

HZSS export different kinds of heat exchanger to more than 40 countries and have agent in Korea, Italy, Israel, Czech Republic, Spain, India, Thailand.



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 Hangzhou Shenshi Energy Conservation Technology Co.,Ltd

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About Us

Hangzhou Shenshi Energy Conservation Technology Co., Ltd.(HZSS) was set up in the year of 2005 (Original name of Hangzhou Shenshi Heat Exchanger Co., Ltd.), Is one of the largest manufacturers of Coaxial coil heat exchanger, Coil in shell heatexchanger, Shell & pipe heat exchanger and Shell & tubeheat exchanger, andowner of the global-leading technology of integrated micro-channel heat exchanger and complete set of micro chemical reactors. HZSS focus on production and marketing and innovation of high efficiency and energy saving heat exchangers.



容慧博微、建功立德
Smart solution for you



我们的部分客户 Some of our customers



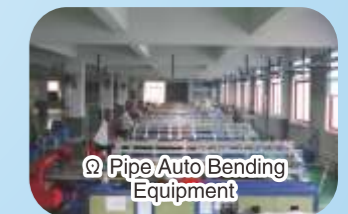
全自动弯管机



全自动氦检漏系统



阴级电泳涂装线



Ω 管全自动弯管机



焊接机器人



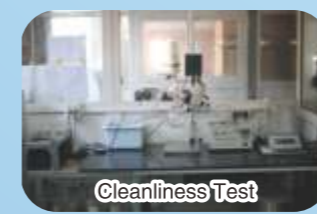
15-70kW换热器测试台



试验台 Test Lab



试验台 Test Lab



清洁度检测



盐雾试验



脉冲试验



暴力试验

Application



Our products have been successfully used into applications like: heat pump, icemachine, water purifier, pool heat pump, marine AC, water chiller, CO2 heat pump, medical facility, micro chemical, aerospace, military, top universities' labs etc.

R & D

Laying on constant innovation and invention, and outstanding flexible customization ability, perfecting products and solutions, improvement, We gets to win the trust and cooperation of global customers. In the field of energy saving, Wecanprovide the service including of designing, manufacturing, testing and other one-stop service for customers.



Production

Our factory hashighly efficient management and goodquality assurance system, with a varieties of modern automated production and testing equipment, scale and production capacity in the lead of the filed, precision and quality in the industry has been in the position of the way ahead.



Quality

Top-ranking inspection devices, strict material quality control method, and perfect process control system make excellent quality in HZSS.



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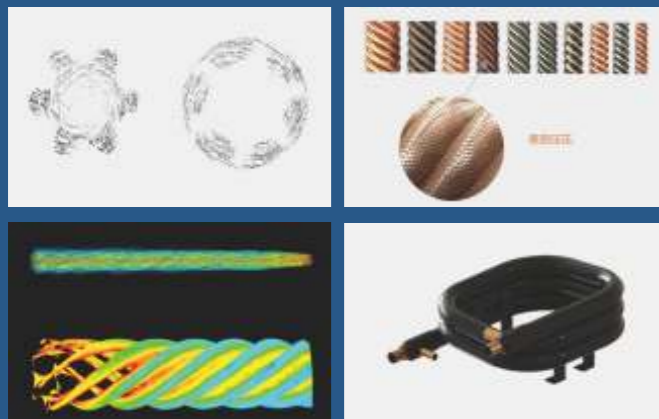
Product Profile

HZSS's WSHP coils are specially made for water source heat pump as evaporator and condenser, with flexible shape, compact and high efficiency.



Product Features

1. Water in the inner coil and gas in between the inner and outer coil to enhance turbulence intensity and heat transfer coefficient.
2. Different inner tube materials available: copper, coppernikle, Stainless Steel, Titanium.
3. Reliable with higher pressure stand and less welding points.
4. Anti-frezzing and self cleaning.

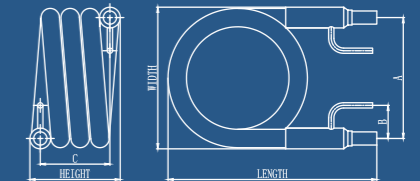
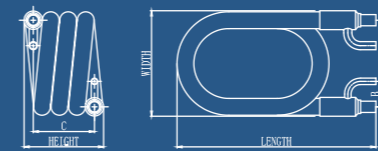


Product Technical Parameters

Models	Refrigerant	Capacity Ton	Round	Trombone	Double wound helix	Sprial	Water flow		Evaporator		Condenser	
							GPM	m ³ /h	Btu/h	kW	Btu/h	kW
SS-0050GT	R410A	0.50	●	●			1.33	0.30	6000	1.8	7800	2.3
SS-0075GT	R410A	0.75	●	●		●	1.99	0.45	9000	2.6	11600	3.4
SS-0100GT	R410A	1.00	●	●		●	2.65	0.60	11900	3.5	15500	4.6
SS-0150GT	R410A	1.50	●	●		●	3.98	0.90	17900	5.3	23300	6.8
SS-0200GT	R410A	2.00		●	●	●	5.30	1.20	23900	7.0	31000	9.1
SS-0250GT	R410A	2.50		●	●	●	6.63	1.51	29900	8.8	38800	11.4
SS-0300GT	R410A	3.00		●	●	●	7.95	1.81	35800	10.5	46600	13.7
SS-0350GT	R410A	3.50		●	●	●	9.28	2.11	41800	12.3	54300	15.9
SS-0400GT	R410A	4.00		●	●	●	10.60	2.41	47800	14.0	62100	18.2
SS-0500GT	R410A	5.00		●	●	●	13.25	3.01	59700	17.5	77600	22.8
SS-0600GT	R410A	6.00		●	●	●	15.90	3.61	71600	21.0	93100	27.3
SS-0750GT	R410A	7.50		●	●	●	19.88	4.52	89600	26.3	116400	34.1

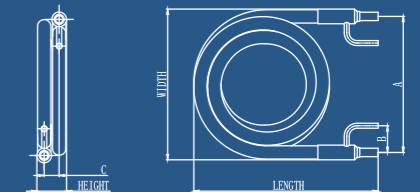
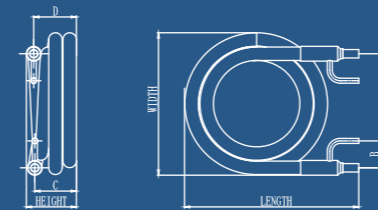
Note: Model SS-0XXXGT, G means Carbon Steel, T means Copper
 Test Condition: As Evaporator, water inlet temp 68°F, Evaporating Temp 50°F; as Condenser, water inlet temp 85°F, Condensing Temp 104°F

Product Dimensions



Model	Refrigerant Inlet OD mm	Refrigerant Outlet OD mm	Water Connection OD mm	Length mm	Width mm	Height mm	A mm	B mm	C mm
SS-0050GT-U	9.52	9.52	12.7	350	152	60	127	40	35
SS-0075GT-U	9.52	9.52	12.7	310	152	83	127	40	58
SS-0100GT-U	9.52	9.52	12.7	380	152	83	127	40	58
SS-0150GT-U	9.52	9.52	16	360	168	121	140	50	93
SS-0200GT-U	9.52	9.52	16	430	168	121	140	50	93
SS-0250GT-U	12.7	12.7	19	470	184	134	152	50	102
SS-0300GT-U	16	16	22	475	207	156	170	50	119
SS-0350GT-U	16	16	22	460	207	190	170	50	153
SS-0400GT-U	19	19	22	495	270	201	220	60	151
SS-0500GT-U	19	19	28	590	290	201	240	60	151
SS-0600GT-U	19	19	28	560	290	244	240	60	194
SS-0750GT-U	19	19	28	665	295	257	245	60	207

Model	Refrigerant Inlet OD mm	Refrigerant Outlet OD mm	Water Connection OD mm	Length mm	Width mm	Height mm	A mm	B mm	C mm
SS-0050	9.52	9.52	16	252	171	109	146	41	60
SS-0075	9.52	9.52	16	252	171	109	146	41	84
SS-0100	9.52	9.52	16	252	171	133	146	41	108
SS-0150	9.52	9.52	16	338	258	123	230	51	95



