

TEMPTEK[®]

HEAT EXCHANGERS

David W. Ennes
 Blackhawk Machinery & Systems, Inc.
 847-427-0414
 ennes@chillerconnect.com

HE SERIES

TEMPTEK plate & frame heat exchangers are used in many applications where process cooling, or heating is required between two fluids that must not be allowed to mix.

Heat exchangers are often used to isolate cooling tower water from the water in contact with your processing equipment to keep your processing equipment clean and maintenance to a minimum.

TEMPTEK plate heat exchangers consist of a number of stainless steel transfer plates that are held in place between a fixed plate and a movable pressure plate to form a complete unit. The plates are corrugated, which creates turbulence in the fluids as they flow through the unit. Each heat transfer plate has a gasket arrangement that provides two separate channel systems.

The arrangement of the gaskets results in through flow in single channels, so that the primary and secondary fluids are in counter-current flow. The fluids cannot mix because of the gasket design.

TEMPTEK plate heat exchangers allow for plate cleaning without disconnecting process piping.



Heat Exchanger

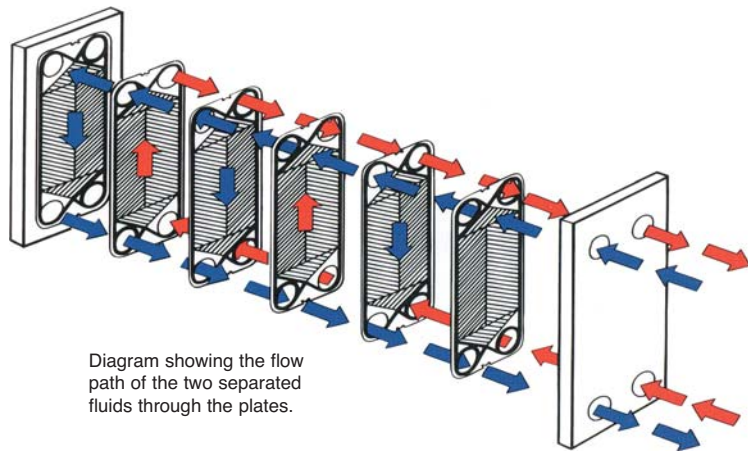


Diagram showing the flow path of the two separated fluids through the plates.



Three heat exchangers with plumbing manifold for custom system.

APPLICATIONS

Heat exchangers can be used on a variety of process applications.



Molds & Dies



Nozzles, Barrels & Tools



Heat Exchangers



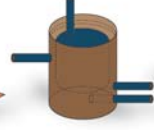
Troughs & Tanks



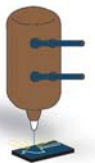
Rolls



Radiators and Air Coils



Jacketed Vessels and Mixers



Lasers

SPECIFICATIONS

Model		HE-5-45	HE-5-85	HE-5-105	HE-5-135	HE-5-170	HE-5-210	HE-5-270	HE-5-315	HE-5-405	HE-5-540
Capacity	Tons ¹	45	85	105	135	170	210	270	315	405	540
	Nominal Flow (GPM)	135	255	315	405	510	630	810	945	1,215	1,620
	Delta T	5	5	5	5	5	5	5	5	5	5
Connection Sizes	Process (To / From)	2	4	4	4	4	4	4	6	6	6
Dimensions² (inches : approximate)	Height	34.000	72.055	72.055	72.055	72.055	72.055	72.055	61.700	61.700	61.700
	Width	12.125	20.500	20.500	20.500	20.500	20.500	20.500	25.625	25.625	25.625
	Depth	23.600	23.600	23.600	23.600	23.600	39.400	39.400	51.200	51.200	59.100
Weight (pounds)	Shipping ³	426	1,568	1,568	1,568	1,568	2,016	2,016	2,429	2,429	2,579

