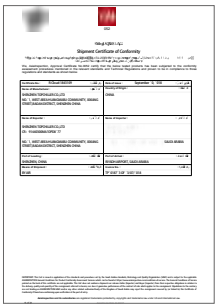
TopChiller®
INTERNATIONAL

PROFESSIONAL WATER CHILLER
SOLUTION PROVIDER

深圳市拓普制冷机械有限公司
SHENZHEN TOPCHILLER CO., LTD.

荣誉证书 Certification



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TopChiller® INTERNATIONAL

公司介绍 Company Profile

香港拓普国际集团有限公司于 2003 年成立于香港荃湾，专业从事研发销售工业制冷设备和配件等。
集团公司于 2007 年投资成立深圳市拓普制冷机械有限公司 – 是一家集研发设计、生产销售为一体的创新型生产实体。
公司主营产品：风冷式工业冷水机、水冷式工业冷水机、风冷式螺杆式冷水机、水冷式螺杆式冷水机、低温冷水机、行业专用冷水机、冷热两用一体机、冷油机、冷风机、运水运油模温机、冷却塔、冷库工程等十余个系列近百种工业冷却设备和各种非标定制工业制冷机械。
我司近二十年来一直专注于工业制冷设备的设计研发生产销售。公司拥有强大的技术力量和先进的生产加工设备，先后引进各种精密加工设备：CNC 冲床、CNC 折床、数控车床、立式涨管机等。一大批先进加工设备明显提升了产品的质量档次。
我们深知：好的产品必须从源头开始。为此我司与世界一流制冷品牌达成了长期合作关系：丹麦、法国丹佛斯、日本三洋、大金，松下涡旋压缩机，台湾汉钟、复盛和德国比泽尔螺杆压缩机、美国谷轮半封闭活塞压缩机。水泵采用南方和台湾源立，其他各主要配件也都为世界知名制冷品牌。
我司产品 80% 外贸出口，远销多达 75 个国家和地区。并在新加坡、西班牙、加拿大、印度尼西亚、马来西亚、菲律宾、巴西、智利、埃及、保加利亚、沙特阿拉伯、阿联酋，澳大利亚等国家有稳定的销售渠道和售后服务。良好的品质为我司在国际市场赢得了广泛赞誉，典型案例主要有：新加坡国防部和政府水处理项目，菲律宾百事可乐生力啤酒，印度尼西亚世界最大椰子制品工厂，智利雀巢咖啡，德国西门子核磁共振水冷系统，印度国有铁路钢轨焊接项目，肯尼亚国有电镀工厂和孟加拉国最大的国有纺织制造企业。
为了免除客户的后顾之忧，我们为每一台机器提供 12 个月的免费质保期。在质保期范围之内，我司无偿提供各类售后服务直到问题解决。同时为了更好服务国内客户，公司在北京、上海、天津、济南、烟台、青岛、成都、广州、昆明等地区均设有售后网点来更加及时便捷的服务每一位 TopChiller 的客户。
秉持“做工业制冷行业领导者，为中国制造争光添彩”的经营理念，深圳市拓普制冷机械有限公司全体同事愿与海内外客户合作共赢，共创辉煌。

Top Holdings International Limited established in 2003 HongKong. ShenZhen TopChiller Co., Ltd established in 2007 with 2 factories in Shenzhen and Dezhou. China is one of the most professional industrial chiller manufacturers, with cooling capacity range from 0.8KW (0.2Ton) to 1750KW (550Ton) including: air cooled chiller, water cooled chiller, glycol chiller (0℃ to–35℃), portable chiller, screw chiller, oil cooling chiller, industrial air cooler, Mold temperature controller unit, cooling tower and cold room / cold storage projects.
With the faith of “TOPCHILLER---A PROFESSIONAL WATER CHILLER SOLUTION PROVIDER”, TopChiller is devoted all energy to producing the best quality water chiller products with most reasonable price.
To make sure each air chiller or water chiller unit is good quality and long service life, we develop and maintain strategic partnerships with world renowned manufacturers and suppliers who can guarantee world-class product quality and service. Like For scroll compressor, we are using Danfoss, Hitachi, Panasonic, Copeland, For screw compressor, we are using Bitzer, Hnabell, For water pump, we are using Grundfos, CNP and Minamotor. This will help TopChiller products are much more advanced than similar products on chiller capacity, lifetime and quality stability.
To assure products quality, all TopChiller products are design and made in dust-free workshop under ISO9001 quality system by our R&D department and passed CE & CSA, SASO test allowing to export European countries and USA, Canada market. All technical stuff are more than 10 years working experience in Chiller design, assembling and making. Each chiller unit under strictly quality control has to be checked carefully after production before delivery and well packaged with wooden box.
TopChiller products win its high reputation in the market for steady quality and full time after sales service.
We are providing 12 months warranty time for all products and extend warranty up to 5 years. Within warranty time, any problem caused by the defects of the chiller itself, TopChiller will offer its service until the problem solved. To save customers purchasing problems caused by too many different suppliers, like quality control and shipping concerns, TopChiller supplies not only various Water chiller and Refrigeration unit, but also chiller spare parts for whole accessories, like compressor, water pump, expansion valve, heat exchanger, cooling tower etc. All parts are made in high quality and sold at reasonable price.

生产工艺 Production Process

钣金 Chiller Frame Making

铜焊 Copper Welding

半成品检测 Half-Done Chiller Test

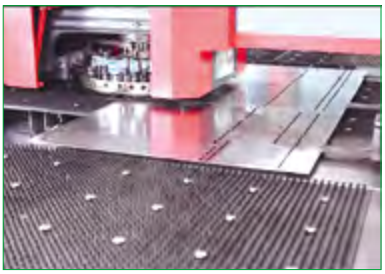
出厂检测 Finished Chiller Test

翅片制作 Fin Aiuminum Flush

涨管 Copper Pipe Expanding

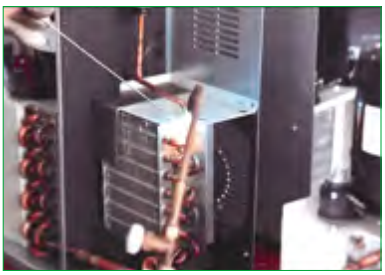
检测 Chiller Condenser Test

冲铝片 Condenser Assembling


钻孔 Plate Drilling

折弯 Pannel Bending

钣金 Frame Processing


铜焊 Condenser Welding

作为一家专业的制冷设备供应商，我司与制冷行业各大知名品牌建立了长期稳定的合作关系。其中涡旋压缩机采用美国谷轮、日本三洋、法国 / 丹麦丹佛斯，半封闭螺杆压缩机采用台湾汉钟 / 复盛和德国比泽尔。其它制冷配件主要采用法国施耐德电器、美国丹佛斯膨胀阀、美国艾克干燥过滤器、台湾马尔 / 微光风机、南方不锈钢水泵、台湾源立铸铁水泵等，以保证每一台机器性能稳定，质量上乘。

We really believe good quality chiller is from our factory beginning. To make sure each water chiller and refrigeration unit are good quality and long service life, we develop and maintain strategic partnerships with world renowned manufacturers and suppliers in refrigeration filed which can guarantee world–class product quality and service.
The hermetic scroll compressor brands are: USA Coepland, Denmark Danfoss, Sanyo & Panasonic from Japan and for Semi–hermetic screw compressors, we are using Bitzer from German, Hanbell and Fusheng fromTaiwan. Schneider Electric, Air blower is Maer / Weiguang, Alco brand dryer filter, Danfoss brand expansion valve, Grundfos, CNP and Minamotor water pump to make sure each chiller unit good quality and best performance.

