HEATAWAY



COMBINED FLOW STAINLESS STEEL EVAPORATIVE CONDENSER

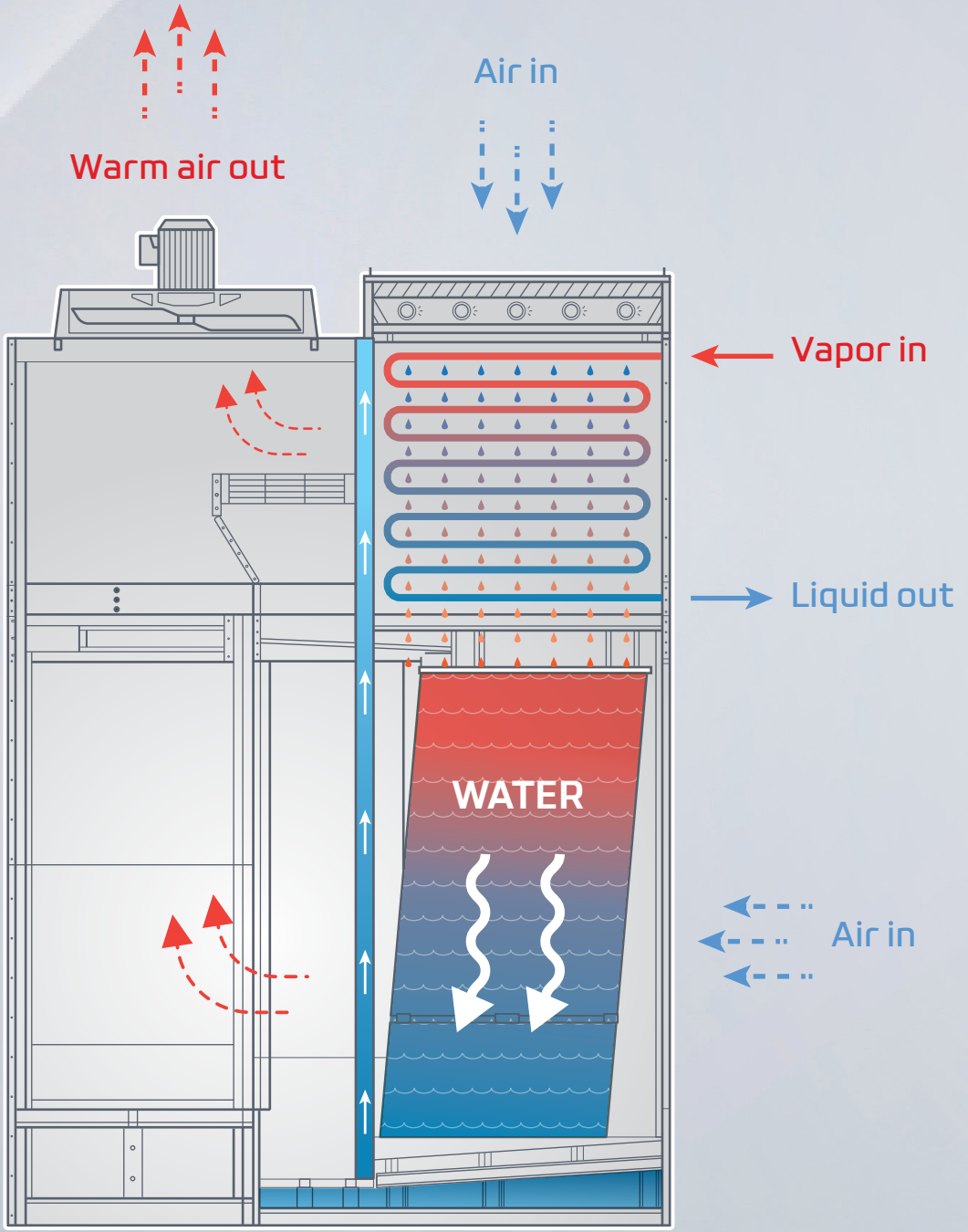
DELIVERING COST-EFFECTIVE EFFICIENCY
WITH WORLD-CLASS QUALITY

CONTAINERIZED

www.heataway.net

PRINCIPLE OF OPERATION





HC1 SERIES

HIGHLY EFFICIENT PERFORMANCE

Combine flow design pre-cools water through our fill, delivering faster and more efficient coil heat transfer.

EXCELLENT ENERGY EFFICIENCY

Overall energy, water, and electricity consumption are reduced compared to other condenser types.