Model	Refrigerant Inlet OD mm	Refrigerant Outlet OD mm	Water Connection OD mm	Length mm	Width mm	Height mm	A mm	B mm	C mm	D mm
SS-0250GT-P	12.7	12.7	19	340	260	98	204	50	55	82
SS-0300GT-P	16	16	22	353	314	107	248	54	70	93
SS-0400GT-P	19	19	25	413	363	133	287	60	99	112
SS-0600GT-P	19	19	25	450	381	138	305	58	98	117
SS-0500GT-P	19	19	28	483	461	175	371	60	125	150
SS-0650GT-P	19	19	28	457	439	194	355	67	120	170

Model	Refrigerant Inlet OD mm	Refrigerant Outlet OD mm	Water Connection OD mm	Length mm	Width mm	Height mm	A mm	B mm	C mm
SS-0130GT-W	9.52	9.52	16	352	278	54	250	60	28
SS-0160GT-W	12.7	12.7	16	355	290	54	261	60	28
SS-0240GT-W	12.7	12.7	19	392	339	59	307	60	31
SS-0360GT-W	12.7	12.7	22	418	343	69	306	60	36
SS-0430GT-W	16	12.7	22	438	389	69	352	60	36
SS-0480GT-W	19	12.7	25	450	413	79	370	60	41
SS-0520GT-W	22	16	28	517	472	87	422	70	45
SS-0620GT-W	22	16	28	540	472	87	422	70	45
SS-0650GT-W	22	16	28	571	528	92	478	70	47





Marine Condensing Coils

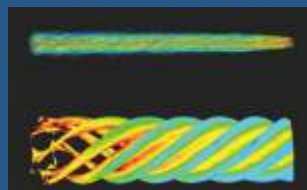
Product Profile

HZSS Marine condensing coils are made of titanium with enhanced groove line technology to achieve high efficient and high corrosion resistance.



Product Features

1. Water in the inner coil and gas in between the inner and outer coil to enhance turbulence intensity and heat transfer coefficient.
2. Spirally corrugated tubes increase heat transfer area to create higher efficiency.
3. Reliable with higher pressure stand and less welding points.
4. Anti-freezing and self cleaning.
5. Titanium inner tube with high corrosion resistance.
6. Enhanced groove line inner tube surface increase heat transfer efficient by 30%.

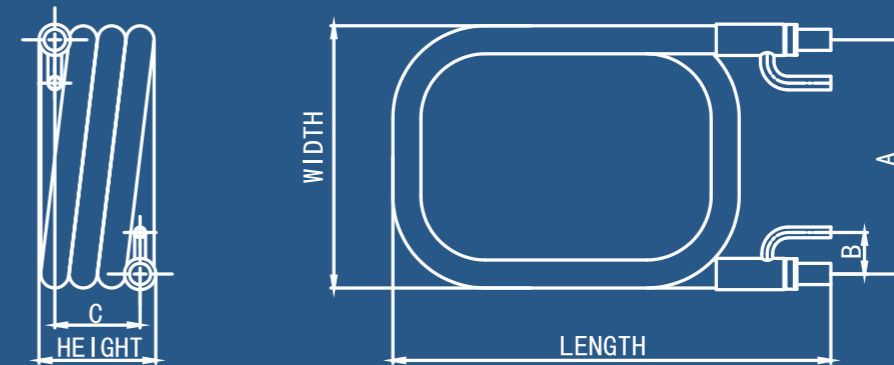


Product Technical Parameters

Model	Refrigerant	Water flow GPM	Water flow m ³ /h	Capacity Btu/h	Capacity kW
SS-H100GTi-F	R410A	2	0.45	10000	2.9
SS-H125GTi-F	R410A	3	0.68	15000	4.4
SS-H150GTi-F	R410A	4	0.91	20000	5.9
SS-H200GTi-F	R410A	5	1.14	25000	7.3
SS-H250GTi-F	R410A	6	1.36	30000	8.8
SS-H500GTi-F	R410A	12	2.73	60000	17.6
SS-H600GTi-F	R410A	15	3.41	75000	22.0
SS-H750GTi-F	R410A	18	4.09	90000	26.4

Note: SS-HXXXGTi, H=Enhanced, G=Carbon Steel, Ti=Titanium
 Test condition: As Condenser, water inlet temp 29.4°C, water outlet temp 35°C, condensing Temp 40°C.
 As Condenser, water inlet temp 85°F, water outlet temp 95°F, condensing Temp 104°F.

Product Dimensions



Model	Refrigerant Inlet OD mm	Refrigerant Outlet OD mm	Water Connection OD mm	Length mm	Width mm	Height mm	A mm	B mm	C mm
SS-H100GTi-F	12.7	9.52	14	320	205	63	182	50	40
SS-H125GTi-F	12.7	9.52	18	340	262	73	237	50	48
SS-H150GTi-F	12.7	9.52	19	345	270	82	242	50	54
SS-H200GTi-F	12.7	9.52	22	390	245	92	213	50	60
SS-H250GTi-F	12.7	9.52	22	390	283	92	251	50	60
SS-H500GTi-F	16	12.7	25	500	313	138	276	50	101
SS-H600GTi-F	19	12.7	30	615	326	169	283	60	126
SS-H750GTi-F	19	12.7	35	625	410	179	360	60	129

Supercritical CO₂ HE

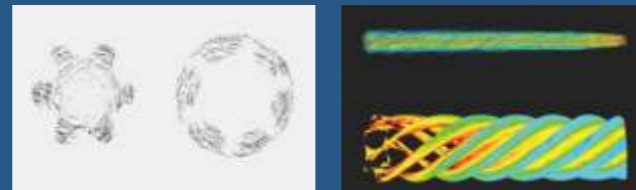


Product Profile

HZSS's self developed supercritical CO₂ HX is applied in transcritical carbon dioxide heat pump water heater system.

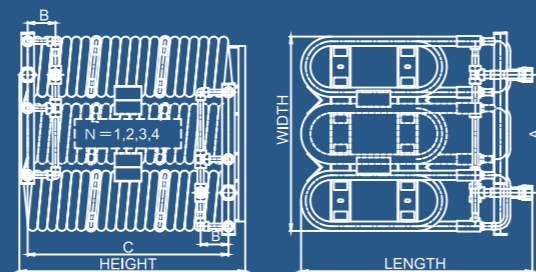
Product Features

1. Water in the inner coil and gas in between the inner and outer coil to enhance turbulence intensity and heat transfer coefficient.
2. Spirally corrugated tubes increase heat transfer area to create higher efficiency.
3. Reliable with higher pressure stand and less welding points.
4. Anti-freezing and self-cleaning.
5. Cupronickel inner tube gives better compression performance, and corrosion resistance.



Product Technical Parameters

Model	Refrigerant	Water flow GPM	Water flow m ³ /h	Capacity Btu/h	Capacity kW
SS-0060GN-U-S	R744	0.43	0.10	15400	4.5
SS-0100GN-U-S	R744	0.57	0.13	20500	6.0
SS-0125GN-U-S	R744	0.76	0.17	27300	8.0
SS-0150GN-U-3	R744	1.14	0.26	40900	12
SS-0250GN-F-3	R744	1.51	0.34	54600	16
SS-0300GN-F-3	R744	2.60	0.59	93800	28
SS-0360GN-F-3	R744	3.31	0.75	119400	35
SS-0300GN-U-6	R744	5.21	1.18	187600	55
SS-0300GN-U-9	R744	6.63	1.51	238800	70
SS-0300GN-U-12	R744	9.47	2.15	341200	100
SS-0420GN-U-12	R744	12.78	2.90	460600	135



Note: SS-0XXXGN G=Carbon Steel, N= Cupronickel, U=Trombone

Test Condition: Air side temp dry/wet ball 68/59°F, Water Inlet Temp 59°F, Water Outlet Temp 131°F.
Air side temp dry/wet bulb 20/15°C, Water Inlet Temp 15°C, Water Outlet Temp 55°C.



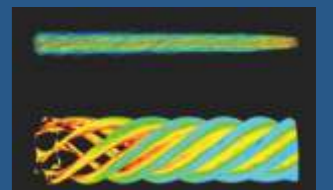
Water Purifier/Evaporator

Product Profile

HZSS's water purifier coils have both internal and external pipes made of food-grade stainless steel and provide users of water purifiers with safe ice water or hot water through refrigeration or heat pump systems.