美国谷轮压缩机
Copeland compressor

日本松下三洋压缩机
Panasonic & Sanyo compressor

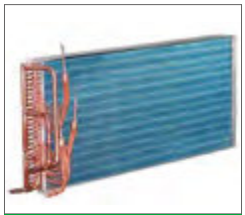
法国丹佛斯压缩机
Danfoss compressor

台湾汉钟螺杆压缩机
Hanbell Screw Compressor

德国比泽尔压缩机
Bitzer screw compressor

板式换热器
Plate exchanger

水箱盘管
SS water tank


风冷翅片冷凝器
Air Cooled Condenser

壳管
Shell and tube

施耐德 接触器
Schneider contactor

高低压表
High & low pressure gauge

美国丹佛斯膨胀阀
Danfoss Expansion Valve

干燥过滤器
Dryer filter

冷媒
Refrigerant

施耐德 继电器
Schneider Overload Relay

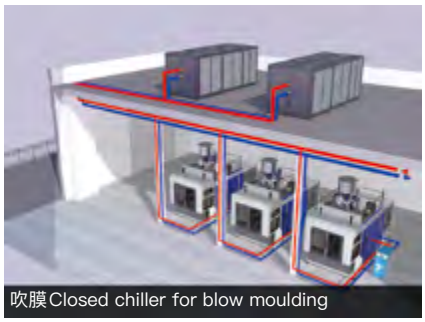
风机
Air blower

电磁阀
Solenoid Valve

温控
Temperature controller

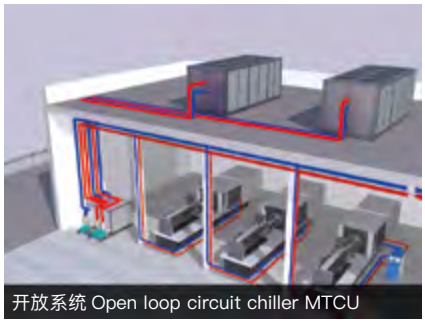
不锈钢水泵
SS water pump

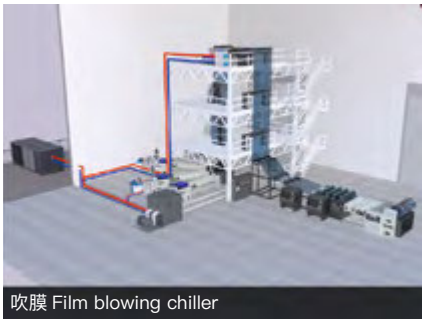
铸铁水泵
Iron water pump


吹膜Closed chiller for blow moulding

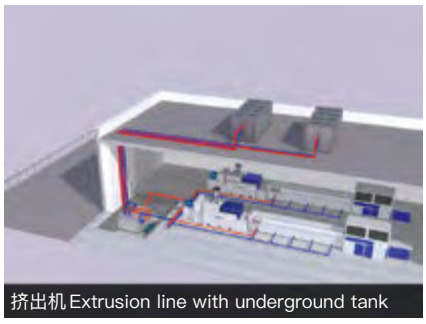
压铸机 Cast film line chillers

酸奶Dairy and milk cooling chiller layout


开放系统 Open loop circuit chiller MTCU


吹膜 Film blowing chiller

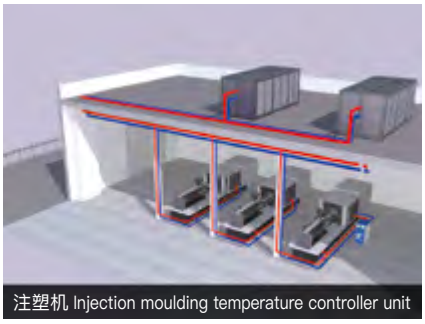
水泥搅拌站 Concrete batch process chiller

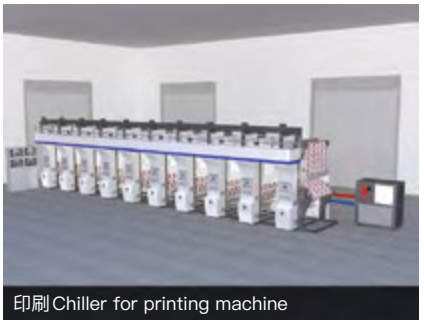

挤出机Extrusion line with underground tank

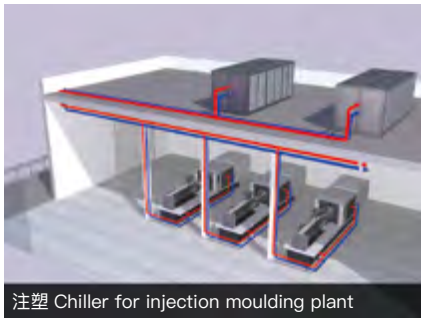
牛奶Dairy and milk chiller layout

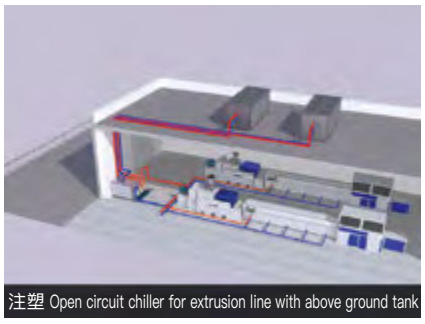
中央供水 Medium size plant central chiller

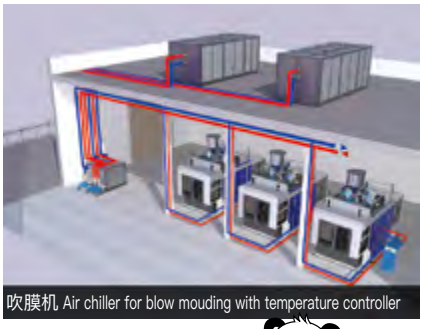
啤酒饮料Brewery chillers


注塑机 Injection moulding temperature controller unit


印刷Chiller for printing machine


注塑 Chiller for injection moulding plant


注塑 Open circuit chiller for extrusion line with above ground tank

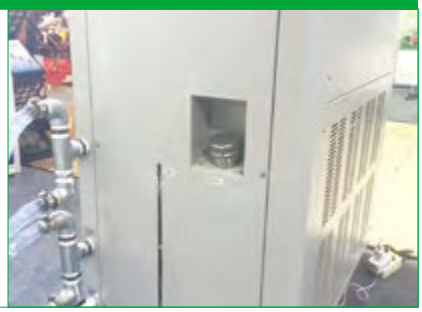

吹膜机 Air chiller for blow mouding with temperature controller

2017 菲律宾橡塑机械展 Plastic Philippines

2017 泰国橡塑展会 PLASTIC THAILAND

2016 广州雅士橡塑机械展 CHINAPLAS

2016 印度尼西亚橡塑展 INDOPLAS JAKARTA



2015 上海国际橡塑机械展 CHINAPLAS

哥斯达黎加风冷 25TON AIR COOLED CHILLER IN COSTA RICA

新加坡 10TON 风冷机组 AIR COOLED CHILLER IN SINGAPORE

30TON 菲律宾风冷机组 AIR COOLED CHILLER IN PHILIPPINES

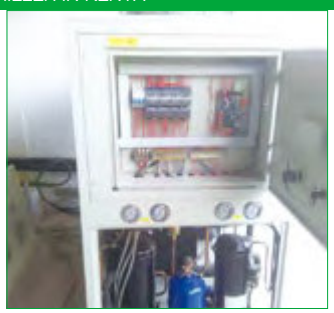
180TR 乌兹别克斯坦水冷低温螺杆 GLYCOL CHILLER IN UZBEKISTAN

30HP 菲律宾风冷低温机 AIR COOLED GLYCOL CHILLER IN PHILIPPINES

19KW 泰国风冷水机 AIR COOLED CHILLLER IN THAILAND

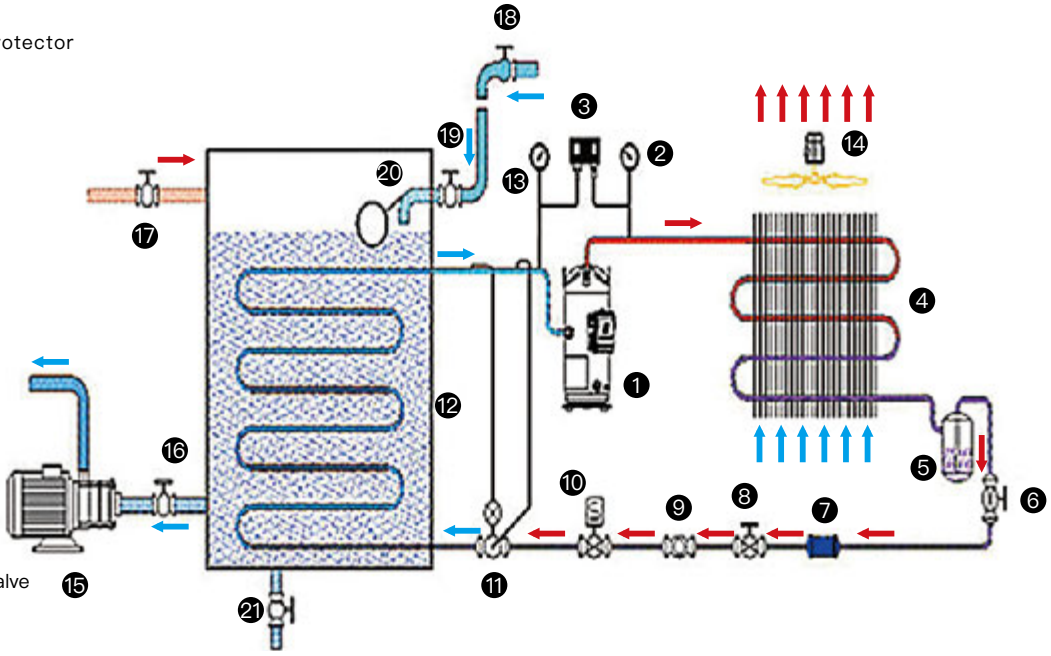
120HP 科威特风冷螺杆 AIR COOLED CHILLER IN KUWAIT

52KW 肯尼亚风冷水机 AIR COOLED CHILLER IN KENYA



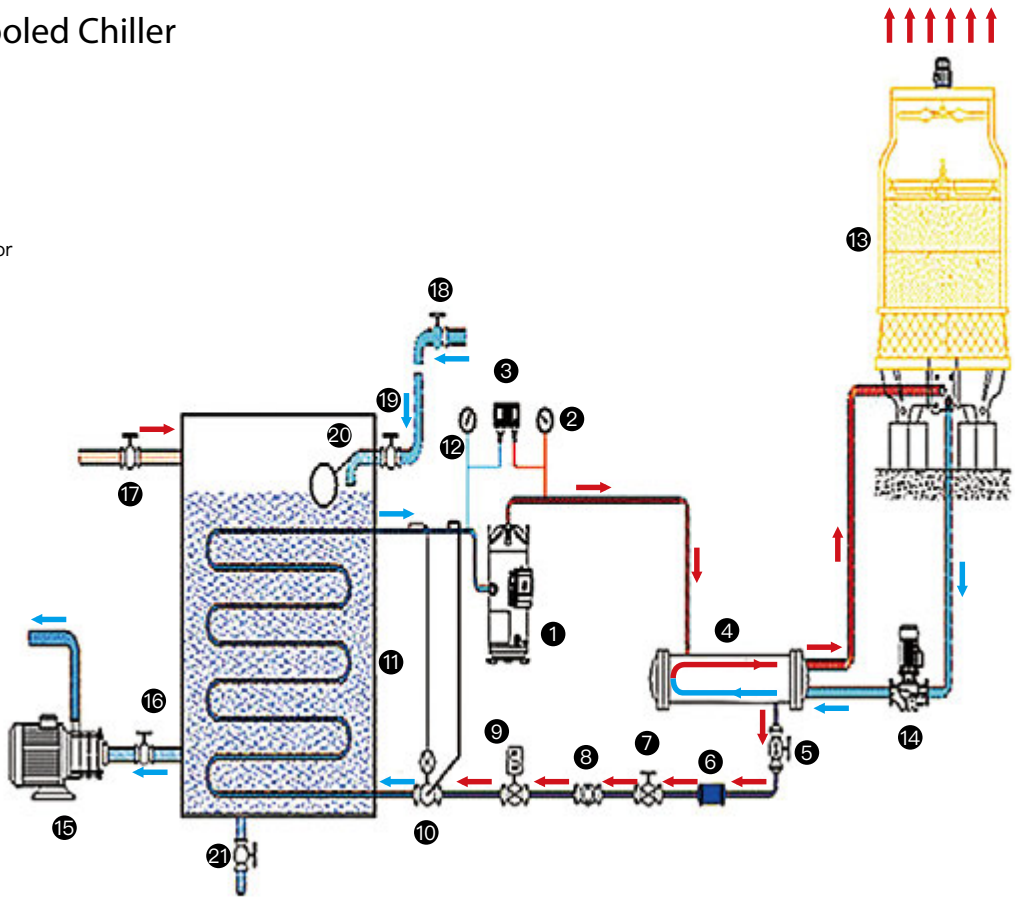
风冷式冷水机 Air Cooled Chiller

1 Compressor
2 High pressure gauge
3 High and low pressure protector
4 Condenser
5 High pressure accummulator
6 Angled shut-off valve
7 Filter dryer
8 Manual Shut-offoff valve
9 Liquid minor
10 Solenoid valve
11 Expansion valve
12 Evaporator
13 Low pressure gauge
14 exhanst fan
15 water pump
16 outlet water shut-off valve
17 inlet water shut-off valve
18 tap water valve
19 water supply valve
20 tank water floating ball valve
21 Water tank drainage water valve



