

Fre-Heater®



MUELLER

Mueller® Fre-Heater® Heat Recovery Units

Convert Wasted Heat Into Free Hot Water

Whether your dairy farm operation is large or small, you need plenty of hot water for equipment cleanup, cow prepping, and feeding calves. Paul Mueller Company's Fre-Heater® recovers wasted heat from your milk-cooling system and uses it to heat water you can use around your farm. Adding a Mueller® Fre-Heater to your system drastically reduces the cost of hot water in your operation, enhancing your profitability.

The Model "D" Fre-Heater consists of a heavy-duty, glass-lined storage tank surrounded by stainless steel Mueller Temp-Plate® heat transfer surface for maximum heating efficiency. Two-inch foam surrounds the Temp-Plate, keeping heat within the tank. A rust-resistant, stainless steel outer jacket houses the entire assembly for protection and a finished appearance.

The Mueller Model "D" recovers 45 to 60 percent of your system's wasted heat energy, depending on the refrigerant type. It is available in 50-, 80-, and 120-gallon sizes to meet your specific hot water needs.

The Mueller Model "DE" Fre-Heater is similar in construction to the Model "D" Fre-Heater and recovers up to 60 percent of your system's wasted heat energy. A 4.5-kilowatt heating element is included for maintaining 120° to 170°F water. The Model "DE" is available in a 120-gallon size.



Features and Benefits

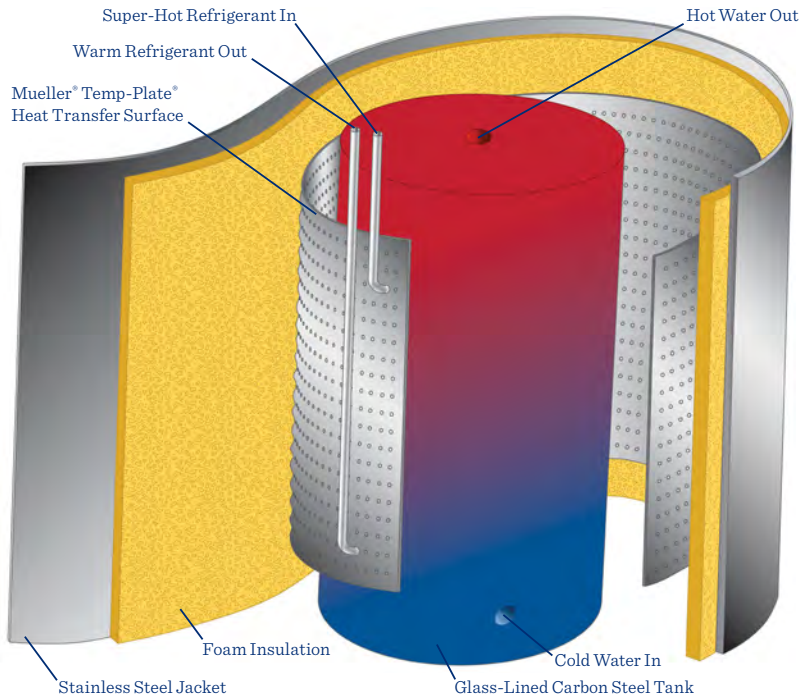
- **Mueller Temp-Plate® heat transfer surface** cools superheated refrigerant from the milk cooling condensing units and harvests the system's wasted heat energy.
- A **rust-resistant stainless steel outer jacket** requires almost no maintenance.
- **Factory-installed anodes** provide superior galvanic-corrosion protection for the water storage tank. Model D-120 has two anodes and models D-50 and D-80 each have one anode.
- A **five-year limited warranty** protects your purchase and ensures quality.
- Units are **CSA^{US} and NRTL regulation compliant**. CE-certified models are also available.
- The **industrial-grade, fully-insulated, and glass-lined storage tank** assures minimal heat loss and long-term reliability.

MODEL "D" AND "DE" FRE-HEATER HEAT RECOVERY UNIT SPECIFICATIONS							
Model Number ²	Number of Refrigeration Circuits	Refrigeration Connection Size	Refrigeration Per Circuit Capacity ¹	Dimensions		Approximate Shipping Weight (lb)	Part Number
				Height (in)	Diameter (in)		
D-50	1	.63" ODM	6,000 to 48,000 Btuh R-507	53.88	21.75	225	8828038
D2-50	2	.63" ODM	6,000 to 48,000 Btuh R-507	53.88	21.75	225	8828037
D-80	2	.75" ODM	12,000 to 60,000 Btuh R-507	58.63	25.25	320	8828036
D-120	2	.75" ODM	12,000 to 90,000 Btuh R-507	61.75	29.50	475	8828032
D2-120	2	1.63" ODM	36,000 to 180,000 Btuh R-507	61.75	29.50	475	8828030
DH-120	2	1.63" ODM	84,000 to 420,000 Btuh R-507	61.75	29.50	475	8828029
DHS-120	1	1.63" ODM	168,000 to 840,000 Btuh R-507	61.75	29.50	440	8825141
DE-120 ³	2	1.13" ODM	36,000 to 180,000 Btuh R-507	61.75	29.50	475	8828034

¹ Refrigeration tonnage capacities are 30°F evaporator ton loads, not total heat of rejection tons. Pressure drop through a Fre-Heater refrigeration circuit will be approximately 15 psi at the maximum tonnage application. Pressure drop at the mid-range of tonnage application will be approximately 5 to 7 psi. The best overall refrigeration/heat recovery system efficiency is usually obtained at or below the mid-range tonnage application.

