

HEAT RECOVERY EQUIPMENT



MUELLER[®]

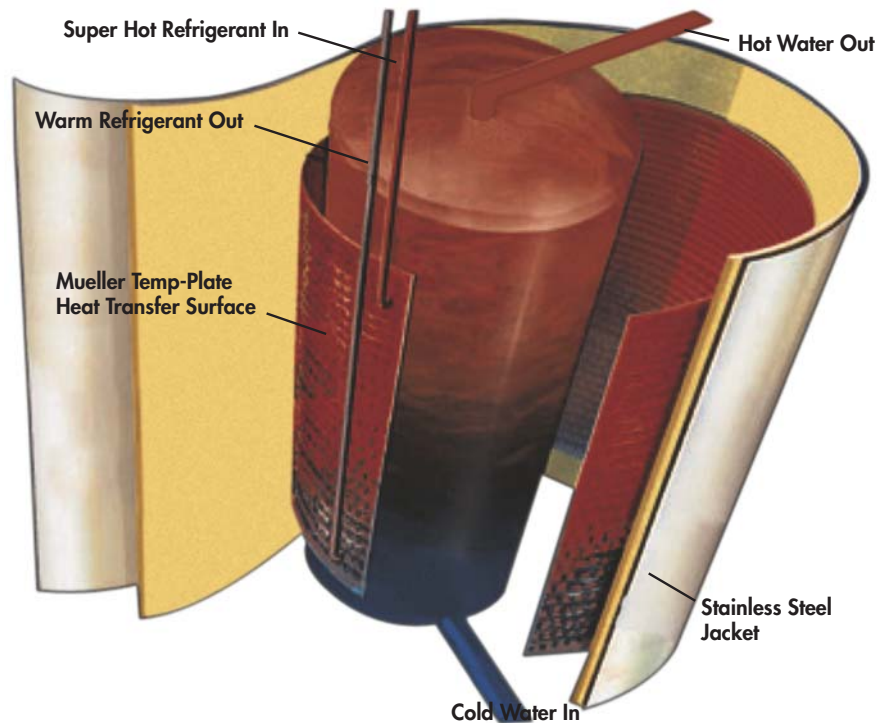
REFRIGERATION PRODUCTS

Model "D" Fre-Heater®

Up to 60% of the normally wasted energy discarded from refrigeration and air-conditioning systems can be recovered with the Mueller Model "D" Fre-Heater. By transferring the recovered heat energy to water, vast amounts of free hot water can be stored for use when and where the need arises.

The bottom line is the Fre-Heater pays for itself plus reduces your energy costs proportionately to your hot water usage.

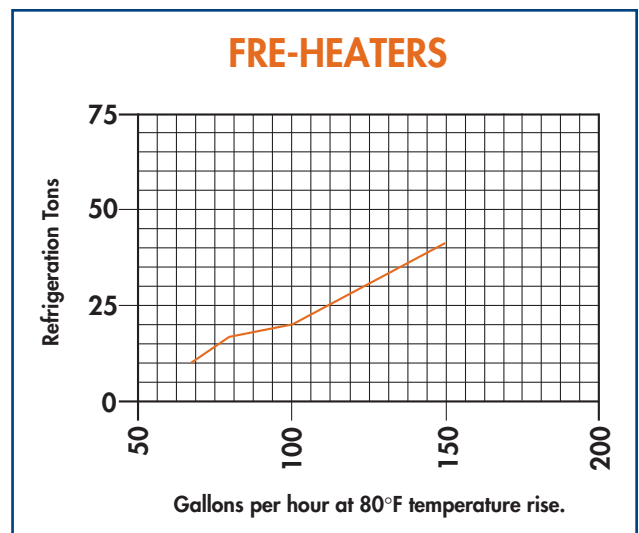
Walk-in coolers, freezers, commercial air-conditioning systems, ice machines, and other refrigeration systems all waste enough heat energy to produce hot water on a large scale. The Model "D" Fre-Heater enables a user to channel recovered energy from as many as six refrigeration sources into a single Fre-Heater unit, producing more than enough hot water to satisfy your needs.