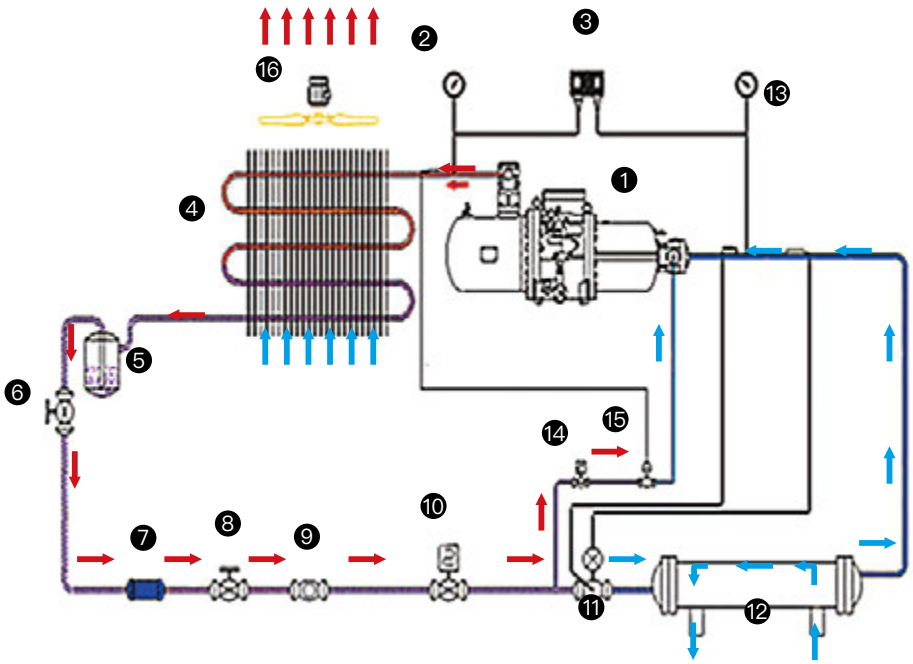
水冷式冷水机 Water Cooled Chiller

1 Scroll compressor
2 High pressure gauge
3 High and low pressure protector
4 Condenser
5 Angled shut-off valve
6 Filter dryer
7 Manual shut-off valve
8 Liquid minor
9 Solenoid valve
10 Expansion valve
11 Evaporator
12 Low pressure gauge
13 Cooling tower
14 Water pump
15 Chilled water pump
16 Outlet water shut-off valve
17 Inlet water shut-off valve
18 Tap water valve
19 Water supply valve
20 Tank water floating ball valve
21 Water tank drain water valve



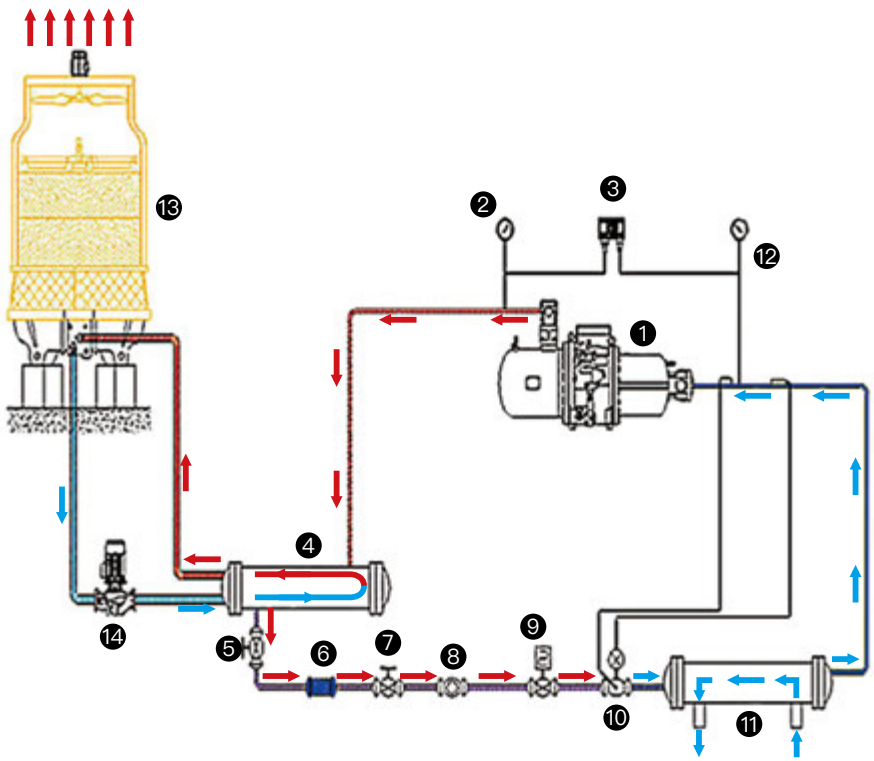
风冷式螺杆冷水机 Air Cooled Screw Chiller

1 Screw compressor
2 High pressure gauge
3 High and low pressure protector
4 Condenser
5 High pressure liquid receiver
6 Angled shut-off valve
7 Filter dryer
8 Manuel shut-off valve
9 Liquid minor
10 Solenoid valve
11 Thermost expansion valve
12 Evaporator
13 Low pressure gauge
14 Liquid spray solenoid valve
15 Liquid spray expansion valve
16 Air blower



水冷式螺杆冷水机 Water Cooled Screw Chiller

1 Screw compressor
2 High pressure gauge
3 High and low pressure protector
4 Condenser
5 Angled shut off valve
6 Filter dryer
7 Manual shut off valve
8 Liquid minor
9 Solenoid valve
10 Thermal expansion valve
11 Evaporator
12 Low pressure gauge
13 Cooling tower
14 Water pump



TopChiller 风冷式工业冷水机优点：

- 结构紧凑，运转平稳：冷凝器、蒸发器均采用高效传热管，主机选用进口高效全封闭涡旋式压缩机，具有结构紧凑、体积小、重量轻、安装位置小等诸多优点。全封闭涡旋式压缩机运动部件少，压缩机采用柔性压缩机，能效比高，低噪音，运行成本低，可自动卸载降压没有直接磨损，可靠性高。由于是连续压缩机无脉动，因此机组具有性能稳定、噪音低、振动小、运行平稳的特点。
- 完善的能量控制系统：根据负荷变化自运调节机组启停，更加节能。运行时，电脑控制系统会依据客户端热负荷变化来改变机组的能量输出。微电脑通过监控测量的实际负荷与用户的设定之差异迅速判断到所需的能量。并且在多台系统中，以最佳冷量输出时最少电能消耗的优化方式工作，不但全负荷时体现出优异的性能， 而且在部分负荷时也有很高的运行效率；
- 操作简便直观：机组采用微电脑程序控制器（中英文显示 / 数码管显示），按照屏幕上 / 面板上的提示菜单选择操作，直接用手指轻触按钮即可启动机组。面板可随时显示机组的运行状态，并且以文字 + 数字的方式显示，一目了然。

Advantages:

Air cooled water chiller is also called air chiller or air cooled chiller with cooling capacity from 1.65KW to 202KW and adjustable temperature control range 5℃ to 30. This kind of air chiller equips with branded Copeland, Danfoss, Sanyo or Panasonic Hermetic scroll compressors depend on detailed requirements. We have 3 or 4 refrigerant circuits for chiller models from AC-25AD to AC-60AF according to chiller refrigeration capacity. Each circuit can work or stop independently for chiller safety and energy saving considering.

Each air cooled chiller having stainless steel buffer tank and built-in water pump allows easy installation and high flexibility. All the water piping system are stainless steel material can make sure the circulation water clean without rust.

For air chiller evaporator, we have some options for different processing requirements, Built-in water tank as the open loop system and Shell & Tube type heat exchanger or Stainless Steel Plate heat exchanger as the closed loop system.

For this air cooled chiller condenser, we are using Aluminum fin with cooper tube with big volume air blowers.

For refrigerant, there are R22, R407c, R134a, R410a, R404a for option. For refrigerant R134a charged chiller, can be installed and working under 55℃ to 60℃ high ambient temperature without any high pressure alarm.

Each air cooled chiller from TopChiller has to be checked carefully after production and refrigerant charged before delivery. This is more convenient for all air chiller end users installation and operation when they received TopChiller products. Each air chiller unit is with portable wheels doesn't require cooling tower, which is easy install and remove.