Product Features

1. Water flow in the inner tube and refrigerant flow in gap between the inner and outer coil, to enhance turbulence intensity and heat transfer coefficient.
2. Spirally corrugated inner tube increase heat transfer surface to create higher efficiency.
3. Reliable with higher pressure stand and less welding points.
4. Anti-freezing and self-cleaning.
5. Inner tube is food grade stainless steel, to ensure safety and reliability.



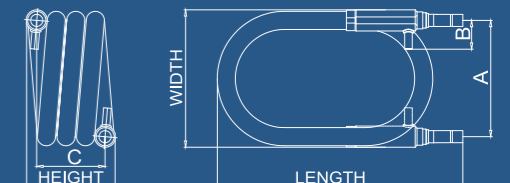
Product Technical Parameters

Model	Refrigerant	Water Flow GPM	Water Flow L/min	Capacity Btu/h	Capacity kW
SS-0100GB-U	R134a	0.32	1.2	5100	1.50
SS-0100BB-U	R134a	0.32	1.2	5100	1.50

Test Condition: Air side temp dry/wet ball 35/24°C, water Inlet Temp 25°C, water Outlet Temp 7°C, evaporating temp 2°C.
Air side temp dry/wet ball 95/75.2°F, water Inlet Temp 77°F, water Outlet Temp 44.6°F, evaporating temp 32°F.

Product Dimensions

Model	Refrigerant Inlet OD mm	Refrigerant Outlet OD mm	Water Connection OD mm	Length mm	Width mm	Height mm	A mm	B mm	C mm
SS-0100GB-U	8	8	12.7	258	145	175	122	30	154
SS-0100BB-U	8	8	12.7	258	141	174	122	30	154





Dishwasher/Washing machine/Battery cooling

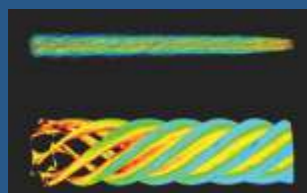
Product Profile

HZSS's coils are also applicable to dishwashing machine, provide hot water for washing machine, better temperature environment for battery system in order to extend battery life duration.



Product Features

1. Water flow in the inner tube and refrigerant flow in gap between the inner and outer coil, to enhance turbulence intensity and heat transfer coefficient.
2. Spirally corrugated inner tube increase heat transfer surface to creat higher efficiency.
3. Reliable with higher pressure stand and less welding points.
4. Anti-freezing and self-cleaning.



Product Technical Parameters

Dishwasher

Model	Refrigerant	Flow rate GPM	Flow rate m ³ /h	Heat Transfer Capacity Btu/h	Heat Transfer Capacity kW
SS-0050GB-F	R134a	6.60	1.5	3800	1.10

Washing machine

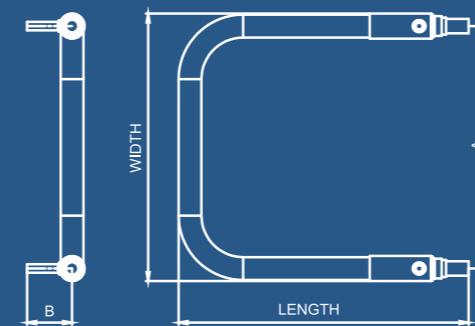
Model	Refrigerant	Flow rate GPM	Flow rate m ³ /h	Heat Transfer Capacity Btu/h	Heat Transfer Capacity kW
SS-0060GB-F	R134a	4.84	1.1	6800	2.00

Test Condition: Water inlet temp 25°C, water outlet temp 55°C, circulation heating.
Water inlet temp 45.9°F, water outlet temp 62.6°F, circulation heating.

Battery cooling system

Model	Refrigerant	Flow rate GPM	Flow rate m ³ /h	Heat Transfer Capacity Btu/h	Heat Transfer Capacity kW
SS-0060GT-F	R407C	0.27	1.032	20500	6

Product Dimensions

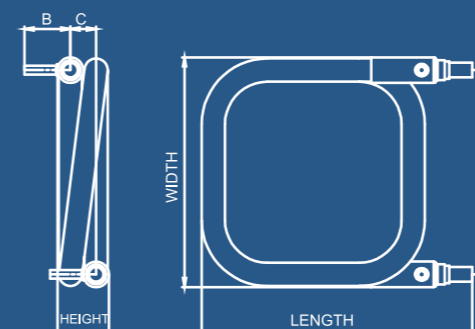
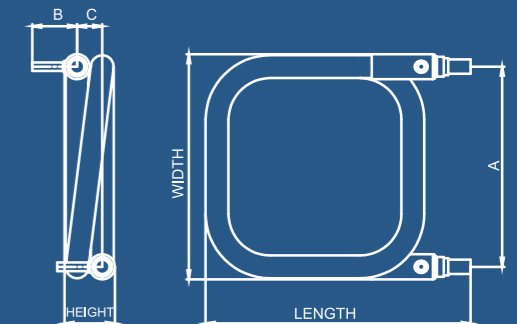


Dishwasher

Model	Refrigerant Inlet OD mm	Refrigerant Outlet OD mm	Water Connection OD mm	Length mm	Width mm	A mm	B mm
SS-0050GB-F	9.52	9.52	16	315	298	270	50

Washing machine

换热器型号	Refrigerant Inlet OD mm	Refrigerant Outlet OD mm	Water Connection OD mm	Length mm	Width mm	Height mm	A mm	B mm	C mm
SS-0060GB-F	9.52	9.52	16	295	251	56	223	50	28



Battery cooling system

换热器型号	Refrigerant Inlet OD mm	Refrigerant Outlet OD mm	Water Connection OD mm	Length mm	Width mm	Height mm	A mm	B mm	C mm
SS-0060GT-F	12.7	12.7	22	315	322	72	285	50	35





Ice Machine Coils

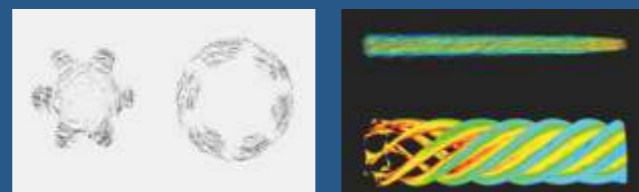


Product Profile

Water cooled Condensing Coils are optimal solution for Ice Machine to achieve higher efficiency.

Product Features

1. Water in the inner coil and gas in between the inner and outer coil to enhance turbulence intensity and heat transfer coefficient.
2. Spirally corrugated tubes increase heat transfer area to create higher efficiency.
3. Reliable with higher pressure stand and less welding points.
4. Anti-freezing and self-cleaning.

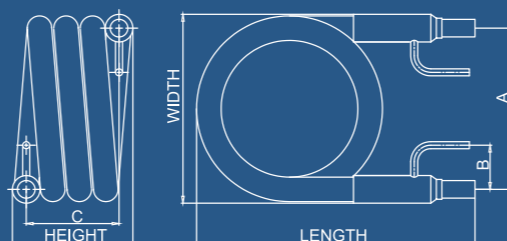


Product Technical Parameters

Model	Refrigerant	Capacity lb-ice/day	Capacity kg/day
SS-0050GT	R404A	150	68
SS-0055GT	R404A	320	145
SS-0060GT	R404A	450	204
SS-0075GT	R404A	600	272
SS-0125GT	R404A	800	363

Product Dimensions

Model	Refrigerant Inlet OD mm	Refrigerant Outlet OD mm	Water Connection OD mm	Length mm	Width mm	Height mm	A mm	B mm	C mm
SS-0050GT	9.52	6.35	16	252	171	109	146	40	84
SS-0055GT	9.52	6.35	16	252	171	133	146	40	108
SS-0060GT	9.52	6.35	16	252	171	157	146	40	132
SS-0075GT	9.52	6.35	16	300	220	123	192	40	95
SS-0125GT	9.52	6.35	19	311	232	166	200	40	135



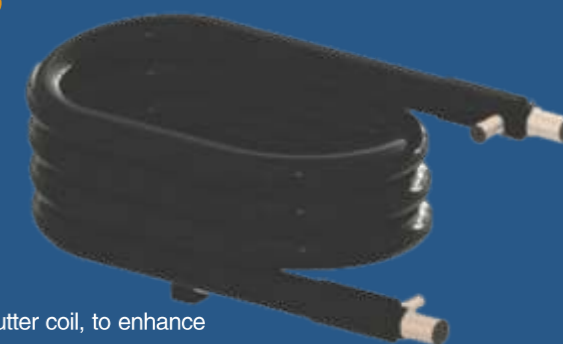
Gas air source absorption heat pump

Product Profile

HZSS's gas air source absorption heat pump coils are applicable to ammonia absorption type air conditioners or heat pumps. The inner tube is made of stainless steel and is resistant to ammonia solution corrosion. The coolers, condensers and regenerators. Cooling system.

