Payback Period

Installed cost \div yearly savings = _____

Return On Investment

Yearly savings \div installed cost = _____



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