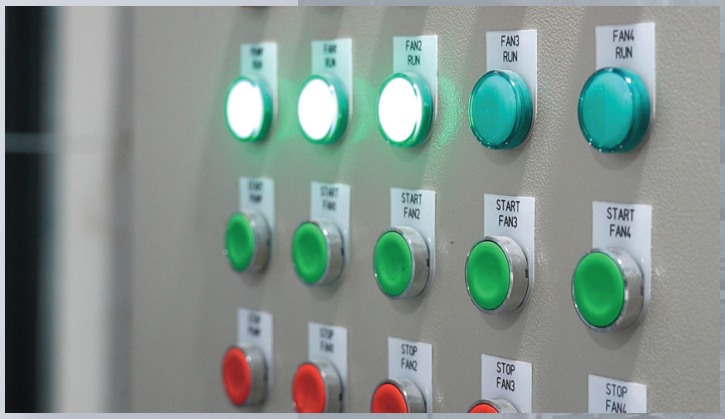
HIGH-QUALITY MATERIALS

Stainless steel 304 components from certified suppliers are verified with PMI and undergo mechanical testing in accordance with ASME standards, ensuring strength, durability, and long-lasting performance.

MEETS CTI ATC-106

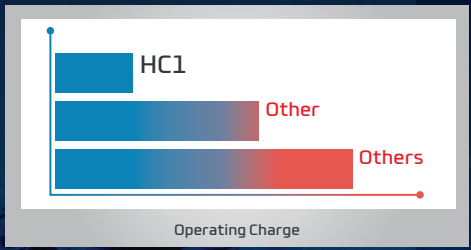
MEETS ASME B31.5







OVERALL COST-EFFECTIVE











LOW CHARGE REFRIGERANT

Enhances efficiency by preventing hot spots on the coil and lowering spray water temperature through improved heat rejection. This significantly reduces refrigerant usage compared to other evaporative condenser types.

LESS WATER, LIGHTER WEIGHT

The design minimizes water usage and provides a lightweight structure for efficient operation, easy transport, and simple installation.

HIGH-EFFICIENCY FILL

The fill enhances heat transfer efficiency by reducing the water temperature after it passes through the coil, resulting in improved overall heat-rejection performance.

STANDARD SPARE PARTS

Spare parts are standard models that are readily available and easy to replace.

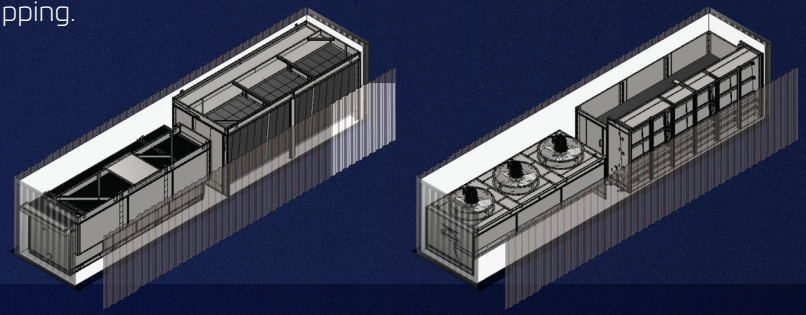
SIMPLIFIED NOZZLE MAINTENANCE

Spray nozzles can be removed and cleaned easily by hand no tools required saving maintenance time

COMPLETE KNOCK DOWN

MODULAR ASSEMBLY

Delivered in Complete Knock Down (CKD) form, compatible with standard containers for convenient and cost-effective shipping.



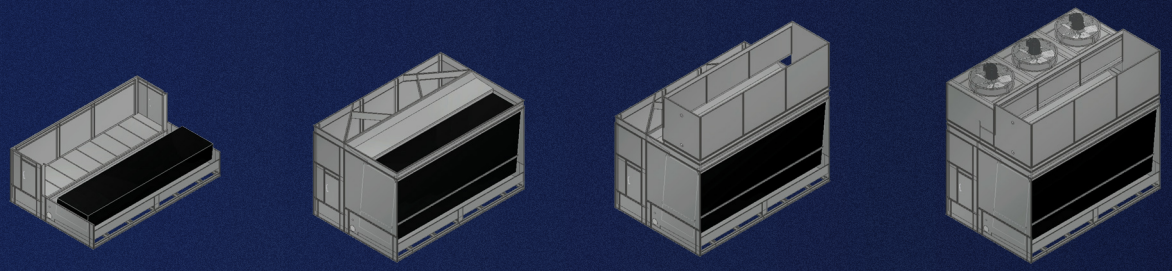
LOWER INSTALLATION COSTS

Lightweight and modular design for simpler installation and lower lifting costs.