Standard Features

- Designed for 150 psi maximum water working pressure and 426 psi maximum refrigerant working pressure.
- Available in 50-, 80-, and 119-gallon capacities, one of which will satisfy your hot water needs.
- Patented stainless steel Temp-Plate® is the heart of the Fre-Heater system. This highly efficient heat transfer surface is constructed of 100% stainless steel. Thoroughly tested and listed by Underwriters Laboratories Inc., it meets all codes required for double-wall heat exchanger construction.
- The industrial-grade, glass-lined water storage tank resists rust and features two replaceable magnesium anodes for extra protection against natural water corrosion, increasing the life of the tank.
- Model "DE" Fre-Heaters offer all of the features of a standard Model "D" Fre-Heater with the addition of a 4,500-watt, 240-volt electric element. Available in 80- and 119-gallon sizes.
- Heats and stores in one unit. Operates on any potable water supply because it is virtually immune to corrosion.

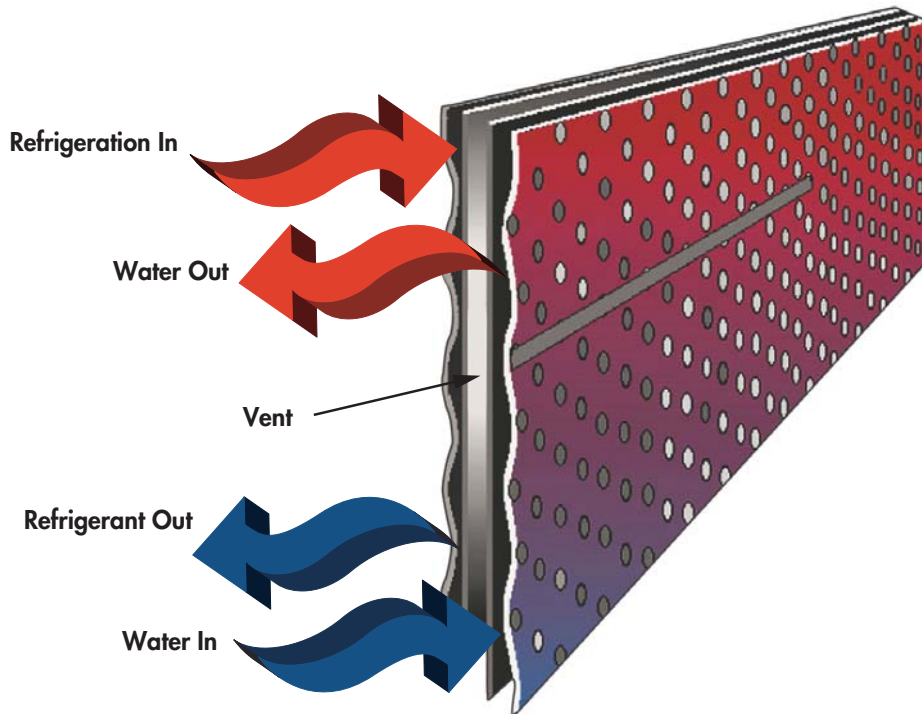
Save Energy and G



FIVE-YEAR LIMITED WARRANTY

Contact Paul Mueller Company for further details.

Model "QPX" Heat Exchanger

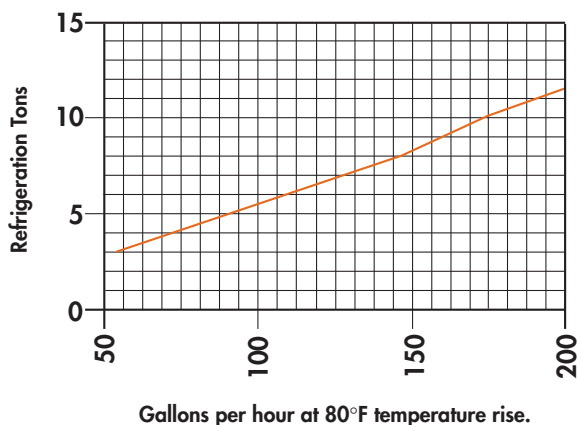


Recover as much as 100% of the energy discarded from refrigeration and air-conditioning systems with the quad-plate (QPX) heat exchanger.

The quad-plate heat exchanger requires a storage tank and a water pump to complete the system. With larger water requirements, the flexibility of a separate water tank (sizes from 50 to 1,000 gallons) allows the storage capacity to be selected for your hot water needs.

