Coaxial Heat Exchanger

Features

1. Spiral twisted construction optimized surface structure of heat exchanger tubes and enlarge the area on the unit heat exchange tube
2. Because of spiral twisting construction, it produced high turbulence flow and enhanced heat transfer efficiency on both side
3. Big pass diameter inside unlimited the water quality
4. High turbulence inside reduced fouling rate on water side
5. One heat exchanger tube make sume no inner leak occur
6. Cost efficient
7. Various material choose from copper, cupronickel, aluminum, titanium, stainless steel to carbon steel
8. 6 Sigma Administration System
9. ISO 9001:2000 Approved

Applications

Air source heat pump water heater, water chiller, air/water/ground/marine/waste water source heat pump, pool facility, marine air conditioner, laser chiller, energy recycle, sea food machine, ice maker and so on.
This type of heat exchangers are suitable to R-22, R-407c and R-410a refrigerants

Coaxial Heat Exchanger Model Introduction

CHE 150 S C - S – 2
1 2 3 4 5 6

1. Coaxial heat exchanger
2. 150Nominal capacity 150 x 0.1KW
3. Out tube material, S: Steel (Omitted) / C: Copper
4. Inner tube material, C: Copper / T:Titanium / V: Vialbra (aluminium brass) / N: Nickel-copper / S: Stainless steel / A: Aluminum
5. Shape, S: Square / R: Round / C: Course / U: U Shape / L: Touple loop / V: Volution
6. Pass number, 1 pass omitted

C Series Copper Heat Exchanger

The inner tubes are made from copper, which is good heat conduction material. They are applied in the following:

1. Air sourced heat pump water heater
2. Water chiller
3. Water/ground sourced heat pump
4. Heat recycle facility

C Series

N Series Cupronickel Heat Exchanger

The inner tubes are made from cupronickel with high corrosion resistance. They are applied in the following:

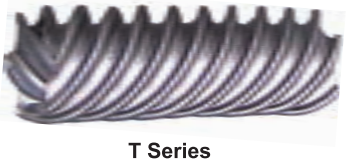
1. Marine air conditioner: Because of high corrosion resistance, it resisted the corrosion by salinity in sea water, prolonged lifetime and reduced maintenance cost, and a compacted size with high heat exchanging capacity
2. Ice maker: Ice maker and ice-cream machine worked under low temperature. They need salty water. Nominal heat exchanger is easy to be corroded to be leaked. But cupronickel has high corrosion to prohibit leaking.
3. Sea water sourced heat pump
4. Waste water sourced heat pump

N Series

T Series Titanium Heat Exchanger

The inner tubes are made from titanium. Purity titanium does not have chemical reaction with chlorine, thin hydrochloric and thin sulphuric acid, but corroded by hydrofluoric acid, phosphoric acid and melt alkali, titanium has high corrosion resistance to sea water. Its resistance rate is 15 times to normal stainless steel and life time is 10 times of stainless steel

1. swimming pool facility: Because chlorine had produced high corrosive chlorine in the swimming pool water. Normal heat exchangers cannot prohibit the leak in the system by its corrosion. Titanium has a high corrosion resistance. It protected the safety of system.
2. Sea food facility, sea water baths, and aquarium: There are a great many of chlorine ion in sea water. Because of corrosion of chlorine ion, normal heat exchanger cannot meet its requirements. Titanium coaxial heat exchangers solved the corrosion problem and reduced maintenince cost maintain.
3. Laser machine, plating application
4. Marine air conditioner
5. Sea water sourced heat pump
6. Waste-water sourced heat pump



T Series

S Series Stainless Steel Heat Exchanger

S series coaxial heat exchangers have stainless steel 316L,304 inner tubes. They are mainly applied in as the following

