ACCU-THERM®

MUELLER

THE MILK COOLING SYSTEMS SPECIALISTS™

Mueller® Accu-Therm®

Save Money and Energy While Enhancing Your Milk Quality!

Mueller® Accu-Therm® plate heat exchangers let 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.

Mueller 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.

Paul Mueller Company's 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.

Sharon Eastburn, Mueller Employee Since 1989

Built in America

Mueller Accu-Therm Wall-Mount Model Specifications

| Part No. | Model | No. of Plates | No. of Passes | | No. of Passes | | Shipping Weight |
| | | | Well Water | | Chilled Water | | |
			Milk	Water	Milk	PG[2]	
			Single-Pass				
9816135	AT4DW-21	21	1	1	—	—	85 lbs.
9816136	AT4DW-31	31	1	1	—	—	95 lbs.
			Dual-Pass				
9816137	AT4DWD-51	51	2	2	—	—	110 lbs.
9816138	AT4DWD-61	61	2	2	—	—	120 lbs.
9816144	AT10DWD-30	30	2	2	—	—	245 lbs.
9816145	AT10DWD-40	40	2	2	—	—	263 lbs.
			Multi-Pass, Multi-Duty[1]				
9816146	AT10DWM-50	50	1	1	2	1	284 lbs.
			Multi-Pass, Single Duty[3]				
9861033	AT10DWD-52	52	—	—	2	1	287 lbs.

Mueller Accu-Therm Floor-Mount Model Specifications

| Part No. | Model | No. of Plates | No. of Passes | | No. of Passes | | Shipping Weight |
| | | | Well Water | | Chilled Water | | |
			Milk	Water	Milk	PG[2]	
			Multi-Pass, Multi-Duty[1]				
9816148	AT10DFM-91	91	1	1	3	1	530 lbs.
9831128	AT20DFM-91	91	1	1	5	1	1,407 lbs.
9831129	AT20DFM-130	130	2	1	4	1	1,605 lbs.
			High-Efficiency, Multi-Pass, Multi-Duty[1], Ported Terminal				
9830581	AT20DFM "P"-76	76	2	2	2	1	1,485 lbs.
9831117	AT20DFM "P"-96	96	2	2	4	1	1,547 lbs.
9402443	AT20DFM "P"-174	174	2	2	4	1	1,788 lbs.
			High-Efficiency, Pre-Cooling Only, Multi-Pass				
9830605	AT20DF-48	48	4	4	—	—	1,152 lbs.

Accu-Therm plate heat exchangers for other applications and flows available upon request.
[1]All connections are clamp-type fittings.
[2]Propylene glycol.
[3]For 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 _____ ÷ 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 ÷ 60°) = _____

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

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

Payback Period

Installed _____ ÷ yearly _____ = _____
cost   savings

Return on Investment

Yearly _____ ÷ installed _____ = _____
savings   cost

Travis Tyler, Mueller
Employee Since 2009