风冷式工业冷水机 Air Cooled Water Chiller Technical Specifications

项目Item	型号Model	AC-0.5A	AC-1A	AC-1.5A	AC-2A	AC-2.5A	AC-3A	AC-4A	AC-5A	AC-6A	AC-8AD	AC-10AD	AC-12AD	AC-15AD
名义制冷量 Cooling capacity	Kcal/h 50HZ/60HZ	1419	2451	3182	4833	5848	7181	9288	11988	14534	18576	23994	29068	38270
		1703	2941	3784	5800	7018	8617	11146	14386	17441	22291	28793	34882	45924
	KW 50HZ/60HZ	1.65	2.85	3.7	5.62	6.8	8.35	10.8	13.94	16.9	21.6	27.9	33.8	44.5
		1.98	3.42	4.4	6.74	8.2	10.02	12.96	16.73	20.28	25.92	33.48	40.56	53.4
输入功率 Input power	KW	0.88	1.35	2	2.25	2.66	3.27	4.07	5.75	6.45	8.25	11.5	12.9	17.45
最大运行电流 Max Current	A	5.4	8.2	12	13.6	6.6	8.2	10.1	13.8	15.5	20	27.9	31.3	42.4
电源Power source		1PH~220V/3PH~220V/380V 50HZ/60HZ				3PH～380V/415V/480V～50HZ/60HZ(3PH～200V/220V 50HZ/60HZ)								
冷媒 Refrigerant	名称Type	R22/R407C/134a/404A/410A												
	控制Control	毛细管Capillary/外平衡热力膨胀阀Thermostatic expansion valve												
压缩机 Compressor	类型Type	全封闭活塞式Hermetic Rotary					全封闭涡旋式（活塞式）Hermetic scroll (Piston)							
	功率Power(KW)	0.45	0.89	1.3	1.73	2.1	2.7	3.5	4.55	5.25	3.5×2	4.55×2	5.25×2	7×2
冷凝器 Condenser	类型Type	高效紫铜铜管套铝翅片式+低噪音外转子风机 Efficient finned copper tube with aluminum+Low noise external rotor fan												
	冷却风量 Air flow (m^3/h)	750	1000	1500	2000	2500	3000	4000	5000	6000	8000	10000	12000	15000
	风扇功率 Air blower（KW）	0.06	0.09	0.15	0.15	0.19	0.14×2	0.14×2	0.19×2	0.19×2	0.25×2	0.45×2	0.45×2	0.6×2
蒸发器 Evaporator	类型Type	不锈钢盘管/壳管式/不锈钢板式换热器 SS Tank coil/ Shell and tube type/Plate type heat exchanger												
	冷冻水量(m^3/h) Chilled water	0.28	0.49	0.64	0.97	1.12	1.44	1.86	2.4	2.91	3.71	4.8	5.81	7.65
		0.34	0.59	0.76	1.16	1.4	1.72	2.23	2.88	3.49	4.46	5.76	7	9.18
	水箱Water tank(L)	10.6	18.3	27	27	50	50	60	60	110	120	200	200	270
	进出水管径(inch) Inlet/outlet pipe	1/2"	1/2"	1/2"	1/2"	1"	1"	1"	1"	1"	1-1/2"	2"	2"	2"
水泵 Water pump	功率Power(kw)	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.75	0.75	0.75	1.5	1.5	2.2
	最高扬程Max lift(m)	22	22	22	22	22	22	22	30	30	25	25	25	28
	最大流量Max flow (m^3)	5.4	5.4	5.4	5.4	5.4	5.4	5.4	8.1	8.1	8.1	13.5	13.5	25.2
安全保护 Safety protection		压缩机过热保护，过流保护，高低压保护，超温保护，流量保护，电器相序/缺相保护，低液位保护，防冻保护等. Compressor inner protection, over current protection, high/low pressure protection, over temperature protection, flow rate protection, phase sequence/phase missing protection, low level coolant protection, anti freezing protection, exhaust overheat protection.												
机械尺寸 Dimension	长 L(mm)	500	560	600	600	720	850	980	1100	1180	1450	1530	1530	1650
	宽W(mm)	350	420	420	480	550	580	520	580	620	750	750	750	910
	高H(mm)	600	720	770	910	1350	1030	1170	1350	1350	1500	1630	1630	1740
机组净重Net weight（KG）		45	70	85	95	125	150	175	195	220	285	350	370	510

备注Note

以上参数依据下列工况设计:The above specifications are according to the following design conditions:

1, 冷冻水进出水温度12℃/7℃.Chilled water inlet/outlet temperature 12℃/7℃.

2, 冷却风进出温度33℃/38℃.Cooling air inlet/outlet temperature 33℃/38℃.

规格性能因产品改良有所改动恕不另行通知。We reserve the right to modify the specification without further notice.

TopChiller® INTERNATIONAL

风冷式工业冷水机 Air Cooled Water Chiller Technical Specifications

项目Item / 型号Model		AC-15AT	AC-20AD	AC-20AF	AC-25AD	AC-25AF	AC-30AD	AC-30AT	AC-40AD	AC-40AF	AC-50AD	AC-50AF	AC-60AF
名义制冷量 Cooling capacity	Kcal/h 50HZ/60HZ	36120	49966	47988	58480	58136	74734	74922	98040	99760	119024	116960	144996
		43344	59959	57586	70176	69763	89681	89990	117648	119712	142829	140352	173995
	KW 50HZ/60HZ	42	58.1	55.8	68	67.6	86.9	87.2	114	116	138.4	136	168.6
		50.4	69.72	66.96	81.6	81.12	104.28	104.64	136.8	139.2	166.08	163.2	202.3
输入功率 Input power	KW	17.1	21.73	22	25.4	24.8	33.39	33.1	44.91	43.3	57.3	54	65
最大运行电流 Max Current	A	43.2	52.7	53.3	63.7	61.3	81	80.2	109	106	135.5	128.5	135
电源Power source		3PH～380V/415V/480V～50HZ/60HZ(3PH～200V/220V 50HZ/60HZ)											
冷媒 Refrigerant	名称Type	R22/R407C/134a/404A/410A											
	控制Control	毛细管Capillary/外平衡热力膨胀阀Thermostatic expansion valve											
压缩机 Compressor	类型Type	全封闭涡旋式（活塞式）Hermetic scroll (Piston)											
	功率Power(KW)	4.55×3	8.96×2	4.55×4	10.8×2	5.25×4	13.62×2	8.96×3	18.78×2	8.96×4	23.6×2	10.8×4	13.62×4
冷凝器 Condenser	类型Type	高效紫铜铜管套铝翅片式+低噪音外转子风机 Efficient finned copper tube with aluminum+Low noise external rotor fan											
	冷却风量 Air flow (m^3/h)	15000	20000	20000	25000	25000	30000	30000	40000	40000	50000	50000	60000
	风扇功率 Air blower（KW）	0.6×2	0.78×2	0.78×2	0.78×2	0.78×2	0.42×6	0.42×6	0.6×6	0.6×6	0.78×6	0.78×6	0.78×6
蒸发器 Evaporator	类型Type	不锈钢盘管/壳管式/不锈钢板式换热器 SS Tank coil/ Shell and tube type/Plate type heat exchanger											
	冷冻水量(m^3/h) Chilled water	7.22	10	9.6	11.69	11.62	14.94	15	19.6	19.95	23.8	23.4	29
		8.67	11.99	11.51	14.03	13.95	17.93	18	23.52	23.94	28.6	28.1	34.8
	水箱Water tank(L)	270	350	350	350	350	420	420	580	580	580	580	580
	进出水管径(inch) Inlet/outlet pipe	2"	2"	2"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	3"	3"	3″	3″	3″
水泵 Water pump	功率Power(kw)	2.2	2.2	2.2	2.2	2.2	4	4	4	4	5.5	5.5	5.5
	最高扬程Max lift(m)	28	28	28	28	28	30	30	30	30	32	32	32
	最大流量Max flow (m^3)	25.2	25.2	25.2	25.2	25.2	36	36	36	36	40	40	40
安全保护 Safety protection		压缩机过热保护、过流保护、高低压保护、超温保护、流量保护、电器相序/缺相保护、低液位保护、防冻保护等 Compressor inner protection, over current protection, high/low pressure protection, over temperature protection, flow rate protection, phase sequence/phase missing protection, low level coolant protection, anti freezing protection, exhaust overheat protection											
外形尺寸 Dimension	长L（mm）	1650	1850	1850	1900	1900	2250	2250	2200	2200	2200	2200	2870
	宽W（mm）	910	1000	1000	1050	1050	1400	1400	1600	1600	1700	1700	1550
	高H（mm）	1740	1850	1850	1970	1970	1950	1950	2050	2050	2050	2050	2000
机组净重Net weight（KG）		510	630	630	820	820	950	950	1150	1150	1230	1230	1450

备注Note

以上参数依据下列工况设计:The above specifications are according to the following design conditions:

1, 冷冻水进出水温度12℃/7℃.Chilled water inlet/outlet temperature 12℃/7℃.

2, 冷却风进出温度33℃/38℃.Cooling air inlet/outlet temperature 33℃/38℃.

规格性能因产品改良有所改动恕不另行通知。We reserve the right to modify the specification without further notice.

TopChiller 水冷式工业冷水机优点：

- 结构紧凑，运转平稳：机组的冷凝器、蒸发器均采用高效传热管，主机选用进口高效的全封闭涡旋式压缩机，具有结构紧凑、体积小、重量轻、安装位置小等诸多优点。全封闭涡旋式压缩机运动部件少，压缩机采用柔性压缩机，能效比高，低噪音，运行成本低，可自动卸载降压且没有直接磨损，可靠性高。由于是连续压缩机无脉动的，因此机组具有性能稳定、噪音低、振动小、运行平稳的特点。
- 微电脑控制器的保护功能：具有压缩机线圈电流过高的保护、水泵电流过高、冷水流量开关、冷水出水温度过低保护、温度过高保护、压缩机过载保护、启停频繁保护、电压异常保护、高低压保护等保护功能。
- 优化配置：采用水冷式制冷效率高，尽可能的减少噪音，满足环保要求（需要配备水塔水泵使用）。
- 便于安装: 机组在工厂内已完成全部的部件安装,运行测试,并已加注制冷剂及冷冻油,用户只需铺设水路及电路和水塔安装连结即可投入使用,减少了安装及调试时间。

Advantages:

Water cooled water chiller is also named water cooled chiller and water to water chiller with cooling capacity from 9.5KW to 236KW and adjustable temperature control range 5℃ to 30℃。Compared with Air cooled chiller, Water cooled chiller is higher cooling efficiency. This kind water chiller equips with branded Copeland, Danfoss, Sanyo or Panasonic Hermetic scroll compressors depend on detailed requirements. We have 3 or 4 refrigerant circuits for water chiller models from AW-15WT to AW-60WF according to chiller refrigeration capacity. Each circuit can work or stop independently for chiller safety and energy saving considering.

