

PRODUCT RANGE

DESCRIPTION	UNIT	CEVC100	CEVC150	CEVC350	CEVC500	CEVC650	CEVC800	CEVC1000	CEVC 1100	CEVC1200
HEAT REJECTION	KW	100	150	350	500	650	800	1000	1100	1200
HEAT REJECTION	TR	28	43	99	142	185	227	284	313	341

DESCRIPTION	UNIT	CEVC1400	CEVC1600	CEVC1800	CEVC2000	CEVC2200	CEVC2400	CEVC2600	CEVC2800	CEVC3000
HEAT REJECTION	KW	1400	1600	1800	2000	2200	2400	2600	2800	3000
HEAT REJECTION	TR	398	455	512	568	625	682	739	796	853

* Please contact Colt representative for suitable selection of the equipment based on the site conditons and application

FOOTPRINTS – PROCESS COOLING



DAIRY



FISHERIES



F&B



MEAT PROCESSING



CHEMICAL



POLYFLIMS & PLASTIC



EPC



PHARMACEUTICAL & PIGMENTS

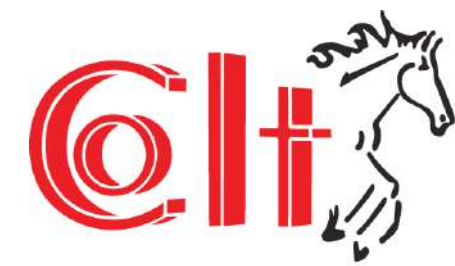


POWER & STEEL



because performance counts

Email: info@coltfreeze.com Website: www.coltfreeze.com



because performance counts

EVAPORATIVE CONDENSER



LOW ENERGY CONSUMPTION



LOW INSTALLED COST



LONG SERVICE LIFE

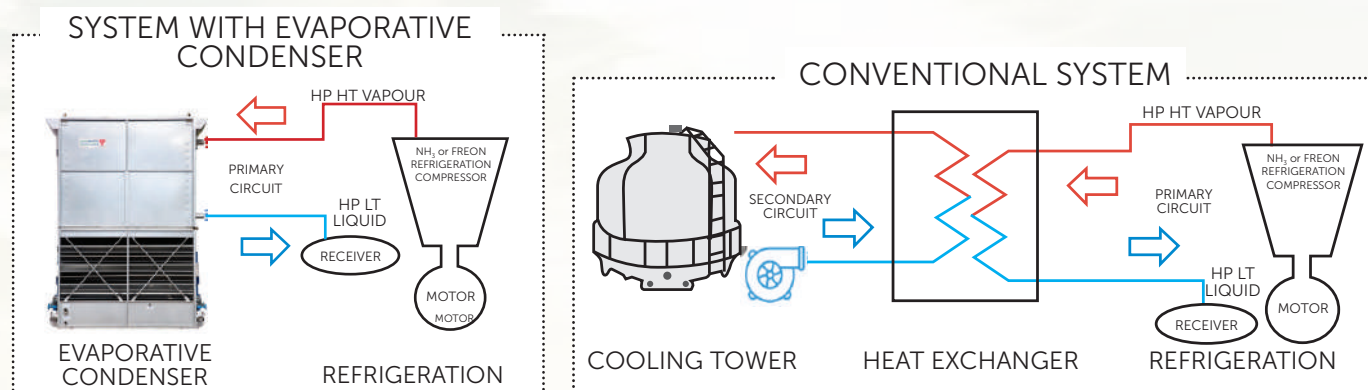


ZERO MAINTENANCE

EVAPORATIVE CONDENSER

An evaporative condenser is a condenser integrated into a cooling tower which rejects the latent heat of condensation of refrigerant (Ammonia/Freon) through a coil to the surroundings by means of evaporation. Water sprayed onto the coil exchanges heat with the refrigerant. A small quantity of water is evaporated into the air thereby cooling the remaining water cascading to the basin at the bottom. Post evaporation the saturated air passes through the drift eliminators and then forced out using a fan.