Product Features

1. Water flow in the inner tube and refrigerant flow in gap between the inner and outer coil, to enhance turbulence intensity and heat transfer coefficient.
2. Spirally corrugated inner tube increase heat transfer surface to create higher efficiency.
3. Reliable with higher pressure stand and less welding points.
4. Anti-freezing and self-cleaning.
5. In gas air source absorption heat pump, the cooler is an important component, while the ammonia gas is mixing with ammonia liquid, the heat is absorbing and releasing by gas and liquid.
6. HZSS coaxial coil heat exchanger is designed with spirally corrugated inner tube, to let the ammonia gas and liquid to mix completely.
7. This heat exchanger with long passage is suitable for heat gradual absorption and release process.



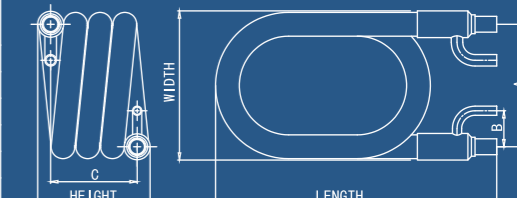
Product Technical Parameters

Model	Refrigerant	Function	Flow rate		Heat Transfer Capacity	
			GPM	m ³ /h	Btu/h	kW
SS-0525GB-U	R717	Cooler	22.0	5.0	119400	35
SS-0360GB-U	R717	Cooler	6.6	1.5	39200	11.5
SS-0525GB-U	R717	Condenser	22.0	5.0	85300	25.0
SS-0150GB-U	R717	Condenser	6.6	1.5	23900	7.0
SS-0270GB-U	R717	Regenerator	—	—	5100	1.5
SS-0050GB-U	R717	Regenerator	—	—	1700	0.5

Test condition:
Cooler: water inlet temp 45°C, water outlet temp 51°C, ammonia inlet temp 85°C, ammonia outlet temp 46°C.
Condenser: water inlet temp 51°C, water outlet temp 55°C, condensing temp 60°C.
Test condition:
Cooler: water inlet temp 113°F, water outlet temp 123.8°F, ammonia inlet temp 185°F, ammonia outlet temp 114.8°F.
Condenser: water inlet temp 123.8°F, water outlet temp 131°F, condensing temp 140°F.

Product Dimensions

Model	Refrigerant Inlet OD mm	Refrigerant Outlet OD mm	Water Connection OD mm	Length mm	Width mm	Height mm	A mm	B mm	C mm
SS-0525GB-U	22	18	37	624	346	297	296	65	207
SS-0360GB-U	22	22	28	560	231	263	188	65	176
SS-0525GB-U	22	18	37	624	346	297	296	65	207
SS-0150GB-U	18	18	25	560	207	169	170	65	86
SS-0270GB-U	18	18	28	450	231	223	188	65	136
SS-0050GB-U	18	18	22	392	172	154	140	65	73





**Economizer/Subcooler
/Superheater**

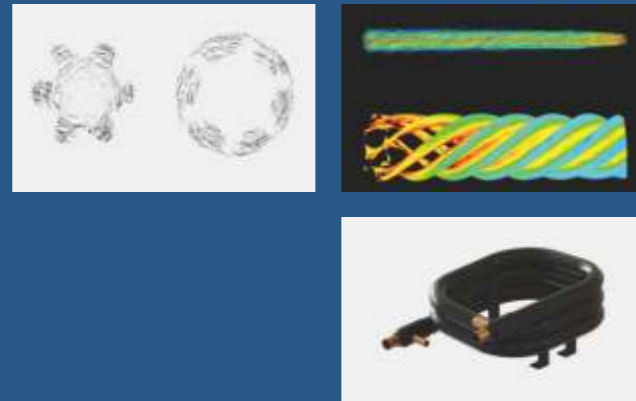


Product Profile

HZSS Subcooler is applied on refrigeration systems to transfer heat between liquid on the high pressure side of the system and refrigerant on the low pressure side of the system.

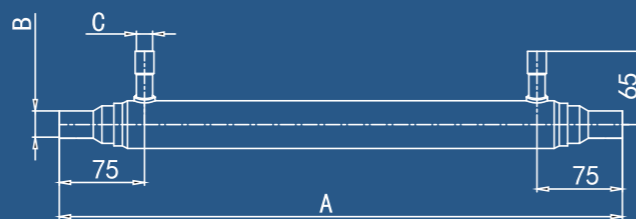
Product Features

- 1.Low pressure refrigerant flow in the inner tube and High-pressure refrigerant flows in between inner and outer tube.
- 2.Spirally corrugated tubes increase heat transfer area to create higher efficiency.
- 3.Reliable with higher pressure stand and less welding points.
- 4.Flexible design and less space needed.

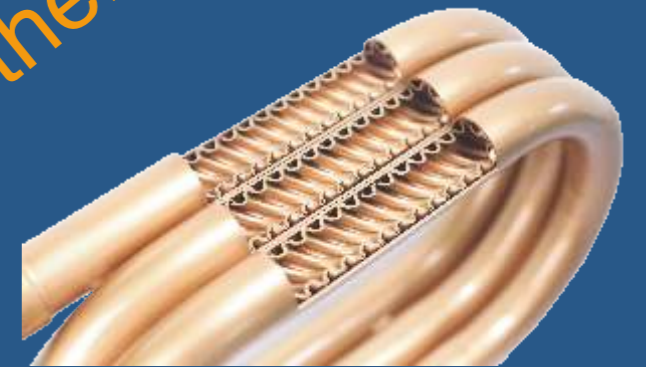


Product Dimensions

Model	Capacity kW	A mm	B OD mm	C ID mm
SS-9005TT-Z	0.5	160	12.7	9.52
SS-9010TT-Z	1.0	260	12.7	9.52
SS-9015TT-Z	1.5	330	12.7	9.52
SS-9020TT-Z	2.0	415	12.7	9.52
SS-9025GT-Z	2.5	500	12.7	9.52
SS-9030GT-Z	3.0	560	12.7	9.52
SS-9035GT-Z	3.5	490	16.0	12.7



Other type of coils

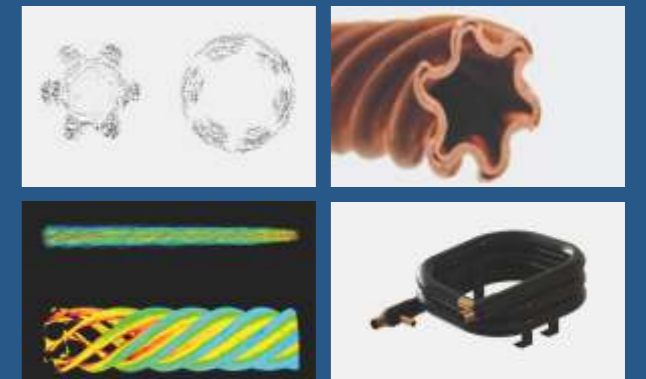


Product Profile

HZSS's other type of coils are strong safety, if leakage occurs in the inner layer of the inner tube, water will flow out of the inner tube and play an early warning role. If leakage occurs in the inner layer, the refrigerant leaks from the interlayer and will not enter the water.

Product Features

- 1.Water flow in the inner tube and refrigerant flow in gap between the inner and outer coil, to enhance turbulence intensity and heat transfer coefficient.
- 2.Spirally corrugated inner tube increase heat transfer surface to create higher efficiency.
- 3.Reliable with higher pressure stand and less welding points.
- 4.Anti-freezing and self-cleaning.
- 5.Double wall inner tube more reliability and safety.