Get FREE Hot Water

QUAD PLATE HEAT EXCHANGERS



Standard Features

- Designed for 150 psi maximum water working pressure and 426 psi maximum refrigerant working pressure.
- Heat exchanger is constructed of Type 316L stainless steel on both the refrigerant and water sides.
- Outer cover is constructed of Type 304 stainless steel.
- Size of the unit is very compact, which will allow for the installation of the unit in the rack room with a minimal loss of space. With the heat exchanger located in the rack room, the length of refrigerant lines can be reduced, helping control potential leaks.
- Water storage tanks can be placed in some locations other than the heat exchanger with water lines connecting the two units.

THE BOTTOM LINE

With the proper selection of heat recovery equipment, we can limit the use of gas or electric water heaters in most cases.

Technical Specifications

Fre-Heater Model "D" Technical Specifications										
Model No. ¹	Mueller Part No.	Water Connection Size	No. of Refrig. Circuits	Refrig. Connection Size	Refrig.	Per Circuit Application Capacity ²	Dimensions Height Diameter		Approx. Shipping Wt. (lbs)	Approx. Loaded Wt. (lbs)
D-50	8823750	.75" MPT	1	.625" ODM	R-22	.5 thru 4	54"	21.75"	220	600
D2-50	8823751	.75" MPT	2	.625" ODM	R-22	.5 thru 4	54"	21.75"	220	600
D-80	8823780	.75" MPT	2	.75" ODM	R-22	1 thru 5	59"	25.25"	300	940
DE-80 ³	8823781	.75" MPT	2	.75" ODM	R-22	1 thru 5	59"	25.25"	300	940
D-120	8823821	1.5" FPT	2	.75" ODM	R-22	1 thru 7.5	62"	29.50"	430	1,300
D2-120	8823820	1.5" FPT	2	1.125" ODM	R-22	3 thru 15	62"	29.50"	430	1,300
DE-120 ³	8823822	1.5" FPT	2	1.125" ODM	R-22	3 thru 15	62"	29"	430	1,300
DH-120	8823823	1.5" FPT	2	1.625" ODM	R-22	7 thru 35	62"	29.50"	430	1,300
DA-120	8823826	1.5" FPT	2	1" MPT	R-717	5 thru 25	62"	29.50"	430	1,300
WT-120	8823611	1.5" FPT	N/A	N/A	See Note ⁴		62"	29.50"	375	1,200

¹Nominal water tank capacity: D-50/50 U.S. gallons, D-80 and DE-80/80 U.S. gallons, and D-120/119 U.S. gallons.

²Refrigeration tonnage capacities are evaporator load tons, not heat of rejection tons.

Conditions for these capacities are:

- 30°F evaporator temperature, 110°F condensing temperature, and 50°F discharge gas superheat.
- Pressure drop through the Fre-Heater refrigeration circuits at the maximum rated tonnage will be approximately 15 psi.
- Pressure drop at the mid-range of the tonnage ratings will be approximately 5 to 7 psi.
- The best overall refrigeration/heat recovery system efficiency is usually obtained at the mid-range of the tonnage capacity ratings.
- When selecting a Fre-Heater for commercial refrigeration applications, the compressor discharge line size as well as the tonnage rating must be considered.

³"DE" models have one 4,500-watt, 240-volt electric element.

⁴Hot water storage only.

QUAD-PLATE HEAT EXCHANGER TECHNICAL SPECIFICATIONS				
Model No.	Water Inlet/Outlet	Refrigerant Connection Sizes	Dimensions L x W x H	Approximate Shipping Weight (lbs)
QPX-003	1 ¹ / ₄ "	7 ⁷ / ₈ " ODM	65" x 3" x 24"	180
QPX-004	1 ¹ / ₄ "	7 ⁷ / ₈ " ODM	65" x 6" x 24"	245
QPX-005	1 ¹ / ₄ "	1 ¹ / ₈ " ODM	65" x 9" x 24"	325
QPX-006	1 ¹ / ₄ "	1 ¹ / ₈ " ODM	65" x 12" x 24"	400
QPX-008	1 ¹ / ₂ "	1 ³ / ₈ " ODM	65" x 16" x 24"	500
QPX-010	1 ¹ / ₂ "	1 ³ / ₈ " ODM	65" x 20" x 24"	620
QPX-012	1 ¹ / ₂ "	1 ³ / ₈ " ODM	65" x 24" x 24"	750
QPX-014	1 ¹ / ₂ "	1 ³ / ₈ " ODM	65" x 28" x 24"	820
QPX-016	2"	1 ³ / ₈ " ODM	65" x 32" x 24"	965
QPX-020	2"	2 ¹ / ₈ " ODM	65" x 40" x 24"	1,300



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