Each water cooled chiller having stainless steel buffer tank and built-in water pump allows easy installation and high flexibility. All the water piping systems are stainless steel material can make sure the circulation water clean without rust.

For water cooled chiller evaporator, we have some options for different processing requirements, Built-in water tank as open loop system and Shell & Tube type heat exchanger or Stainless Steel Plate heat exchanger as closed loop system.

For water chiller condenser, we are using water cooled shell and tube heat exchanger working together with external water cooling tower.

Each water cooled chiller unit from TopChiller has to be checked carefully after production and refrigerant charged before delivery. This is more convenient for all water chiller end users installation and operation when they received TopChiller products. This kind water chiller unit is with portable wheels, requiring connect with external water cooling tower and circulation water pump for normal working.

TopChiller® INTERNATIONAL

水冷式工业冷水机 Water Cooled Water Chiller Technical Specifications

项目Item / 型号Model		AW-3W	AW-4W	AW-5W	AW-6W	AW-8WD	AW-10WD	AW-12WD	AW-15WD	AW-15WT	AW-20WD
名义制冷量 Cooling capacity	kcal/h 50HZ/60HZ	8170	11266	14018	16340	22532	28036	32680	43172	42140	56760
		9804	13519	16822	19608	27038	33643	39216	51806	50568	68112
	KW 50HZ/60HZ	9.5	13.1	16.3	19	26.2	32.6	38	50.2	49	66
		11.4	15.72	19.56	22.8	31.44	39.12	45.6	60.24	58.8	79.2
输入功率 Input power	KW	3.07	3.87	5.3	5.95	7.75	10.6	11.9	16.25	15.85	19.71
最大运行电流 Max Current	A	7.5	9.4	12.9	14.4	18,8	25.7	28.9	39.4	38.2	47.8
电源Power source		3PH～380V/415V/480V～50HZ/60HZ(3PH～200V/220V 50HZ/60HZ)									
冷媒 Refrigerant	名称Type	R22/R407C/134a/404A/410A									
	控制Control	毛细管Capillary/外平衡热力膨胀阀Thermostatic expansion valve									
压缩机 Compressor	类型Type	全封闭涡旋式（活塞式）Hermetic scroll (Piston)									
	功率Power(KW)	2.7	3.5	4.55	5.2	3.5×2	4.55×2	5.2×2	7×2	4.55×3	8.96×2
冷凝器 Condenser	类型Type	壳管式/不锈钢板式蒸发器Shell and tube/ SS plate type heat exchanger									
	冷却水 (m^3/h) Cooling water	2.1	2.9	3.6	4.2	5.7	7.1	8.3	11	10.8	14.4
		2.4	3.3	4.1	4.8	6.6	8.3	9.6	12.8	12.5	16.7
	进出水管径(inch) Inlet/outlet pipe	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2"	2"	2"
蒸发器 Evaporator	类型Type	不锈钢盘管/壳管式/板式SS Tank with cooper coil / Shell and tube/Plate heat exchanger									
	冷冻水量(m^3/h) Chilled water	1.63	2.25	2.8	3.27	4.5	5.6	6.53	8.63	8.43	11.35
		1.96	2.7	3.36	3.92	5.4	6.73	7.84	10.36	10.1	13.62
	水箱Water tank(L)	60	60	60	90	150	200	200	330	330	330
	进出水管径(inch) Inlet/outlet pipe	1"	1"	1"	1"	1-1/2"	2"	2"	2"	2"	2"
水泵 Water pump	功率Power(kw)	0.37	0.37	0.75	0.75	0.75	1.5	1.5	2.2	2.2	2.2
	最高扬程Max lift(m)	22	22	30	30	25	25	25	28	28	28
	最大流量Max flow (m^3)	5.4	5.4	8.1	8.1	8.1	13.5	13.5	25.2	25.2	25.2
安全保护 Safety protection		压缩机过热保护，过流保护，高低压保护，超温保护，流量保护，电器相序/缺相保护，低液位保护，防冻保护等 Compressor inner protection, over current protection, high/low pressure protection, over temperature protection, flow rate protection, phase sequence/phase missing protection, low level coolant protection, anti freezing protection, exhaust overheat protection									
外形尺寸 Dimension	长L(mm)	830	910	830	830	1170	1170	1170	1700	1700	1700
	宽W(mm))	530	480	530	530	710	710	710	800	800	800
	高H(mm))	910	1000	910	910	1300	1300	1300	1600	1600	1600
机组净重Net weight（KG）		135	135	150	165	230	255	265	430	430	510

备注Note

以上参数依据下列工况设计:The above specifications are according to the following design conditions:

1, 冷冻水进出水温度12℃/7℃.Chilled water inlet/outlet temperature 12℃/7℃.

2, 温度控制范围5℃/35℃.chiller temperature control range 5℃/35℃.

规格性能因产品改良有所改动恕不另行通知。We reserve the right to modify the specification without further notice.

水冷式工业冷水机 Water Cooled Water Chiller Technical Specifications

项目Item / 型号Model		AW-20WF	AW-25WD	AW-25WF	AW-30WD	AW-30WT	AW-40WD	AW-40WF	AW-50WD	AW-50WF	AW-60WF
名义制冷量 Cooling capacity	kcal/h 50HZ/60HZ	56072	66048	65360	83420	85140	114036	113520	134504	132096	169764
		67286	79258	78432	100104	102168	136843	136224	161405	158515	203717
	KW 50HZ/60HZ	65.2	76.8	76	97	99	132.6	132	156.4	153.6	197.4
		76.56	92.16	91.2	116.4	118.8	159.12	158.4	187.68	184.32	236.88
输入功率 Input power	KW	20.4	23.8	23	30.99	30.63	41.31	39.59	52.7	48.7	59.3
最大运行电流 Max Current	A	48.5	61.7	60	75.2	74.8	100.3	96.6	127.9	119.7	143.9
电源Power source		3PH～380V/415V/480V～50HZ/60HZ(3PH～200V/220V 50HZ/60HZ)									
冷媒 Refrigerant	名称Type	R22/R407C/134a/404A/410A									
	控制Control	外平衡热力膨胀阀Thermostatic expansion valve									
压缩机 Compressor	类型Type	全封闭涡旋式（活塞式）Hermetic scroll (Piston)									
	功率Power(KW)	4.55×4	10.8×2	5.2×4	13.62×2	8.96×3	18.78×2	8.96×4	23.6×2	10.8×4	13.62×4
冷凝器 Condenser	类型Type	壳管式/不锈钢板式蒸发器Shell and tube/ SS plate type heat exchanger									
	冷却水 (m^3/h) Cooling water	14.4	17	16.7	21.4	21.7	29.3	28.9	35	33.9	43.2
		16.6	19.6	19.3	24.7	25.1	33.8	34.4	40.4	39.1	50
	进出水管径(inch) Inlet/outlet pipe	2"	2"	2 1/2"	2 1/2"	2 1/2"	3"	3"	3"	3"	4"
蒸发器 Evaporator	类型Type	不锈钢盘管/壳管式/板式SS Tank with cooper coil / Shell and tube/Plate heat exchanger									
	冷冻水量(m^3/h) Chilled water	11.21	13.21	13.1	16.68	17.02	22.8	22.7	26.9	26.41	33.95
		13.45	15.85	15.68	20.02	20.43	27.36	27.24	32.27	31.7	40.73
	水箱Water tank(L)	330	350	350	450	450	580	580	620	620	620
	进出水管径(inch) Inlet/outlet pipe	2"	2"	2"	2-1/2"	2-1/2"	3"	3"	3"	3"	4"
水泵 Water pump	功率Power(kw)	2.2	2.2	2.2	4	4	4	4	5.5	5.5	5.5
	最高扬程Max lift(m)	28	28	28	30	30	30	30	32	32	32
	最大流量Max flow (m^3)	25.2	25.2	25.2	36	36	36	36	40	40	40
安全保护Safety protection		压缩机过热保护，过流保护，高低压保护，超温保护，流量保护，电器相序/缺相保护，低液位保护，防冻保护等 Compressor inner protection, over current protection, high/low pressure protection, over temperature protection, flow rate protection, phase sequence/phase missing protection, low level coolant protection, anti freezing protection, exhaust overheat protection									
外形尺寸 Dimension	长L(mm)	1700	1700	1700	1880	1880	2050	2050	2050	2050	2200
	宽W(mm)	800	800	800	910	910	1050	1050	1050	1050	1100
	高H(mm)	1600	1600	1600	1830	1830	1880	1880	1880	1880	1850
机组净重Net weight（KG）		510	630	630	780	780	950	950	1050	1050	1120

备注Note

以上参数依据下列工况设计:The above specifications are according to the following design conditions:

1, 冷冻水进出水温度12℃/7℃.Chilled water inlet/outlet temperature 12℃/7℃.

2, 温度控制范围5℃/35℃.chiller temperature control range 5℃/35℃.

规格性能因产品改良有所改动恕不另行通知。We reserve the right to modify the specification without further notice.