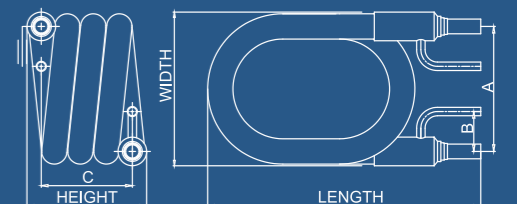
Product Technical Parameters

Model	Refrigerant	Capacity ton	Water flow capacity		Heat Transfer Capacity	
			GPM	m ³ /h	Btu/h	kW
SS-0100GTT-U	R410A	1	2.65	0.60	11900	3.5
SS-0200GTT-U	R410A	2	5.30	1.20	23900	7.0

Test condition: As Condenser, water inlet temp 68°F, water outlet Temp 95°C, Condensing Temp 104°F

Product Dimensions

Model	Refrigerant Inlet OD mm	Refrigerant Outlet OD mm	Water Connection OD mm	Length mm	Width mm	Height mm	A mm	B mm	C mm
SS-0100GTT-U	9.52	9.52	22	400	207	122	170	50	86
SS-0200GTT-U	12.7	12.7	22	465	231	219	188	60	176





Plastic steel shell and pipe heat exchanger



Product Profile

This product is a kind of high efficiency heat exchanger which is composed of high efficient Ω style inner pipes and plastic shell. It has the advantages of both shell & tube heat exchanger and plate heat exchanger. The shell is made up of plastic inner tank, and foam insulation layer and steel shell. The inner tubes arrangement method has been certificated as our technology invention patent.

Product Features

- 1. Anti-Freezing**
Both Heat exchanging inner core with structure of Ω and plastic baffle plate possess the ability of elasticity to obtain the function of anti-freezing.
- 2. Anti-Corrosion, Long serve life**
HZSS patented structure of plastic baffle plate and titanium inner core has long serve life and high corrosion resistance.
- 3. High Efficiency**
Our heat exchanging inner core are internal threaded to obtain more heat transfer area and turbulence flow in order to achieve higher efficiency.
- 4. Special Refrigerant connection sealing to avoid leakage**
Sealing components are special material to resist temperature from 200°C to -20°C, and sealing covers are screw threaded to ensure reliability.
- 5. Easy maintenance and cleaning**
The shell is designed to be dismountable to make maintenance and cleaning much easier.

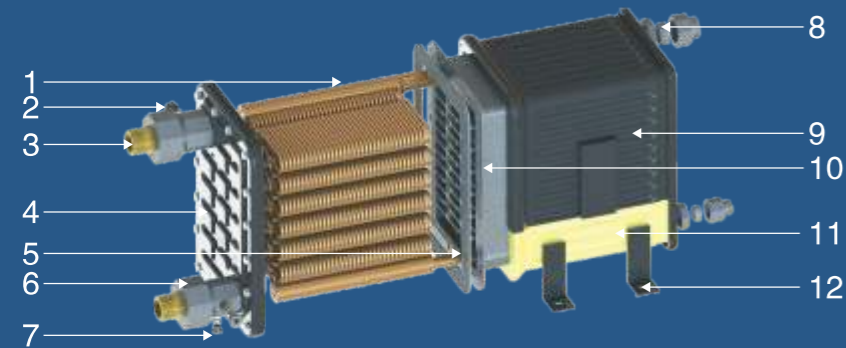
Product Technical Parameters

Model	Refrigerant	Evaporator				Condenser			
		Water flow		Heat Transfer Capacity		Water flow		Heat Transfer Capacity	
		GPM	m ³ /h	Btu/h	kW	GPM	m ³ /h	Btu/h	kW
Plastic stell shell and pipe heat exchanger-copper inner core									
SS-0120GST-F	R410A	8.46	1.92	38000	11.1	13.15	2.99	59000	17.3
SS-0150GST-F	R410A	10.98	2.49	49300	14.5	16.34	3.71	73400	21.5
SS-0180GST-F	R410A	12.53	2.85	56300	16.5	19.30	4.38	86700	25.4
SS-0220GST-F	R410A	15.24	3.46	68500	20.1	25.53	5.80	114700	33.6
SS-0250GST-F	R410A	17.31	3.93	77700	22.8	26.67	6.06	119800	35.1
SS-0300GST-F2	R410A	19.51	4.43	87600	25.7	32.22	7.32	144700	42.4
SS-0360GST-F	R410A	22.03	5.00	98900	29.0	35.79	8.13	160700	47.1
SS-0360GST-F2	R410A	22.67	5.15	101800	29.8	36.86	8.37	165500	48.5
SS-0480GST-F2	R410A	31.20	7.09	140100	41.1	50.76	11.53	228000	66.8
SS-0650GST-F2	R410A	41.86	9.51	188000	55.1	71.05	16.14	319100	93.5
Plastic stell shell and pipe heat exchanger-cupronickel inner core									
SS-0120GSN-F	R410A	7.75	1.76	34800	10.2	11.17	2.54	50200	14.7
SS-0150GSN-F	R410A	10.08	2.29	45300	13.3	13.91	3.16	62500	18.3
SS-0180GSN-F	R410A	11.50	2.61	51600	15.1	16.41	3.73	73700	21.6
SS-0220GSN-F	R410A	13.95	3.17	62700	18.4	21.66	4.92	97300	28.5
SS-0250GSN-F	R410A	15.89	3.61	71300	20.9	22.72	5.16	102000	29.9
SS-0300GSN-F2	R410A	17.89	4.06	80300	23.5	27.43	6.23	123200	36.1
SS-0360GSN-F	R410A	20.22	4.59	90800	26.6	30.40	6.90	136500	40
SS-0360GSN-F2	R410A	20.80	4.72	93400	27.4	31.31	7.11	140600	41.2
SS-0480GSN-F2	R410A	28.68	6.51	128800	37.7	43.16	9.80	193800	56.8
SS-0650GSN-F2	R410A	38.37	8.71	172300	50.5	60.41	13.72	271300	79.5
Plastic stell shell and pipe heat exchanger-titanium inner core									
SS-0120GSTi-F	R410A	5.88	1.33	26400	7.7	7.14	1.62	32100	9.4
SS-0150GSTi-F	R410A	6.85	1.55	30700	9.0	8.28	1.88	37200	10.9
SS-0180GSTi-F	R410A	8.33	1.89	37400	11.0	10.11	2.30	45400	13.3
SS-0220GSTi-F	R410A	10.27	2.33	46100	13.5	12.46	2.83	56000	16.4
SS-0250GSTi-F	R410A	12.08	2.74	54200	15.9	14.89	3.38	66900	19.6
SS-0300GSTi-F2	R410A	14.60	3.32	65600	19.2	17.71	4.02	79500	23.3
SS-0360GSTi-F	R410A	15.63	3.55	70200	20.6	19.00	4.31	85300	25
SS-0360GSTi-F2	R410A	16.67	3.78	74800	21.9	20.21	4.59	90800	26.6
SS-0480GSTi-F2	R410A	21.90	4.97	98300	28.8	26.52	6.02	119100	34.9
SS-0650GSTi-F2	R410A	29.33	6.66	131700	38.6	35.56	8.08	159700	46.8

Test condition: As condenser, water inlet temp 30°C, water outlet temp 35°C, condensing Temp 40°C; as evaporator, water inlet temp 12°C, water outlet temp 7°C, evaporating Temp 2°C.
As condenser, water inlet temp 86°F, water outlet temp 95°F, condensing Temp 104°F; As evaporator, water inlet temp 53.6°F, water outlet temp 44.6°F, evaporating Temp 35.6°F.