² Nominal water tank capacity: D-50 is 50 U.S. gallons, D-80 is 80 U.S. gallons, and D-120 and DE-120 are 119 U.S. gallons.

³ Model "DE" heat exchanger and storage tank combined in single unit: 4,500-watt, 240-VAC electric heating element, UL classified, and stainless steel exterior. An optional 6,000-watt element may be field installed if needed to meet water heating requirements.

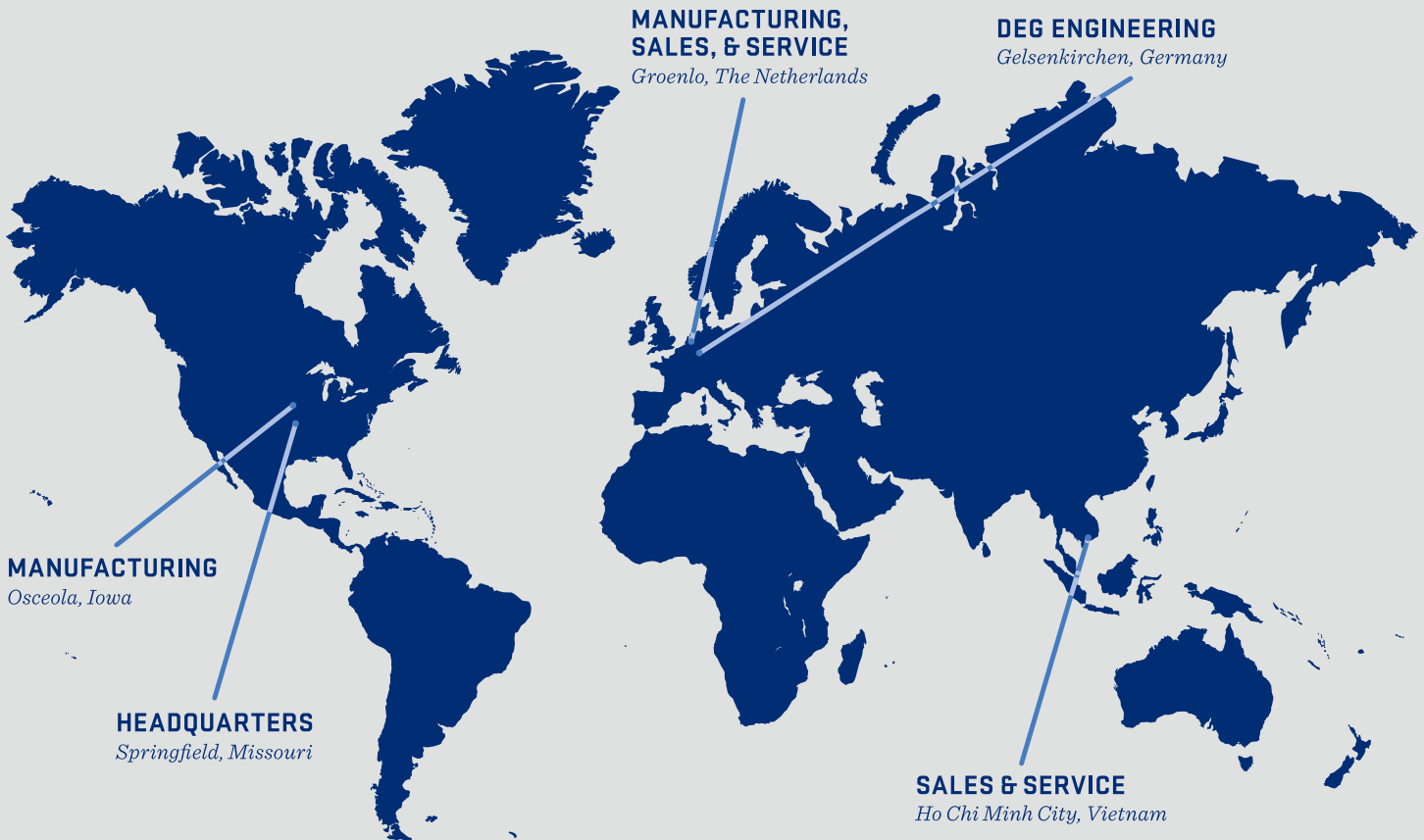


PAUL MUELLER COMPANY

PAUL MUELLER, OUR FOUNDER



At Paul Mueller Company, we are united by a belief in quality that works for life. Our goal is to have lasting impact with every piece of processing equipment we build. This collective vision has led us from a small sheet metal shop into a global supplier of heating, cooling, processing, and storage solutions. Our equipment allows farmers, brewers, and engineers to keep their products fresh and their inventory strong. Whether our equipment preserves milk in rural areas or helps manufacture medicine with broad health benefits, we are making an impact across the globe.



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