TopChiller 风冷式螺杆式冷水机

风冷螺杆式冷水机组，无需安装冷却水塔，使用更方便。机组适用范围广泛，适用于塑胶、电镀、电子、化工、医疗、净化、食品、冶金等各个行业提供冷却系统配套及工程。同时也为商场、办公楼、酒店、医院等公共场所提供性能卓越的冷水系统，为客户创造安静舒适的生活工作环境。

- 高效半封闭双螺杆压缩机，机组运行平稳，噪声低。吸气冷却使电机运行温度低，电机寿命长。
- 采用高质量轴承，轴承寿命至少 40000 小时。内置式油分离器，体积更小，效果更好。
- 可以在 0% ～ 100% 范围内安全的实现阶段或无级能量调节，最大限度节约电力资源。
- 蒸发器采用高效能壳管式换热器（可选配不锈钢板式换热器），内置高效换热齿牙管，设计合理，换热效果良好；
- 适用于 R22、R407c、R134a 、R404A 等多种工质。
- 可选配经济器和机油冷却装置以进一步提高压缩机制冷量和效率，可选配喷液冷却装置以扩展压缩机的应用范围。
- 可实现开机控制程序、能量调节程序、停机控制程序、故障停机、故障诊断、运转时间统计、运行状态显示及恢复重新开机程序等。
- 具有控制功能全、保护功能齐、中英文界面及操作简便等特点，电脑液晶触摸屏控制器，可反映机组运行状况，操作更加便捷。
- 可接驳远程控制主机，实现高度自动化，无需专门设置运行管理人员。

Air cooled screw chiller adopts branded screw type compressor, high efficient copper condenser, evaporator and famous control components, which features compact size, low noise & vibration, high cooling capacity, easy operation.

This kind of air cooled screw chillers are used widely in plastic industry, electrons, plating, chemical industry, ultrasonic wave cooling, printing and others. TopChiller supplies air cooled screw chillers in various standard specifications, and customer screw chillers are also welcomed to match your special needs.

Advantages:

New screw type compressor with 20%–30% higher in cooling efficiency.

Cooling capacity control available at four steps (100%–75%–50%–25%), three steps (100%–66%–33%).

High efficiency, low noise and vibration, easy installation.

Environmental protection refrigerant R134a, R407c available.

SIEMENS PLC program control system, human–computer interface with big LED touch panel, running state displaying in multi–language, and self–diagnosis for easy operation and supervision.

Extended industrial interface, convenient for being computer monitor via network to realize romote contral.

Multi–safety protection by high and low pressure, compressor overheating, overloading, over temperature, flow switch, phase sequence, phase–missing, exhaust overheating and anti–freezing.

风冷式螺杆式冷水机 Air Cooled Screw Chiller Technical Specifications

项目Item / 型号Model			TPAS-80ASH	TPAS-110ASH	TPAS-140ASH	TPAS-160ASH	TPAS-190ASH	TPAS-210ASH	TPAS-250ASH	TPAS-290ASH	TPAS-310ASH	TPAS-340ASH	TPAS-400ASH	TPAS-430ASH
名义制冷量Cooling capacity		kcal/h	68800	94600	122980	135020	164260	180600	212420	245100	266600	292400	348300	369800
		KW	80	110	143	157	191	210	247	285	310	340	405	430
输入功率Input power		KW	32.5	43.6	54.7	59.7	73.6	79.6	88.2	101.2	112.8	123.8	145	155
最大运行电流Max Current		A	57	75	95	103	125	135	151	173	191	211	246	263
电源Power source			3PH～380V/415V/480V～50HZ/60HZ(3PH～200V/220V 50HZ/60HZ)											
冷媒 Refrigerant	名称Type		R22(R134a/R407c/R404A)											
	充注量Charge	kg	21	28	35	42	49	56	63	70	77	84	98	112
	控制方式Control		外平衡热力膨胀阀Thermostatic expansion valve											
压缩机 Compressor	类型Type		Semi-hermetic screw											
	功率Power	KW	30	40	50	55	67	73	82	95	104	115	134	142
	启动方式Start mode		Y-△											
	能量调节 Capacity control	%	0-33-66-100			0-25-50-75-100								
蒸发器 Evaporator	类型Type		壳管式（不锈钢板式）Shell and tube (SS plate heat exchanger)											
	冷冻水 Chilled water	m^3/h	13.8	18.9	24.6	27.0	32.8	36.1	42.5	49.0	53.3	58.4	70.0	74.0
	压力 Water pressure	KPa	32	32	35	38	42	42	45	43	43	43	41	43
	管径 Pipe connection	Inch	3"	3"	3"	4"	4"	4"	4"	4"	5"	5"	6"	6"
冷凝器 Condenser	类型Type		空气冷却式高效内螺纹铜管套铝翅片Air cooled type high efficiency finned cooper tube											
风扇 Fan	类型Type	m^3/h	大风量低噪音外转子风机Big volume & low noise axil fan											
	功率Power	KW	0.42×6	0.6×6	0.78×6	0.78×6	1.1×6	1.1×6	0.78×8	0.78×8	1.1×8	1.1×8	1.1×10	1.1×12
	风量Air volume	m^3/h	30000	40000	50000	60000	70000	80000	90000	100000	110000	116000	145000	165000
安全保护装置 Safety protection devices			压缩机过热保护, 过流保护, 高低压力保护, 超温保护, 流量保护, 相序/缺相保护, 低液位保护, 防冻保护, 排气过热保护,水流开关等 Inner thermostat for compressor motor, unit overload relay,high and low pressure switch, freeze protection thermostat, reverse phase protection relay, discharge gas thermostat, flow switch											
外形尺寸 Dimension	长Length	mm	2200	2350	2600	2600	2650	2650	3400	3400	3800	3800	4800	5800
	宽Width	mm	1150	1350	1500	1500	1900	1900	1700	1700	1900	1900	1900	1900
	高Height	mm	1980	2000	2100	2100	2200	2200	2200	2200	2200	2200	2200	2200
机组净重Net weight		kg	1100	1300	1600	1900	2200	2350	2550	2800	2850	2950	3200	3550
运行重量Running weight		kg	1300	1500	1840	2200	2530	2700	2950	3250	3350	3560	3650	3950

备注Note

以上参数依据下列工况设计:The above specifications are according to the following design conditions:

1.冷冻水进/出温度为12℃/7℃； Chilled water inlet/outlet temperature 12℃/7℃.

2.冷却风进/出温度为30℃/38℃；Cooling air inlet/outlet temperature 30℃/38℃.

规格性能因产品改良有所改动恕不另行通知。We reserve the right to modify the specification without further notice.

TopChiller® INTERNATIONAL

风冷式螺杆式冷水机Air Cooled Screw Chiller Technical Specifications

项目Item / 型号Model			TPAS-160ADH	TPAS-220ADH	TPAS-285ADH	TPAS-315ADH	TPAS-380ADH	TPAS-420ADH	TPAS-495ADH	TPAS-570ADH	TPAS-620ADH	TPAS-680ADH	TPAS-810ADH	TPAS-860ADH
名义制冷量Cooling capacity		kcal/h	137600	189200	245960	270040	328520	361200	424840	490200	533200	584800	696600	739600
		KW	160	220	286	314	382	420	494	570	620	680	810	860
输入功率Input power		KW	64.7	86.6	106.2	118.8	145	159.2	177.2	207.6	225.6	247.6	290	310.4
最大运行电流Max Current		A	114	149	185	205	250	274	308	358	388	428	500	533
电源Power source			3PH～380V/415V/480V～50HZ/60HZ(3PH～200V/220V 50HZ/60HZ)											
冷媒 Refrigerant	名称Type		R22(R134a/R407c/R404A)											
	充注量Charge	kg	21×2	28×2	35×2	42×2	49×2	56×2	63×2	70×2	77×2	84×2	98×2	112×2
	控制Control		外平衡热力膨胀阀Thermostatic expansion valve											
压缩机 Compressor	类型Type		半封闭螺杆式Semi-hermetic screw											
	功率Power	KW	30×2	40×2	50×2	55×2	67×2	73×2	82×2	95×2	104×2	115×2	134×2	142×2
	启动方式Start mode		Y-△											
	能量调节 Capacity control	%	0-33-66-100		0-25-50-75-100									
蒸发器 Evaporator	类型Type		壳管式（不锈钢板式）Shell and tube (SS plate heat exchanger)											
	冷冻水Chilled water	m^3/h	27.5	37.8	49.1	54	65.7	72.2	85	98	106.6	117	139.3	147.9
	压力Water pressure	KPa	32	32	35	38	42	42	45	43	43	43	41	43
	管径Pipe connection	Inch	4"	4"	4"	5"	6"	6"	6"	6"	8"	8"	8"	10"
冷凝器 Condenser	类型Type		空气冷却式高效内螺纹铜管套铝翅片Air cooled type high efficiency finned cooper tube											
风扇 Fan	类型Type	m^3/h	大风量低噪音外转子风机Big volume & low noise axil fan											
	功率Power	KW	0.78×6	1.1×6	0.78×8	1.1×8	1.1×10	1.1×12	1.1×12	1.1×16	1.1×16	1.1×16	1.1×20	1.1×24
	风量Air volume	m^3/h	60000	80000	100000	116000	145000	165000	180000	205000	225000	242000	285000	325000
安全保护装置 Safety protection devices			压缩机过热保护，过流保护，高低压保护，超温保护，流量保护，电器相序/缺相保护，低液位保护，防冻保护等. Compressor inner protection, over current protection, high/low pressure protection, over temperature protection, flow rate protection, phase sequence/phase missing protection, low level coolant protection, anti freezing protection, exhaust overheat protection.											
外形尺寸 Dimension	长Length	mm	2600	2650	3400	3800	4800	5800	5800	7800	7800	8000	9800	11600
	宽Width	mm	1500	1900	1700	1900	1900	1900	2200	2000	2200	2200	2200	2200
	高Height	mm	2100	2200	2200	2200	2200	2200	2300	2250	2250	2300	2350	2350
机组净重Net weight		kg	2050	2520	2980	3180	3420	3730	3950	4330	4650	4930	5450	5850
运行重量Running weight		kg	2360	2870	3420	3690	3780	4180	4380	4650	4920	5360	5830	6530

备注Note

以上参数依据下列工况设计:The above specifications are according to the following design conditions:

1,冷冻水进/出温度为12℃/7℃； Chilled water inlet/outlet temperature 12℃/7℃.