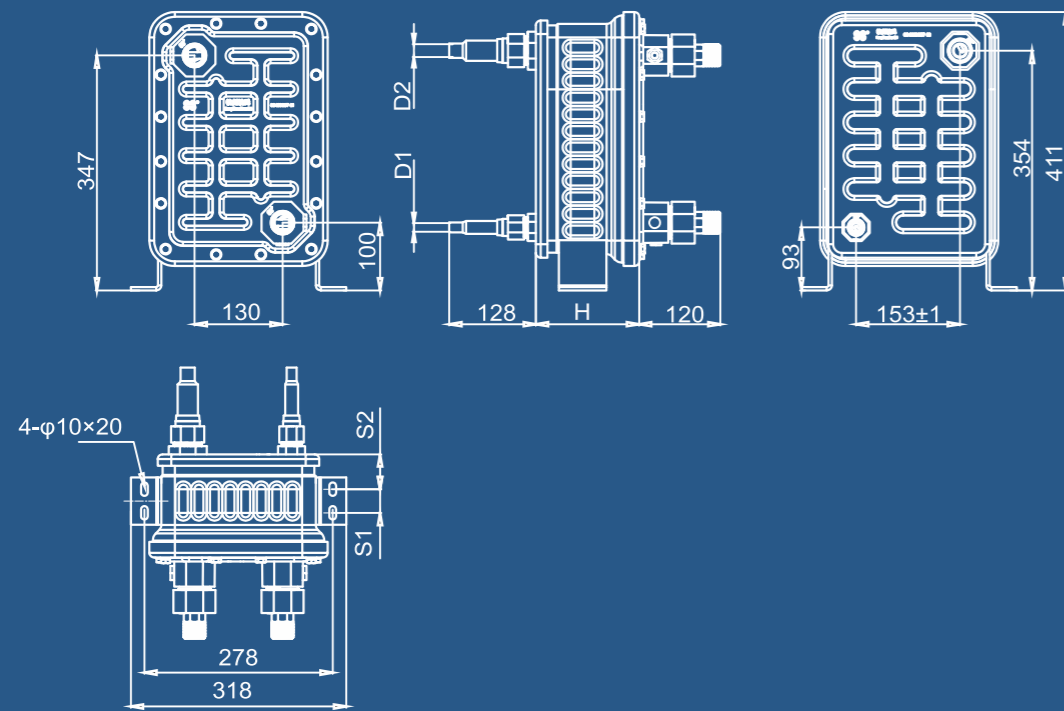


Plastic steel shell and pipe heat exchanger explosion view

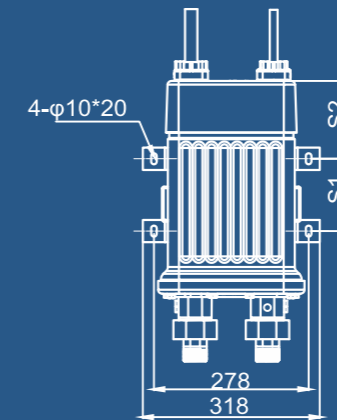
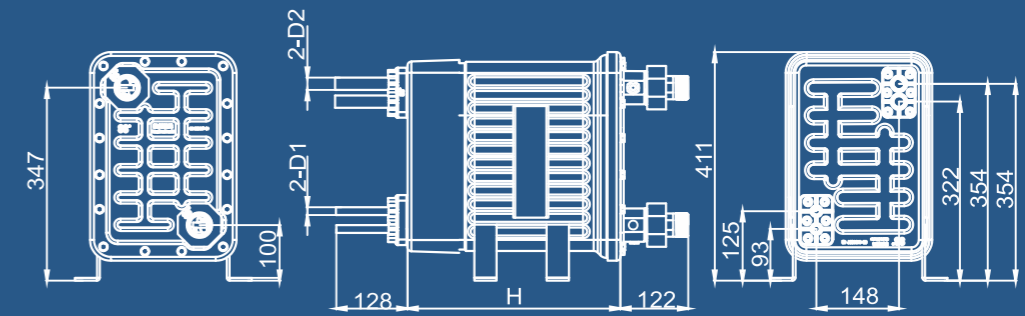


- 1.heat transfer inner core
- 2.temperature sensor point
- 3.metal joint 4.steel cover
- 5.water loop seal plate
- 6.plastic cover 7.water outfall
- 8.seal ring of refrigerant loop
- 9.steel shell 10.plastic shell
- 11.foam material 12.bracket

Product Dimensions



Product Dimensions



Model	Water connection	D1 mm	D2 mm	H mm	S1 mm	S2 mm	Ref side volume L	Water side volume L
SS-0300GST-F2	G1-1/4"/R1-1/4"/G2"OR1-1/2"Hoop Joint	14	22.2	310	120	82	1.44*2	10.39
SS-0360GST-F2	G1-1/4"/R1-1/4"/G2"OR1-1/2"Hoop Joint	14	22.2	310	120	82	1.60*2	10.00
SS-0480GST-F2	G1-1/4"/R1-1/4"/G2"OR1-1/2"Hoop Joint	14	22.2	380	130	140	2.00*2	12.54
SS-0650GST-F2	2"Hoop Joint	19	30	586	290	139	2.96*2	10.29*2

Dimension D1 and D2 can be adjusted based on requirement
Dimension S1 and S2 can be adjusted based on requirement

Model	Water connection	D1 mm	D2 mm	H mm	S1 mm	S2 mm	Ref side volume L	Water side volume L
SS-0120GST-F	G1"/R1"OR1-1/2"Hoop Joint	ID12.7	ID19	152	35	52	1.13	4.70
SS-0150GST-F	G1"/R1"OR1-1/2"Hoop Joint	ID12.8	ID20	152	35	52	1.30	4.51
SS-0180GST-F	G1"/R1"OR1-1/2"Hoop Joint	19	ID22.2	217	90	52	1.63	7.33
SS-0220GST-F	G1"/R1"OR1-1/2"Hoop Joint	19	ID22.2	217	90	52	1.95	6.95
SS-0250GST-F	G1"/R1"OR1-1/2"Hoop Joint	19	ID22.2	217	90	52	2.03	6.85
SS-0360GST-F	G1-1/4"/R1-1/4"OR1-1/2"Hoop Joint	16	ID25.4	310	120	52	2.96	10.29

Dimension D1 and D2 can be adjusted based on requirement.
Dimension S1 and S2 can be adjusted based on requirement.



Swimming pool plastic shell pipe Titanium HE



Product Profile

Shell and pipe heat exchanger is a kind of high efficiency heat exchanger which is composed of high efficiency Ω style inner pipes and shell of baffle plastic plate(PA6). It has the advantages of shell & tube heat exchanger and plate heat exchanger.

Product Features

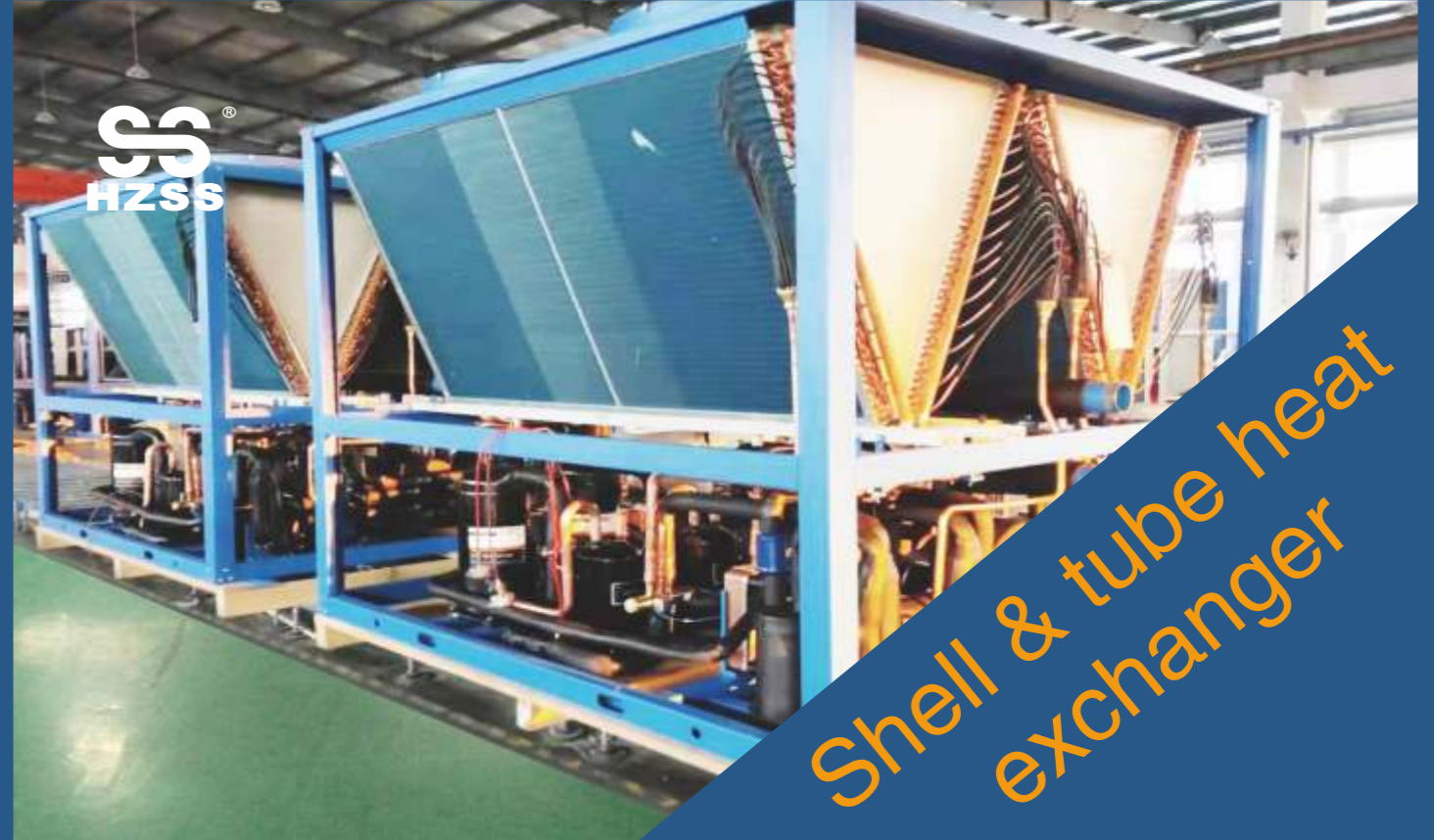
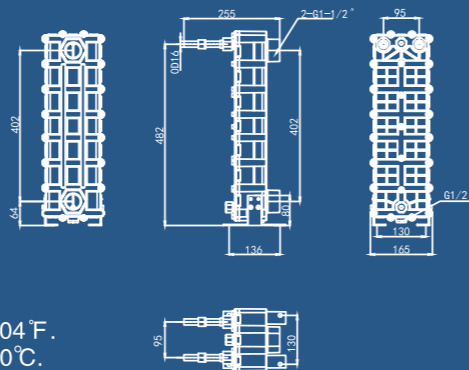
1. Anti-Freezing
Both Heat exchanging inner core with structure of Ω and plastic baffle plate possess the ability of elasticity to obtain the function of anti-freezing .
2. Anti-Corrosion, Long serve life
HZSS patented structure of plastic baffle plate and titanium inner core has long serve life and high corrosion resistance.
3. High Efficiency
Heat exchanging inner core are internal threaded to obtain more heat transfer area and turbulence flow in order to achieve higher efficiency;
4. Special Refrigerant connection sealing to avoid leakage.
5. Easy maintenance and cleaning
The shell is designed to be dismountable to make maintenance and cleaning much easier.