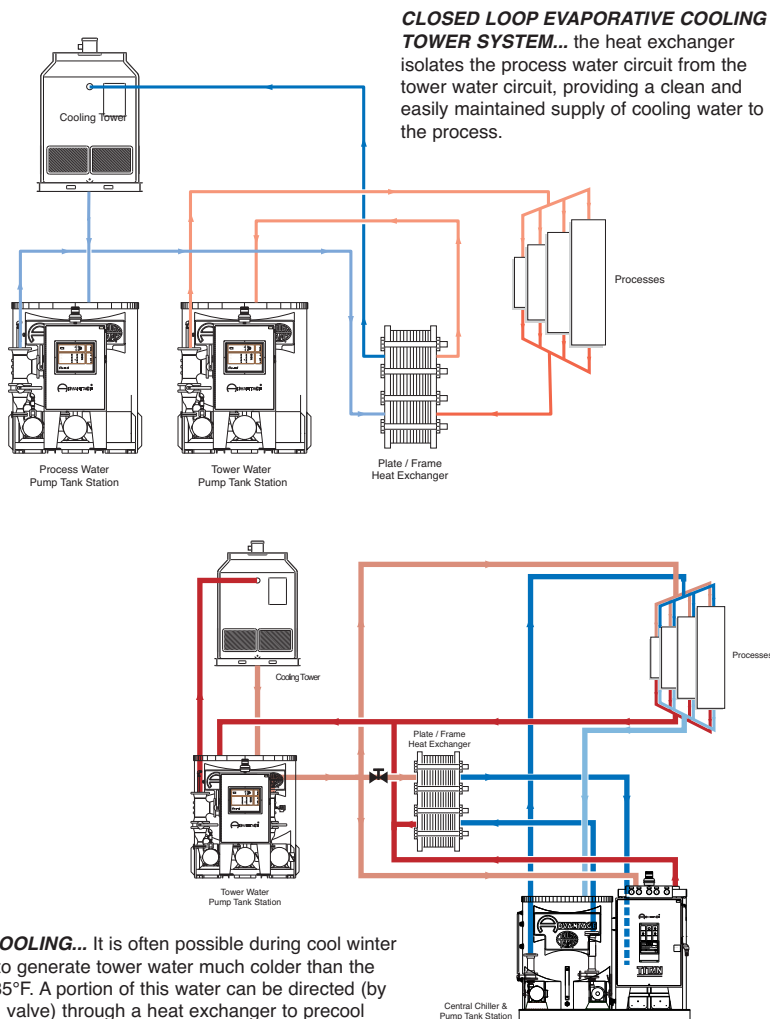
Model		HE-3-45	HE-3-85	HE-3-105	HE-3-135	HE-3-170	HE-3-210	HE-3-270	HE-3-315	HE-3-405	HE-3-540
Capacity	Tons ¹	45	85	105	135	170	210	270	315	405	540
	Nominal Flow (GPM)	135	255	315	405	510	630	810	945	1,215	1,620
	Delta T	3	3	3	3	3	3	3	3	3	3
Connection Sizes	Process (To / From)	4	4	4	4	4	4	6	6	6	6
Dimensions² (inches : approximate)	Height	72.055	72.055	72.055	72.055	72.055	72.055	61.700	61.700	61.700	44.800
	Width	20.500	20.500	20.500	20.500	20.500	20.500	25.625	25.625	25.625	25.625
	Depth	23.600	23.600	23.600	39.400	39.400	39.400	51.200	51.200	59.100	78.700
Weight (pounds)	Shipping ³	1,568	1,568	1,568	1,568	2,013	2,016	3,035	3,035	3,433	3,946

Notes:

1. Tons capacity at 15,000 BTU/hr per ton.
2. Dimensions shown are approximate. Do not use for construction.
3. Weight crated for shipment.

Also note: Heat exchangers are often sourced from several different vendors in order to provide the best cost to performance ratio which may change dimensions and connection sizes.

TYPICAL CIRCUIT SCHEMATICS



FREE COOLING... It is often possible during cool winter months to generate tower water much colder than the normal 85°F. A portion of this water can be directed (by a control valve) through a heat exchanger to precool water prior to it flowing through the chiller evaporator. This reduces the load on the chiller, saving energy.

STANDARD FEATURES

- Heavy gauge steel frame
- Corrugated plates
- Seamless gaskets

OPTIONS

- Plumbing manifolds
- Isolation valves
- Inlet and outlet temperature and pressure gauges
- Nickel plated



Phone: 847-427-0414

Web: www.Temptekchillers.com

email: ennes@chillerconnect.com

TEMPERATURE CONTROLLERS • PORTABLE CHILLERS • CENTRAL CHILLERS • PUMP TANK STATIONS • TOWER SYSTEMS • FILTERS

SINCE PRODUCT INNOVATION AND IMPROVEMENT IS OUR CONSTANT GOAL, ALL FEATURES AND SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE OR LIABILITY.