EVAPORATIVE CONDENSER V/S CONVENTIONAL SYSTEM



Conventional system uses a plate type / shell & tube type heat exchanger, in which primary circuit has refrigerant flowing through it & secondary circuit has circulating water. Circulating water from the secondary circuit rejects heat through cooling tower, the heat exchanger acts as an isolation point to maintain two independent circuits. In a conventional system performance of primary circuit is susceptible to secondary circuit performance & secondary circuit is vulnerable to scaling due to water quality. Also having a heat exchanger between two circuits increases the irreversibility of the system.

In an Evaporative Condenser the intermediate heat exchanger, secondary pump-piping & cooling tower is replaced by a single unit consisting of refrigerant condensing coil as an integral part of the unit. This feature of the evaporative condenser mitigates scaling & improves reliability ensuring ease of operation of the system. The terminal temperature difference required for intermediate heat exchanger is eliminated which translates to system savings.

BENEFITS

RELIABILITY

- Continuous coil without welded joints
- Robust corrosion resistant structural material for long life
- Large diameter laminar flow nozzles for clog free operation.

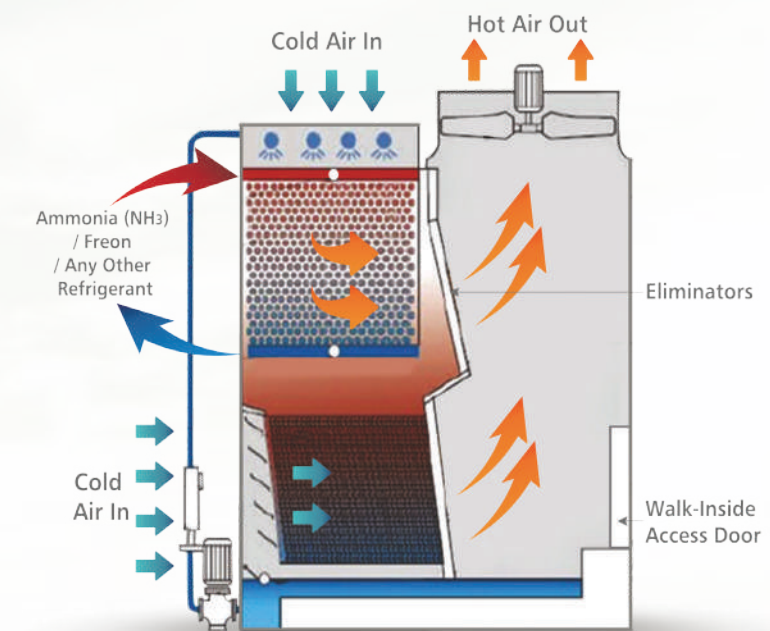
EFFICIENCY

- Honeycomb PVC Wet deck design for most optimal air & Water usage
- Air Flow - Parallel at coil side & cross at fill side for efficient heat transfer
- Optimized spray water flow to coil for maximum heat transfer

MAINTENANCE

- Side access door for easy online maintenance
- Electronic De-scaling device for trouble free operation
- Direct Drive fan arrangement

OPERATING PRINCIPLE



- The refrigerant flows through the coil of the evaporative condenser.
- Heat from the refrigerant is rejected through the coil tubes.
- Part of the heat is removed directly by the downward induced air and discharged to the surrounding.
- Rest of the heat is rejected to the water cascading down over the tubes.
- Simultaneously, air is drawn in through the air inlet louvers at the base of the evaporative condenser.
- A small portion of the water is evaporated which removes the heat. The warm saturated air travels through the drift eliminator & discharged by the fan to the surrounding, thereby reducing drift water loss.
- Post heat exchanged, the condensed refrigerant flows to receiver tank.

WHY COLT EVAPORATIVE CONDENSERS

Colt's evaporative condenser offers unmatched flexibility, providing optimized selections for various refrigeration systems & climatic conditions, utilizing multi flow configuration. Colt provides the most energy efficient evaporative condenser in the market.

- Wide Range of Thermal Duties - Ideal for Ammonia / Freon condensation with low approach
- Retro Fit & Replacement— Single air inlet models are designed and fit into the existing system.
- Selection Customization — can optimize footprint and least Power requirements to suit project requirements, large product range & Customized Material of Construction*.
- Largest sales & support network across India