Product Technical Parameters

Model	Refrigerant	Water flow		Water pressure drop		Capacity	
		GPM	m ³ /h	PSI	kPa	Btu/h	kW
SS-0030STi-Y	R410A	24.66	5.6	2.63	18.1	55600	16.3
SS-0050STi-Y	R410A	29.50	6.7	3.60	24.8	66200	19.4
SS-0070STi-Y	R410A	34.34	7.8	4.74	32.7	77100	22.6
SS-0090STi-Y	R410A	38.75	8.8	5.89	40.6	87000	25.5

Note: All models have titanium Inner tube
 Test Condition: Water inlet temp 78.8°F, water outlet temp 83.3°F, Condensing temp 104°F.
 Water inlet temp 26°C, water outlet temp 28.5°C, Condensing temp 40°C.



Shell & tube heat exchanger

Product Profile

HZSS Shell & tube heat exchanger has the advantages of high heat transfer performance, safe to use, compact size, high cost performance. It is widely used into applications like cold and hot water modular units.



Product Features



High Efficiency

High efficiency HX with enhanced tubing design

HZSS's patented design of distributor adopts better cooling distribution

Spiral baffles is superior to traditional baffles



Cost Performance

High cost performance
Effectively Cost controlled



Safety

Designed and manufactured according to pressure vessel standards
No solder joints in contact with water

Extremely resistant to freezing



Compact

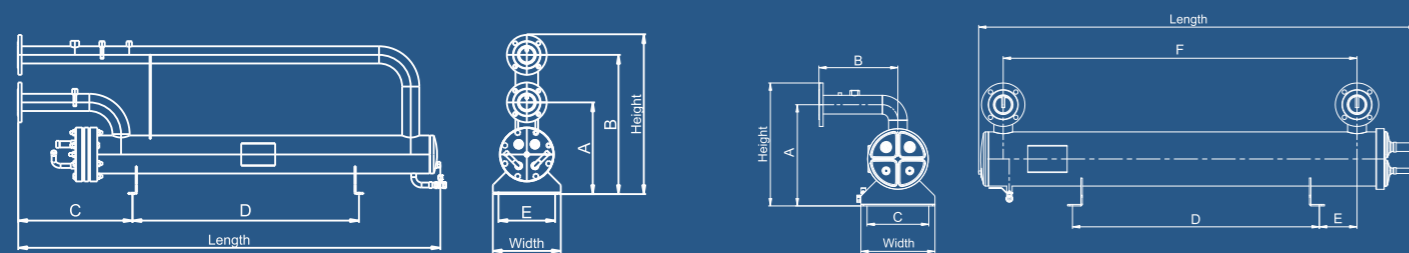
Compact Design
Optimal interface arrangement

Product Technical Parameters

Model	Evaporator						Condenser					Units
	Cooling Capacity kW	Evaporating temp °C	Water Inlet °C	Water Outlet °C	Temp before Valve °C	Superheat °C	Heating capacity kW	Condensing Temp °C	Water Inlet °C	Water Outlet °C	Subcooling Temp °C	
SS-KG168-R-2-C	65	3	12	7	43	2	75	49	40	45	3	2
SS-KG168-B-2-C	65	4	12	7	43	2	75	48	40	45	3	2
SS-KG168-G-2-C	65	5	12	7	43	2	75	47	40	45	3	2
SS-KG219-R-2-C	130	3	12	7	43	2	140	49	40	45	3	2
SS-KG219-R-4-C	130	3	12	7	43	2	140	49	40	45	3	4
SS-KG219-B-2-C	130	4	12	7	43	2	140	48	40	45	3	2
SS-KG219-B-4-C	130	4	12	7	43	2	140	48	40	45	3	4
SS-KG219-G-2-C	130	5	12	7	43	2	140	47	40	45	3	2

Note: HZSS shell and tube HX could provide enhanced performance on evaporating and condensing based on customization

Product Dimensions



Models	Refrigerant Inlet ID mm	Refrigerant Outlet ID mm	Water Connet	Length mm	Width mm	Height mm	A mm	B mm	C mm	D mm	E mm
SS-KG168-R-2-Q	28.6	16	DN65	2007	250	713	425	625	200	1000	648
SS-KG168-B-2-Q	28.6	16	DN65	2007	250	713	425	625	200	1000	648
SS-KG168-G-2-Q	28.6	16	DN65	2007	250	713	425	625	200	1000	648
SS-KG219-R-2-Q	35	22	DN65	2029	300	708	425	620	250	1000	648
SS-KG219-B-2-Q	35	22	DN65	2029	300	708	425	620	250	1000	648
SS-KG219-G-2-Q	35	22	DN65	2029	300	708	425	620	250	1000	648
SS-KG219-R-4-Q	28.6	16	DN65	2029	300	708	425	620	250	1000	648
SS-KG219-B-4-Q	28.6	16	DN65	2029	300	708	425	620	250	1000	648

Models	Refrigerant Inlet ID mm	Refrigerant Outlet ID mm	Water Connet	Length mm	Width mm	Height mm	A mm	B mm	C mm	D mm	E mm	F mm
SS-KG168-R-2-C	28.6	16	DN65	1751	250	483	395	250	200	1000	156	1400
SS-KG168-B-2-C	28.6	16	DN65	1751	250	483	395	250	200	1000	156	1400
SS-KG168-G-2-C	28.6	16	DN65	1751	250	483	395	250	200	1000	156	1400
SS-KG219-R-2-C	35	22	DN65	1773	300	498	410	320	250	1000	153	1433
SS-KG219-B-2-C	35	22	DN65	1773	300	498	410	320	250	1000	153	1433
SS-KG219-G-2-C	35	22	DN65	1773	300	498	410	320	250	1000	153	1433
SS-KG219-R-4-C	28.6	16	DN65	1773	300	498	410	320	250	1000	153	1433
SS-KG219-B-4-C	28.6	16	DN65	1773	300	498	410	320	250	1000	153	1433



