

MUELLER® CHILLERS



PROVIDES FASTER COOLING AND LOWER ENERGY COSTS!

Mueller chillers cool water that will be pumped through your Accu-Therm® plate heat exchanger for faster cooling of warm milk. This rapid cooling inhibits

bacteria growth, ensuring better quality milk. Chillers also help your milk cooler refrigeration system run less often for lower energy costs.

MUELLER®
THE MILK COOLING SYSTEMS SPECIALISTS™

MUELLER® CHILLERS

A complete chiller system requires these basic components: the chiller, a circulating pump, one or more refrigeration units, refrigeration tubing, and an Accu-Therm plate heat exchanger. The refrigeration units circulate refrigerant through evaporator plates within the chiller and drop the temperature of the reservoir water supply. This chilled water then flows from the chiller through the plate heat exchanger where warm milk is



passing in the opposite direction. The warm milk transfers its heat to the water before flowing into the milk storage vessel. The milk cooler refrigeration unit finishes any necessary cooling, running substantially less than if warm milk had been pumped in directly. The warm water in the plate heat exchanger then flows back to the chiller for recooling.

WAYS TO CHILL

FALLING FILM CHILLERS require the addition of refrigeration units, a circulating pump, and an Accu-Therm plate heat exchanger. The main feature is expandability. The falling film chiller can utilize from 2 to 16 stainless steel Temp-Plate® evaporator plates. You will invest less initially and can add plates as cooling needs increase over time.

“LS” CHILLERS are designed for ease of operation and installation utilizing the 5 or 10 hp Energy Star® scroll condensing unit on 20, 30, and 40 horsepower models. Rapid cooling inhibits bacteria growth and ensures

higher milk quality. The Model “LS” chiller, in conjunction with an Accu-Therm® plate heat exchanger, can be used for either instant cooling or heavy pre-cooling, depending on the dairy needs.

COMPACT CHILLERS include a reservoir for water, a chilled water circulation pump, and brazed plate-type evaporators. One or two 5-hp HiPerForm® scroll refrigeration units and an Accu-Therm plate heat exchanger are also required. The compact chiller takes up little space and is a good way for a smaller operation to begin enhancing its cooling capabilities.

SPECIFICATIONS						
Model		No. of Evaporators	Nominal Operating Capacity (gal / liters)	Length (in)	Width (in)	Height (in)
Falling Film Chillers	NS-R	2-8	150 / 568	68 ¹ / ₂	36 ¹ / ₂	76
	NS-R	7-12	300 / 1135	68 ¹ / ₂	60 ¹ / ₂	76
	LNS-R	2-8	325 / 1230	104 ³ / ₈	39 ¹ / ₈	93 ¹ / ₄
	LNS-R	9-16	650 / 2460	104 ³ / ₈	72 ³ / ₈	93 ¹ / ₄
Model “LS” Chillers	LS20-5	4	130 / 492	92	51	42
	LS20-10	2	130 / 492	92	51	42
	LS30-10	3	130 / 492	92	51	42
	LS40-10	4	130 / 492	92	51	42
	LS30-15	2	130 / 492	92	51	42
	LS45-15	3	130 / 492	92	51	42
	LS60-15	4	130 / 492	92	51	42
	LS60-30	2	130 / 492	92	51	42
	LS90-30	3	130 / 492	92	51	42
	LS120-30	4	130 / 492	92	51	42
Compact Chiller	CP-2	N/A	90 / 340	50	29	40

FALLING FILM CHILLER FEATURES AND BENEFITS

■ **Stainless steel water contact surfaces and outer jacket**

Provides longer life than galvanized steel; reduces possibility of leaks.

■ **Patented Temp-Plate heat transfer surface**

Provides the most efficient cooling possible.
Eliminates evaporator ice buildup.

■ **Energy-efficient design**

Refrigeration units can be staged to cool varied milk flows, using less horsepower at low milk flows and saving on energy costs.

■ **Low milk cooling costs**

The refrigeration unit operates only during milking, reducing milk cooling costs.

■ **Designed for compact spaces**

Covers only 30 to 62 square feet of space.

■ **Limits water usage**

Closed loop system recycles water through the system, using only 150 to 650 gallons of water.

■ **Easy access to chiller functions**

The control cabinet is equipped with controls for temperature, circulator pump, and on/off operation.

■ **Two cabinet models available**

Expandability from 2 to 16 plates.

■ **Sizes available to fit any dairy**

10 hp to 160 hp units are available to accommodate your individual needs.

MODEL "LS" CHILLER FEATURES AND BENEFITS

■ **All stainless steel construction**

Durable, polished stainless steel cabinet to prevent corrosion and contamination. Large removable covers for easy accessibility.

■ **Efficient stainless steel evaporator**

Engineered for 5-degree approach temperatures for increased refrigeration capacity and fast, efficient cooling.

■ **Compact design**

Easy-to-install, flexible design allows for expansion and growth.

■ **Digital temperature indicator**

Discharge water monitored, controlled, and displayed for operator interface.

■ **Starter protection for pump**

Factory-installed, high-volume pump, pre-wired with manual reset overload protection.

■ **Staged refrigeration control**

Four-stage temperature control for independent refrigeration units or large-horsepower refrigeration units with unloaders.

■ **Stainless steel insulated storage tank**

130-gallon capacity which includes external sight glass to indicate fluid level and 20-mesh screen on the outlet to prevent particles from entering the pump and heat exchanger.

■ **3-inch flange connections**

All water circulation lines are 3-inch copper with 150#, 4-bolt, 3-inch flange connections.

■ **Manufactured exclusively by Paul Mueller Company**

Quality assured and customer satisfaction guaranteed.

COMPACT CHILLER FEATURES AND BENEFITS

■ **Designed for compact spaces**

Unit requires only 10 square feet of space, fitting easily in operations with tight space constraints.

■ **Energy-efficient design**

Refrigeration units can be staged to cool varied milk flows, using less horsepower at low milk flows and saving on energy costs.

■ **Factory-installed plumbing**

Provides fast, easy installation.

■ **Instant cooling of large volumes of milk**

Works with the plate heat exchanger to cool milk flows up to 2,000 pounds per hour.

■ **Insulated, 90-gallon reservoir**

Maintains chilled water temperature until ready for pumping through the Accu-Therm plate heat exchanger.

■ **Utilizes two 5-hp Energy Star™ HiPerForm scroll condensing units**

The most energy-efficient chiller system available. Low horsepower units help reduce the use of the milk cooler's condensing units.

■ **Easy access to chiller functions**

The control cabinet is equipped with controls for temperature, circulator pump, and on/off operation.

■ **Stainless steel plate-type evaporator heat exchangers**

Provides fast, efficient cooling of water passing over the plates.

■ **3 hp circulator pump**

Circulates chiller water for proper operation.

■ **Flow switches**

Provides evaporator protection.

THE MILK COOLING SYSTEMS SPECIALISTS™

MUELLER®

P.O. Box 828 • Springfield, Missouri 65801-0828, U.S.A.

DFE Internal Sales Direct Line: 1-888-645-5826 • Phone: (417) 831-3000 • 1-800-MUELLER • Fax: (800) 436-2466

www.muel.com • E-mail: dairyfarm@muel.com

International Inquiries - Fax: (417) 831-6906 • E-mail: international@muel.com

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