2,冷却风进/出温度为30℃/38℃；Cooling air inlet/outlet temperature 30℃/38℃.

规格性能因产品改良有所改动恕不另行通知。We reserve the right to modify the specification without further notice.

TopChiller 水冷式螺杆冷水机，可用于塑胶、电镀、电子、化工、医疗、净化、食品、冶金等各个行业提供冷却系统配套及工程，同时也为商场、办公楼、酒店、医院等公共场所提供性能卓越的冷水系统，为客户创造安静、温度舒适的生活工作环境。

- 高效半封闭双螺杆压缩机，可以在 0% ～ 100% 范围内安全的实现阶段或无级能量调节，最大限度节约电力资源。
- 吸气冷却使电机运行温度低，电机寿命长。采用高质量轴承，轴承寿命至少 40000 小时。
- 内置式油分离器，体积更小，效果更好。运转部件少，故障率低。
- 冷凝器和蒸发器采用高效能壳管式换热器（可选配不锈钢板式换热器），内置高效换热齿牙管，设计合理，换热效果良好。
- 适用于 R22、R407c、R134a、R404A 等多种工质。
- 可选配经济器和配喷液冷却装置以进一步提高压缩机制冷量和效率并扩展压缩机的应用范围。

TopChiller water cooled screw chiller adopts BITZER, HANBELL screw type compressor, high efficient copper condenser, evaporator and famous control components, which features compact size, low noise & vibration, high cooling capacity, easy operation and durability.

Water cooled screw chiller has single head series, double heads series and four heads series depend on cooling capality. All this kind of water cooled screw chillers are used widely in plastic industry, electrons, plating, chemical industry, ultrasonic wave cooling, printing and others. TopChiller supplies water cooled screw chillers in various standard specifications, and customer screw chillers are also welcomed to match your special needs.

Advantages:

New screw type compressor with 20%–30% higher in efficiency. low noise and vibration, easy to install.

Cooling capacity control available at four steps (100%–75%–50%–25%), three steps (100%–66%–33%).

High efficiency, Environmental protection refrigerant R134a, R407c available for different ambient temperature.

SIEMENS PLC program control system, human–computer interface with big LED touch panel, running state displaying in multi–language, and self–diagnosis for easy operation and supervision.

Extended industrial interface, convenient for being computer monitor via network to realize romote contral.

Multi–safety protection by high and low pressure, compressor overheating, overloading, over temperature, flow switch, phase sequence, phase–missing, exhaust overheating and anti–freezing.

水冷式螺杆式冷水机 Water Cooled Screw Chiller Technical Specifications

项目Item / 型号Model			TPW-100WSH	TPW-135WSH	TPW-175WSH	TPW-190WSH	TPW-230WSH	TPW-255WSH	TPW-300WSH	TPW-350WSH	TPW-375WSH	TPW-415WSH
名义制冷量Cooling capacity		kcal/h	86000	116100	150500	163400	197800	219300	258000	301000	322500	356900
		KW	100	135	175	190	230	255	300	350	375	415
输入功率Input power		KW	22	30	37	42	51	56	65	75	80	90
最大运行电流Max Current		A	40	53	67	73	89	97	109	126	137	153
电源Power source			3PH～380V/415V/480V～50HZ/60HZ(3PH～200V/220V 50HZ/60HZ)									
冷媒 Refrigerant	名称Type		R22(R134a/R407c/R404A)									
	充注量Charge	kg	17	22	27	33	38	43	50	55	60	66
	控制方式Control		外平衡热力膨胀阀 Thermostatic expansion valve									
压缩机 Compressor	类型Type		半封闭螺杆 Semi-hermetic screw									
	功率Power	KW	22	30	37	42	51	56	65	75	80	90
	启动方式Start mode		Y-△									
	能量调节Capacity control	%	0-33-66-100		0-25-50-75-100							
蒸发器 Evaporator	类型Type		壳管式（不锈钢板式）Shell and tube (SS plate heat exchanger)									
	冷冻水Chilled water	m^3/h	17.2	23.2	30	32.7	40	43.9	51.6	60.2	64.5	71.4
	压力Water pressure	KPa	35	35	35	38	40	42	42	45	45	43
	管径Pipe connection	Inch	3"	3"	3"	3"	4"	4"	4"	4"	4"	4"
冷凝器 Condenser	类型Type		水冷式壳管式 Water cooled type shell and tube									
	冷却水Cooling water	m^3/h	21	28.4	36.6	40	48.3	53.5	62.8	73	78.2	86.8
	压力Water pressure	KPa	42	42	42	43	42	43	43	45	45	45
	管径Pipe connection	Inch	3"	3"	3"	4"	4"	4"	4"	4"	5"	5"
安全保护 Safety protection			压缩机过热保护, 过流保护, 高低压力保护, 超温保护, 流量保护, 相序/缺相保护, 低液位保护, 防冻保护, 排气过热保护,水流开关等 Inner thermostat for compressor motor, unit overload relay,high and low pressure switch, freeze protection thermostat, reverse phase protection relay, discharge gas thermostat, flow switch.									
外形尺寸 Dimension	长Length	mm	2150	2350	2450	2600	2750	2800	2800	2900	2900	3000
	宽Width	mm	560	620	650	680	780	950	950	950	950	1200
	高Height	mm	1550	1650	1650	1650	1650	1800	1950	1950	1950	1580
机组净重Net weight		kg	650	900	1050	1200	1550	1800	1900	2050	2050	2350
运行重量Running weight		kg	820	1050	1200	1400	1800	2100	2200	2350	2380	2530

项目Item / 型号Model			TPW-470WSH	TPW-500WSH	TPW-560WSH	TPW-590WSH	TPW-610WSH	TPW-720WSH	TPW-790WSH	TPW-840WSH	TPW-940WSH
名义制冷量Cooling capacity		kcal/h	425700	447200	490200	533200	550400	645000	705200	756800	851400
		KW	495	520	570	620	640	750	820	880	990
输入功率Input power		KW	103	109	118	127	131	151	167	177	199
最大运行电流Max Current		A	177	187	203	218	225	260	288	306	345
电源Power source			3PH～380V/415V/480V～50HZ/60HZ(3PH～200V/220V 50HZ/60HZ)								
冷媒 Refrigerant	名称Type		R22(R134a/R407c/R404A)								
	充注量Charge	kg	82	88	94	100	110	121	132	143	165
	控制方式Control		外平衡热力膨胀阀 Thermostatic expansion valve								
压缩机 Compressor	类型Type		半封闭螺杆 Semi-hermetic screw								
	功率Power	KW	103	109	118	127	131	151	167	177	199
	启动方式Start mode		Y-△								
	能量调节Capacity control	%	0-25-50-75-100								
蒸发器 Evaporator	类型Type		壳管式（不锈钢板式）Shell and tube (SS plate heat exchanger)								
	冷冻水Chilled water	m^3/h	85.1	89.4	98	106.6	110	129	141	151.3	170.4
	压力Water pressure	KPa	40	41	43	45	45	45	45	43	45
	管径Pipe connection	Inch	5"	5"	5"	6"	6"	8"	8"	10"	10"
冷凝器 Condenser	类型Type		水冷壳管式 Water cooled type Shell and tube								
	冷却水Cooling water	m^3/h	102.8	108.2	118.3	128.5	132.6	155	169.7	181.8	204.5
	压力Water pressure	KPa	48	45	46	48	46	48	48	45	47
	管径Pipe connection	Inch	5"	5"	6"	6"	6"	8"	8"	10"	10"
安全保护 Safety protection			压缩机过热保护,过流保护,高低压力保护,超温保护, 流量保护, 相序/缺相保护,低液位保护,防冻保护,排气过热保护,水流开关等。 Inner thermostat for compressor motor, unit overload relay, high and low pressure switch, freeze protection thermostat, reverse phase protection relay, discharge gas thermostat, flow switch.								
外形尺寸 Dimension	长Length	mm	3000	3100	3300	3500	3800	3900	4100	4300	4500
	宽Width	mm	1200	1250	1380	1380	1380	1380	1450	1480	1480
	高Height	mm	1580	1630	1630	1750	1750	1750	1780	1780	1780
机组净重Net weight		kg	2500	2500	2650	2850	3150	3350	3620	3850	4160
运行重量Running weight		kg	2700	3000	3100	3350	3750	4000	4300	4600	5000

备注Note

以上参数依据下列工况设计:The above specifications are according to the following design conditions:

1.冷冻水进/出温度为12℃/7℃； Chilled water inlet/outlet temperature 12℃/7℃.

2.冷却水进/出温度为25℃/30℃；Cooling water inlet/outlet temperature 25℃/30℃.

规格性能因产品改良有所改动恕不另行通知。We reserve the right to modify the specification without further notice.