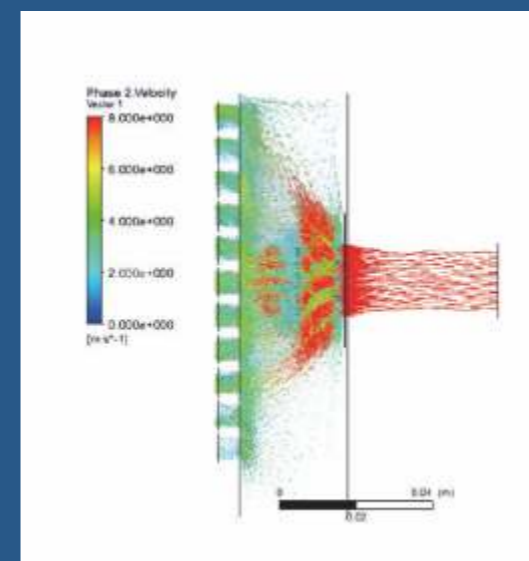
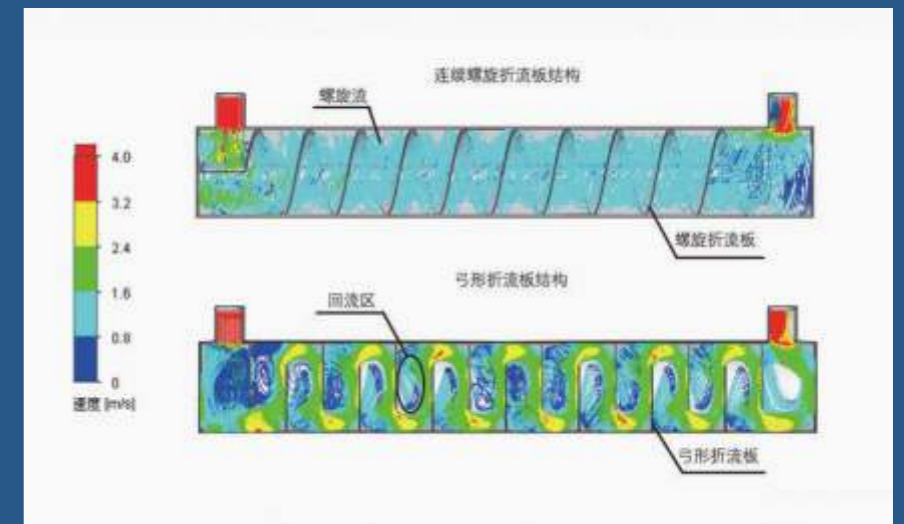
HEAT TRANSFER TUBE

7mm heat transfer tube, bottom wall thickness 0.35mm, number of teeth, tooth height and helix angle are all own parameters, the result of repeated optimization.



SPIRAL BAFFLE

Unique lock design, tight stitching in the splicing area, smooth and natural transition, uniform flow velocity on the water side, high heat exchange efficiency; no dead zone, reducing freezing risks.



PATENT DISTRIBUTOR



REFRIGERATION PAYMENT:
1 MIXING + 2 DISTRIBUTION



HEAT PUMP FUND:
1 MIXING + 1 DISTRIBUTION





LASER TUBE CUTTING PROCESS
SHELL CUTTING AND PROCESSING,
INLET AND OUTLET PIPE PROCESSING



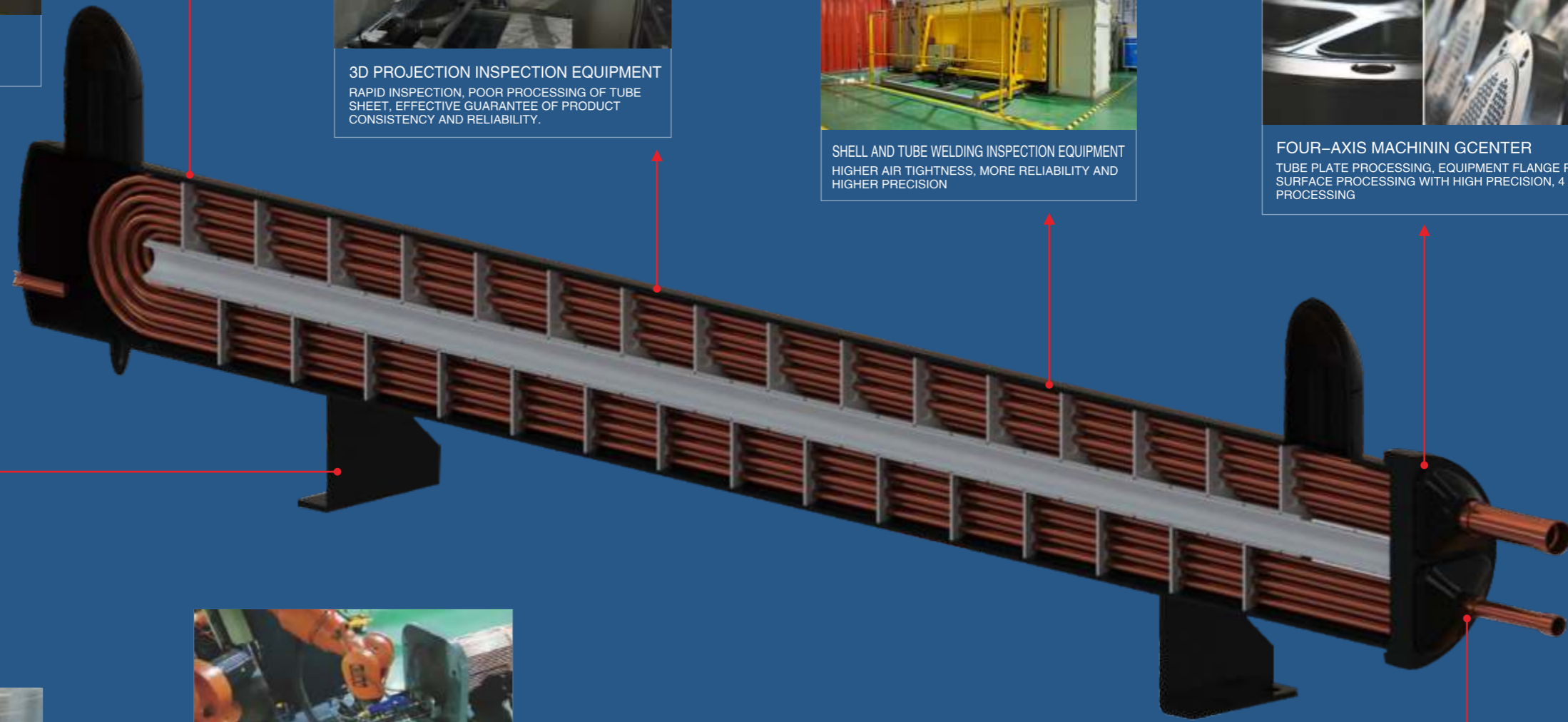
3D PROJECTION INSPECTION EQUIPMENT
RAPID INSPECTION, POOR PROCESSING OF TUBE
SHEET, EFFECTIVE GUARANTEE OF PRODUCT
CONSISTENCY AND RELIABILITY.



SHELL AND TUBE WELDING INSPECTION EQUIPMENT
HIGHER AIR TIGHTNESS, MORE RELIABILITY AND
HIGHER PRECISION



FOUR-AXIS MACHINING CENTER
TUBE PLATE PROCESSING, EQUIPMENT FLANGE PROCESSING AND SEALING
SURFACE PROCESSING WITH HIGH PRECISION, 4 GROOVES IN TUBE SHEET
PROCESSING



LASER CUTTING ACCESSORIES
CUTTING SUPPORTS AND WATER PIPE SUPPORT
PLATES, ETC; WITH HIGH POWER AND HIGH
ACCURACY



ROBOT TUBE EXPANSION PROCESS
GOOD CONSISTENCY, NO SECONDARY SECONDARY
EXPANSION COMMON WITH MANUAL TUBE EXPANSION,
EFFECTIVELY AVOID THE LONG-TERM TRANSPORT RISK
CAUSED BY MANUAL TUBE EXPANSION DEFECTS



FLUORINE SIDE HEAD LASER WELDING
LARGE PENETRATION DEPTH, HIGH PENETRATION
RATE, SMALL HEAT-AFFECTED ZONE, EXTREMELY
FAST COOLING



FLUORINE SIDE HEAD