- Easier installation - modular design and lighter weight simplify assembly and shorten installation time.
- Faster setup - quick positioning and alignment.
- Lower costs - save on crane rental and lifting equipment.

EFFICIENT INSTALLATION

One-day installation across all models, minimising downtime.






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HC1 DESIGN DETAIL

HIGH-STRENGTH CONSTRUCTION

Built with stainless steel 304, the structure is engineered to perform reliably in tough environments and demanding operating conditions—ensuring superior durability and a long service life.

STAINLESS STEEL CONDENSER COIL

Manufactured from stainless steel 304 in compliance with ASME B31.5. All coil materials undergo PMI testing to ensure reliability, consistency, and high quality.

HIGH-EFFICIENCY FILL

Engineered for optimal heat-transfer performance, using PVC material resistant to heat and chemical corrosion.

AXIAL FAN AND RECIRCULATING WATER PUMP

Delivering MEPS-level efficiency, both the fan and pump are designed for excellent energy savings. They feature IP55 protection for resistance against dust and water.

The fan motor is equipped with Class F insulation, providing high heat resistance and ensuring reliable, continuous 24-hour operation.

WATER DISTRIBUTION SYSTEM

Designed to ensure uniform water coverage across the entire coil surface for optimal heat-exchange efficiency. The spray nozzles are easily removable for cleaning and maintenance, preventing clogs and extending the system's lifespan.

BASIN DESIGN

The welded basin prevents leakage and minimises water retention, allowing faster cleaning and easier maintenance.

MODEL SELECTION METHOD

TABLE 1: HEAT REJECTION FACTORS FOR AMMONIA (R-717)

CONDENSING PRESSURE (BARG)	CONDENSING TEMPERATURE (°C)	ENTERING WET BULB TEMPERATURE (°C)										
		20	21	22	23	24	25	26	27	28	29	30
11.73	33	1.19	1.27	1.37	1.50	1.63	1.81	2.03	2.37	2.70	-	-
12.10	34	1.12	1.19	1.27	1.36	1.48	1.61	1.80	2.06	2.35	-	-
12.49	35	1.03	1.08	1.15	1.23	1.30	1.39	1.53	1.69	1.90	2.15	2.47
12.88	36	0.96	1.01	1.07	1.13	1.20	1.28	1.39	1.53	1.70	1.91	2.17
13.28	37	0.88	0.92	0.97	1.03	1.08	1.16	1.23	1.36	1.48	1.65	1.88
13.69	38	0.83	0.86	0.90	0.94	1.00	1.05	1.12	1.21	1.31	1.44	1.59
14.11	39	0.78	0.81	0.84	0.88	0.92	0.98	1.03	1.12	1.20	1.31	1.44
14.53	40	0.74	0.76	0.79	0.83	0.87	0.91	0.96	1.02	1.09	1.18	1.29
14.97	41	0.69	0.72	0.74	0.77	0.80	0.84	0.88	0.93	0.99	1.08	1.18
15.41	42	0.66	0.68	0.71	0.74	0.76	0.80	0.84	0.88	0.93	0.99	1.06

EXAMPLE

Refrigerant:	Ammonia (R-717)
Total heat rejection:	1,150 kW
Condensing temperature:	38°C
Entering wet bulb temperature:	28°C

SELECTION PROCEDURE

1. From Table 1: the heat rejection factor for R-717 at 38°C condensing temperature and 28°C entering wet-bulb temperature is 1.31.
2. Multiply 1,300 kW x 1.31 = 1,703 kW.
3. From Table 2: select the unit whose base heat rejection capacity is equal or greater than 1,703 kW. Model HC1-1710.

Remark:
1. The model selection for other refrigerants, please get in touch with the HEATAWAY representative.
2. The base heat rejection is based on ammonia (R-717)at 38 °C condensing temperature and 24 entering wet-bulb temperature.
3. R-717 operating charge is at 38 °C condensing temperature and 33% of coil volume.
4. The operating weight includes the water weight at the overflow level, and the coil is charged with ammonia (R-717).
5. Dimensions are subject to change. Do not use for construction. This catalog includes data current at the time of publication, which should be reconfirmed at the time of purchase.

