

FALLING FILM CHILLERS



MUELLER[®]

THE MILK COOLING SYSTEMS SPECIALISTS[™]

Mueller® Falling Film Chillers

Our Falling Film Chillers Provide Faster Cooling and Lower Energy Costs!

Mueller® falling film chillers cool water that is pumped through a Mueller Accu-Therm® plate heat exchanger. Faster cooling of warm milk is achieved through this process. The Mueller falling film chiller utilizes 2 to 16 Mueller Temp-Plate® stainless steel evaporator plates. Its rapid cooling inhibits bacterial growth and ensures higher milk quality. An additional benefit of the Mueller falling film chiller is the ability to expand the chiller to meet new growth requirements, providing significant cost savings in the future. Complete Mueller falling film chiller systems include a circulating pump, one or more refrigeration units, refrigeration tubing, and an Accu-Therm plate heat exchanger.



The chiller system works as follows: Refrigeration units circulate refrigerant through the evaporator plates located in the falling film chiller, which drops the temperature of the water supply located in the chiller's reservoir. Chilled

water from the reservoir then flows to the plate heat exchanger where warm milk is circulated in the opposite direction of the chilled water. The chiller water lowers the temperature of the milk before flowing to the milk storage tank. Water from the plate heat exchanger is sent back to the chiller for re-cooling.



Features and Benefits

- Stainless steel water contact surfaces and outer jacket provides longer life than galvanized steel and reduces possibility of leaks.
- Temp-Plate heat transfer surface provides the most efficient cooling possible and eliminates evaporator ice buildup.
- The energy efficient design means refrigeration units can be staged to cool varied milk flows, using less horsepower at low milk flows and saving on energy costs.
- The refrigeration unit operates only during milking, reducing milk cooling costs.
- Mueller falling film chiller's foot print of only 18 to 53 square feet makes it ideal for compact spaces.
- Closed loop system recycles water through the system, using only 150 to 650 gallons of water.
- The easily accessible control cabinet is equipped with controls for temperature, circulator pump, and ON/OFF operation.
- Two cabinet models are available with expandability from 2 to 16 plates.
- Sizes from 10 hp to 160 hp are available to accommodate your dairy's individual needs.

Mueller Falling Film Chiller Specifications

Model	No. of Evaporators	Nominal Operating Capacity		Length (in)	Width (in)	Height (in)
		(gal)	(liters)			
NS-R	2-8	150	568	68½	36½	76
NS-R	7-12	300	1,135	68½	60½	76
LNS-R	2-8	325	1,230	104¾	39⅛	93¼
LNS-R	9-16	650	2,460	104¾	72¾	93¼

Multi-Stage Chiller Control

Mueller falling film chiller pump and refrigeration units are controlled by a multi-stage chiller control with 10 independent output stages and high/low temperature alarms.

- Dual temperature sensors are program-selectable to monitor the chilled water leaving or returning to the chiller.
- Each stage is selectable for either temperature sensor for better control of the refrigeration units and unloaders.
- The remote start option allows the chiller to start automatically with the start of milking.
- All programming is performed from the front panel in any operation mode.





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