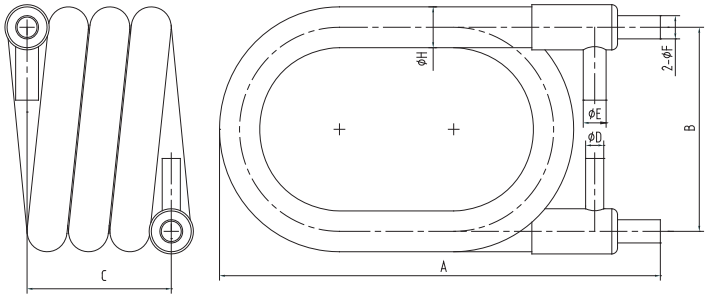
1. Laser chilling: Copper will produce copper ion under high temperature. Copper ion has corrosion to laser head. Therefore, copper or material with copper ion cannot be used in the laser chilling. But coaxial heat exchanger with stainless steel 316L or 304 inner tube avoided the corrosion on laser head by copper ion.
2. Ammonia refrigeration system: Ammonia has high corrosive performance to copper. Copper heat exchanger cannot be used for ammonia systems. Coaxial heat exchanger with stainless steel 316L or 304 inner tube solved the problem of ammonia corrosion and enhanced the heat transfer.
3. Oil cooler: stainless steel 316L or 304 coaxial heat exchangers have low cost compared to copper coaxial heat exchangers
4. For refrigeration systems, Food, drinking, dairy product, medicine process

CC Series Double Wall Heat Exchanger

CC series has double wall inner copper tube. Double wall inner tube prohibited two medium mixing and be polluted when one wall of inner tube leaked. It increased the safety of performance. CC series coaxial heat exchangers are mainly applied in the following application.

1. sanitary water heater: The safety of sanitary water heater effected the health of people. If heat exchanger leaked, lubricant oil will go to water from refrigerant and compressor and is harmful to people drink or bath of polluted water. CC series coaxial heat exchangers enhanced the safety of sanitary water heater.
2. Transformer oil cooling, drinking cooling or heating, chemistry or chemical, bio food, medicine application

Technical Parameter



Model	Heat Capacity	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	H (mm)
	TON	L	W	H	Liquid Inlet	Air Outlet	Water Inlet / Outlet	Pipe Diameter
CHE020	0.5	370	140	47	9.5	12.7	16	28
CHE025	0.75	370	140	75	9.5	12.7	16	28
CHE035	1	300	140	104	12.7	16.0	16	28
CHE055	1.5	340	140	133	12.7	16.0	16	28
CHE070	2	385	170	127	12.7	16.0	22	33
CHE090	2.5	400	170	158	16.0	19.0	22	33
CHE100	3	410	188	136	16.0	19.0	22	38
CHE125	3.5	395	188	175	16.0	19.0	22	38
CHE150	4	390	188	214	16.0	19.0	22	38
CHE165	4.5	502	296	161	19.0	22.0	28	45
CHE185	5	390	188	253	19.0	22.0	28	38
CHE200	6	560	296	161	19.0	22.0	28	45
CHE225	7	483	296	207	19.0	22.0	28	45
CHE250	8	560	296	207	19.0	22.0	28	45
CHE300	10	600	296	229	19.0	22.0	32	50
Remark	1. The material of inner pipe is copper tube, outer pipe is precision tube 2. The trim size should be affirmed by the pratical drawing							

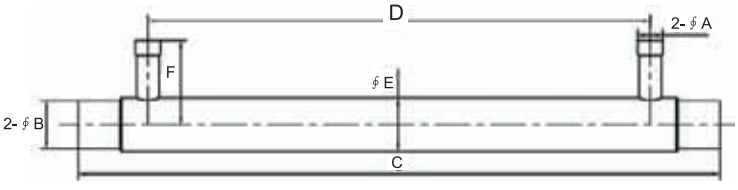







Economizer

Both the inner and outer pipes of Economiser or regenerator, which belongs to coaxial heat exchanger, are made from copper. Mainly used in low-temperature unit, in addition to increasing the superheat and preventing the unevaporated liquid from getting into the compressor which may cause liquid hammer under the circumstance of low-temperature evaporation, those copper pipes can also raise refrigerating output. Also used in high-temperature unit, those copper pipes can increase the subcooling degree of condensed liquid and reduce the load of expansion valve, so that the refrigerating output would be maximised



Model	Quantity RT	Dimension (mm)					
		A	B	C	D	E	F
CHE035CC-I	1	9.52	19	400	320	28	50
CHE055CC-I	1-1/2	9.52	22	420	340	33	50
CHE070CC-I	2	12.7	28	450	370	38	50
CHE100CC-I	3	12.7	28	450	370	45	50
CHE185CC-I	5	16	32	450	370	50	50