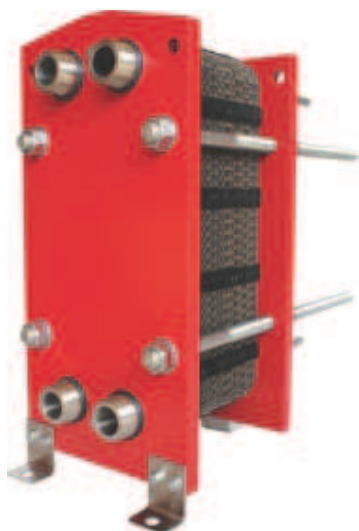


Temperature Control



7- PLATE HEAT EXCHANGERS FOR HEATING & COOLING LIQUIDS

- Ideal for heating, cooling, heat-recovery, condensing and evaporation processes.
- High overall heat transfer coefficient for efficient heat transfer.
- Compact design gives maximum surface area to material volume without compromising mechanical robustness.
- Low installation cost.
- Easy dismantling for rapid cleaning.
- High performance with low hold-up volume.
- Versatile, modular design.
- Plate and gasket materials available to suit most fluid types
- Standard units available from stock: 100-kW to 819-kW for heating applications; 53-kW to 397 kW for cooling applications.
- Short lead-time custom build service.
- The Plate heat exchangers comprise an epoxy coated steel frame consisting of one removable and one fixed cover fitted with top and bottom plate hangers.
- The fluid connections are heavy gauge, stainless steel, male threaded nozzles welded into the front cover.
- Flanged connections are available on request.
- The heat transfer plates are corrugated in a herringbone pattern with port holes for the passage of the two fluids and have clip on re-usable seals.
- Plate materials available: Titanium (standard), BS 316L Stainless Steel, Hastelloy Alloy, Nickel.
- Seal materials available: EPDM (standard), HNBR, NBR, NEOPRENE.
- Maximum working pressure: 0.6-MPa.
- Maximum operating temperature: 150°C.

Cooling Performance Table (water/water)

CODE	PLATE MATERIAL SUFFIX		TRANSFER		AREA OF PLATE m ²	No. OF PLATES	COLD CIRCUIT (8°C/15°C)			PROCESS CIRCUIT (31°C/26°C)		
	Titanium	316 S.Steel					FLOW	PRESSURE DROP	CONN.	FLOW	PRESSURE DROP	CONN.
PHE-100	TI	SS	53	45,700	0.04	18	6.0	42	1½"	8.3	45	1½"
PHE-140	TI	SS	66	56,900	0.04	22	7.5	42	1½"	10.4	45	1½"
PHE-180	TI	SS	92.7	79,700	0.04	30	10.5	42	1½"	14.6	45	1½"
PHE-240	TI	SS	125.9	108,200	0.04	40	14.3	42	1½"	19.9	45	1½"
PHE-290	TI	SS	149	128,200	0.04	47	16.8	42	1½"	23.5	45	1½"
PHE-330	TI	SS	172.3	148,400	0.04	54	19.5	42	1½"	27.2	45	1½"
PHE-370	TI	SS	192.1	165,200	0.04	60	21.7	42	1½"	30.3	45	1½"
PHE-410	TI	SS	215	185,100	0.04	67	24.3	42	1½"	34.0	45	1½"
PHE-450	TI	SS	231.8	199,400	0.04	72	26.2	42	1½"	36.6	45	1½"
PHE-500	TI	SS	244.8	240,300	0.15	26	27.6	40	2½"	38.7	42	2½"
PHE-550	TI	SS	265.2	228,000	0.15	28	29.9	40	2½"	41.9	42	2½"
PHE-610	TI	SS	295.8	254,300	0.15	31	33.4	40	2½"	46.7	42	2½"
PHE-670	TI	SS	326.4	280,600	0.15	34	36.8	40	2½"	51.6	42	2½"
PHE-730	TI	SS	357	307,000	0.15	37	40.3	40	2½"	56.4	42	2½"
PHE-780	TI	SS	377.4	324,500	0.15	39	42.6	40	2½"	59.6	42	2½"
PHE-820	TI	SS	397.8	342,000	0.15	41	44.9	40	2½"	62.8	42	2½"

Heating Performance Table (water/water)

CODE	PLATE MATERIAL SUFFIX		TRANSFER		AREA OF PLATE m ²	No. OF PLATES	COLD CIRCUIT (8°C/15°C)			PROCESS CIRCUIT (31°C/26°C)		
	Titanium	316 S.Steel					FLOW m ³ /h	PRESSURE DROP kPa	CONN. BSPT	FLOW m ³ /h	PRESSURE DROP kPa	CONN. BSPT
PHE-100	TI	SS	102	88,440	0.04	19	4.0	38	1½"	9	47	1½"
PHE-140	TI	SS	140	120,600	0.04	23	5.6	38	1½"	11	47	1½"
PHE-180	TI	SS	178	153,500	0.04	31	7.0	38	1½"	15	47	1½"
PHE-240	TI	SS	242	208,300	0.04	41	9.6	38	1½"	20	47	1½"
PHE-290	TI	SS	287	246,700	0.04	47	11.3	38	1½"	24	47	1½"
PHE-330	TI	SS	332	285,000	0.04	55	13.1	38	1½"	27	47	1½"
PHE-370	TI	SS	370	318,000	0.04	61	14.6	38	1½"	30	47	1½"
PHE-410	TI	SS	414	356,300	0.04	67	16.3	38	1½"	34	47	1½"
PHE-450	TI	SS	446	383,700	0.04	73	17.6	38	1½"	36	47	1½"
PHE-500	TI	SS	504	433,300	0.15	27	19.9	36	2½"	40	45	2½"
PHE-550	TI	SS	546	469,500	0.15	29	21.5	36	2½"	43	45	2½"
PHE-610	TI	SS	609	523,600	0.15	31	24.0	36	2½"	48	45	2½"
PHE-670	TI	SS	672	577,800	0.15	35	26.5	36	2½"	53	45	2½"
PHE-730	TI	SS	735	632,000	0.15	37	29.0	36	2½"	58	45	2½"
PHE-780	TI	SS	777	668,000	0.15	39	30.6	36	2½"	61	45	2½"
PHE-820	TI	SS	819	704,200	0.15	41	32.2	36	2½"	64	45	2½"

CODE	DIMENSIONS (mm)			PACKING	WEIGHT kg	VOLUME m ³
	H	W	D			
PHE-100	530	360	740	1	50	0.14
PHE-140	530	360	740	1	50	0.14
PHE-180	530	360	740	1	52	0.14
PHE-240	530	360	740	1	53	0.14
PHE-290	530	360	740	1	56	0.14
PHE-330	530	360	740	1	56	0.14
PHE-370	530	360	740	1	56	0.14
PHE-410	530	360	740	1	56	0.14
PHE-450	750	360	740	1	60	0.20
PHE-500	750	360	740	1	63	0.20
PHE-550	750	360	740	1	67	0.20
PHE-610	750	360	740	1	70	0.20
PHE-670	780	470	1200	1	238	0.44
PHE-730	780	470	1200	1	240	0.44
PHE-780	780	470	1200	1	243	0.44
PHE-820	780	470	1200	1	247	0.44