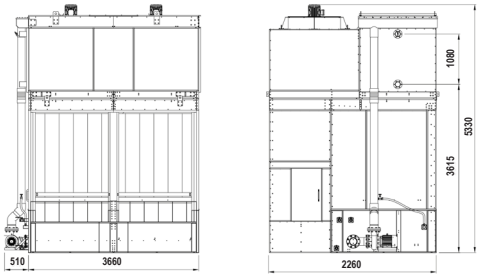
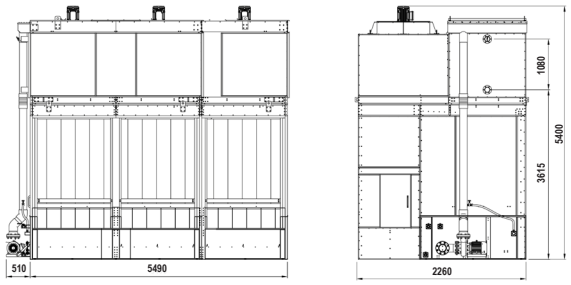
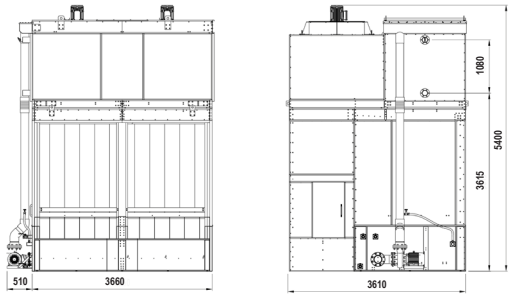
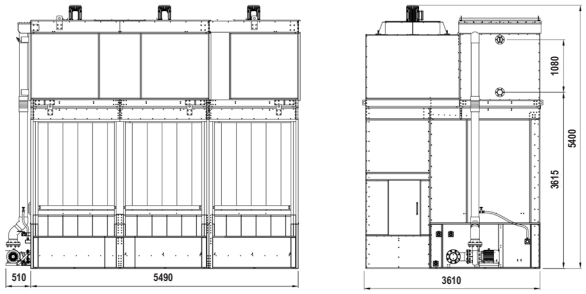
TABLE 2: BASE HEAT REJECTION CAPACITY

MODEL NUMBER	BASE HEAT REJECTION (kW)
HC1-1050	1050
HC1-1260	1260
HC1-1320	1320
HC1-1380	1380
HC1-1440	1440

MODEL NUMBER	BASE HEAT REJECTION (kW)
HC1-1510	1510
HC1-1600	1600
HC1-1630	1630
HC1-1710	1710
HC1-1730	1730

MODEL NUMBER	BASE HEAT REJECTION (kW)
HC1-1830	1830
HC1-2190	2190
HC1-2450	2450
HC1-2650	2650

TABLE 3: TECHNICAL DATA

FOOTPRINT		MODEL NUMBER	DIMENSION (mm)		TOTAL POWER CONSUMPTION (kW)	FAN MOTOR		PUMP MOTOR	
			F	H		Qty	kW	Qty	kW
	7'x12' 2.3x3.6m	HC1-1050	1,080	5,330	12	2	4.0	1	4.0
		HC1-1260	1,080	5,330	15	2	5.5	1	4.0
		HC1-1320	1,080	5,330	15	2	5.5	1	4.0
		HC1-1380	1,080	5,330	19	2	7.5	1	4.0
	7'x18' 2.3x5.5m	HC1-1510	1,080	5,400	17.5	3	4.0	1	5.5
		HC1-1630	1,080	5,400	17.5	3	4.0	1	5.5
		HC1-1710	1,080	5,400	17.5	3	4.0	1	5.5
	12'x12' 3.6x3.6m	HC1-1440	1,080	5,400	13.5	2	4.0	1	5.5
		HC1-1600	1,080	5,400	13.5	2	4.0	1	5.5
		HC1-1730	1,080	5,400	16.5	2	5.5	1	5.5
		HC1-1830	1,080	5,400	20.5	2	7.5	1	5.5
	12'x18' 3.6x5.5m	HC1-2190	1,080	5,400	19.5	3	4.0	1	7.5
		HC1-2450	1,080	5,400	19.5	3	4.0	1	7.5
		HC1-2650	1,080	5,400	24	3	5.5	1	7.5

HEATAWAY

WORLD CLASS QUALITY

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