水冷式螺杆式冷水机 Water Cooled Screw Chiller Technical Specifications

项目Item / 型号Model			TPW-200WDH	TPW-270WDH	TPW-350WDH	TPW-380WDH	TPW-460WDH	TPW-510WDH	TPW-600WDH	TPW-700WDH	TPW-750WDH	TPW-830WDH
名义制冷量Cooling capacity		kcal/h	172000	232200	301000	326800	395600	438600	516000	602000	645000	713800
		KW	200	270	350	380	460	510	600	700	750	830
输入功率Input power		KW	44	60	74	84	102	112	130	150	160	180
最大运行电流Max Current		A	40	53	67	73	89	97	109	126	137	153
电源Power source			3PH～380V/415V/480V～50HZ/60HZ(3PH～200V/220V 50HZ/60HZ)									
冷媒 Refrigerant	名称Type		R22(R134a/R407c/R404A)									
	充注量Charge	kg	17×2	22×2	27×2	33×2	38×2	43×2	50×2	55×2	60×2	66×2
	控制方式Control		外平衡热力膨胀阀 Thermostatic expansion valve									
压缩机 Compressor	类型Type		半封闭螺杆 Semi-hermetic screw									
	功率Power	KW	22×2	30×2	37×2	42×2	51×2	56×2	65×2	75×2	80×2	90×2
	启动方式Start mode		Y-△									
	能量调节 Capacity control	%	0-33-66-100		0-25-50-75-100							
蒸发器 Evaporator	类型Type		壳管式（不锈钢板式）Shell and tube (SS plate heat exchanger)									
	冷冻水Chilled water	m^3/h	34	46	60	65	79	88	103	120	120	143
	压力Water pressure	KPa	35	35	35	38	40	42	42	45	45	43
	管径Pipe connection	Inch	4"	4"	4"	5"	5"	6"	6"	6"	8"	8"
冷凝器 Condenser	类型Type		水冷式壳管式 Water cooled type shell and tube									
	冷却水Cooling water	m^3/h	42	57	73	80	97	107	126	146	156	174
	压力Water pressure	KPa	42	42	42	43	42	43	43	45	45	45
	管径Pipe connection	Inch	4"	4"	4"	5"	6"	4"×2	4"×2	4"×2	5"×2	5"×2
安全保护 Safety protection			压缩机过热保护, 过流保护, 高低压力保护, 超温保护, 流量保护, 相序/缺相保护, 低液位保护, 防冻保护, 排气过热保护,水流开关等 Inner thermostat for compressor motor, unit overload relay,high and low pressure switch, freeze protection thermostat, reverse phase protection relay, discharge gas thermostat, flow switch									
外形尺寸 Dimension	长Length	mm	2750	2800	2800	2950	2950	3150	3480	3480	3480	3650
	宽Width	mm	750	780	780	810	810	850	875	875	895	1120
	高Height	mm	1650	1650	1650	1650	1750	1750	1850	1850	1850	1950
机组净重Net weight		kg	1650	1800	1850	2200	2450	2650	2800	2800	3450	3750

项目Item / 型号Model			TPW-990WDH	TPW-1040WDH	TPW-1140WDH	TPW-1240WDH	TPW-1280WDH	TPW-1500WDH	TPW-1640WDH	TPW-1760WDH	TPW-1980WDH
名义制冷量Cooling capacity		kcal/h	851400	894400	980400	1066400	1100800	1290000	1410400	1513600	1702800
		KW	990	1040	1140	1240	1280	1500	1640	1760	1980
输入功率Input power		KW	206	218	236	254	262	302	334	354	398
最大运行电流Max Current		A	354	374	406	436	450	520	576	612	490
电源Power source			3PH～380V/415V/480V～50HZ/60HZ(3PH～200V/220V 50HZ/60HZ)								
冷媒 Refrigerant	名称Type		R22(R134a/R407c/R404A)								
	充注量Charge	kg	82×2	88×2	94×2	100×2	110×2	121×2	132×2	143×2	165×2
	控制方式Control		外平衡热力膨胀阀 Thermostatic expansion valve								
压缩机 Compressor	类型Type		半封闭螺杆 Semi-hermetic screw								
	功率Power	KW	103×2	109×2	118×2	127×2	131×2	151×2	167×2	177×2	199×2
	启动方式Start mode		Y-△								
	能量调节Capacity control	%	0-25-50-75-100								
蒸发器 Evaporator	类型Type		壳管式（不锈钢板式）Shell and tube (SS plate heat exchanger)								
	冷冻水Chilled water	m^3/h	170	179	196	213	220	258	282	303	340
	压力Water pressure	KPa	40	41	43	45	45	45	45	43	45
	管径Pipe connection	Inch	8"	8"	8"	8"	10"	10"	10"	12"	12"
冷凝器 Condenser	类型Type		水冷式壳管式 Water cooled type shell and tube								
	冷却水Cooling water	m^3/h	206	216	237	257	265	310	339	364	409
	压力Water pressure	KPa	48	45	46	48	46	48	48	45	47
	管径Pipe connection	Inch	5"×2	5"×2	6"×2	6"×2	6"×2	8"×2	8"×2	10"×2	10"×2
安全保护 Safety protection			压缩机过热保护, 过流保护, 高低压力保护, 超温保护, 流量保护, 相序/缺相保护, 低液位保护, 防冻保护, 排气过热保护,水流开关等 Inner thermostat for compressor motor, unit overload relay,high and low pressure switch, freeze protection thermostat, reverse phase protection relay, discharge gas thermostat, flow switch								
外形尺寸 Dimension	长Length	mm	3650	3650	3750	3750	4230	4230	4350	4350	4420
	宽Width	mm	1120	1220	1300	1450	1380	1480	1450	1560	1650
	高Height	mm	1950	1950	2100	2150	2150	2250	2250	2300	2450
机组净重Net weight		kg	3950	4100	4450	4700	5000	5250	5500	5750	6000
运行重量Running weight		kg	4760	4770	5270	5460	5800	6100	6400	6680	6970

备注Note

以上参数依据下列工况设计:The above specifications are according to the following design conditions:

1.冷冻水进/出温度为12℃/7℃； Chilled water inlet/outlet temperature 12℃/7℃.

2.冷却水进/出温度为25℃/30℃；Cooling water inlet/outlet temperature 25℃/30℃.

规格性能因产品改良有所改动恕不另行通知。We reserve the right to modify the specification without further notice.

TopChiller 风冷式低温冷水机优点：

- 主机精选欧、美原厂世界名牌压缩机，制冷效率高，噪音低，节省电能，安全稳定，环保耐用。
- 控制电气采用国际品牌控制电器，保证机器工作稳定，寿命长久，安全可靠。
- 知名品牌低温泵，大排量，低能耗，省电耐用，扬程和泵体材质可选配。
- 知名品牌低噪音外转子风机或轴流风机，噪音低，风量大，省电环保耐用。
- 配备精密式数显温度控制器，操作方便，简单直观。能精确控制水温 ±1℃，设定温度范围 0℃ ~–30℃，可直接分析机组的运行状况（可根据用户要求配置控制系统）。
- 标配水箱盘管式蒸发器（可选不锈钢板式蒸发器或干式壳管式蒸发器），清洗维护方便快捷。
- 采用高效防腐散热器，由高效防腐的散热铝箔加上高效的螺纹换热的螺纹铜管组成，制造时采用二次翻边翘片机械涨管工艺和先进换热器生产线，保证优质高效环保节能。
- 静电喷塑外壳，欧化设计，美观大方，外表板采用快速拆装形式，方便使用和维护。
- 机组尺寸可根据客户现场要求定制。

Advantages:

Air cooled glycol chiller is also called Air cooled low temperature chiller with temperature controlling range from 0℃ to –30℃ is widely used in plastic industry, electrons, plating, chemical industry, ultrasonic wave cooling, printing and others. This kind of air cooled industrial chiller can precisely control the temperature requested by the modernized machinery production, and it greatly improved the production efficiency and quality. TopChiller air cooled industrial chiller doesn't require cooling tower, which is easy to install and remove. This air cooled glycol chiller having built–in water tank and glycol water pump but shell and tube or SS plate heat exchanger are also available depend on client requirements.

TopChiller low temperature chiller is the best choice for the modernized industry and it features easy operation, reasonable design, high quality and various models.

Also we offer a wide range of standard air cooled low temperature chillers, which can be found in following specification tables, but standard chillers may not always fit your unique requirements. Our application specialists can suggest units that are customized to meet your unique needs.

风冷式低温冷水机 Air Cooled Glycol Chiller Technical Specifications

项目Item / 型号Model		Temp	TPL-3AL	TPL-5AL	TPL-6AL	TPL-8AL	TPL-10AL	TPL-12AL	TPL-15AL	TPL-20AL	TPL-25AL	TPL-30AL	TPL-40AL
名义制冷量 Cooling capacity	KW 50HZ/60HZ	-10℃	3.80 4.60	6.30 7.60	7.50 9.00	9.10 10.90	13.20 15.80	16.10 19.30	19.50 23.40	26.40 31.70	32.20 38.60	39.00 46.80	52.00 62.40
		-20℃	1.90 2.30	3.00 3.60	4.00 4.80	6.00 7.20	7.10 8.50	8.00 9.60	13.90 16.70	16.90 20.30	20.80 25.00	24.40 29.30	30.80 37.00
		-30℃	1.00 1.20	1.60 1.90	1.90 2.30	2.70 3.20	3.20 3.80	3.80 4.60	6.10 7.30	9.50 11.4	12.10 14.50	14.30 17.10	19.00 22.80
		-35℃	0.67 0.80	1.04 1.25	1.50 1.80	2.30 2.80	2.80 3.40	3.00 3.60	4.30 5.20	6.35 7.62	8.30 10.00	10.10 12.10	13.35 16.00
蒸发器 Evaporator	冷冻水 Chilled water(m^3/h)	-10℃	0.65 0.79	1.10 1.30	1.30 1.50	1.60 1.90	2.30 2.70	2.80 3.30	3.40 4.10	4.50 5.40	5.60 6.70	6.70 8.10	9.00 10.80
		-20℃	0.33 0.40	0.52 0.62	0.69 0.83	1.10 1.30	1.23 1.47	1.38 1.65	2.39 2.87	2.85 3.45	3.57 4.30	4.20 5.04	5.30 6.36
		-30℃	0.17 0.21	0.28 0.33	0.33 0.40	0.47 0.55	0.55 0.65	0.65 0.80	1.10 1.30	1.60 2.00	2.10 2.50	2.46 2.90	3.30 3.90
		-35℃	0.12 0.14	0.18 0.22	0.26 0.31	0.40 0.48	0.48 0.58	0.52 0.62	0.72 0.89	1.10 1.31	1.43 1.72	1.74 2.09	2.30 2.76
	类型Type		壳管式/板式换热器 Shell and tube type/Plate type heat exchanger										
	管径 Inlet/outlet pipe	Inch	1"	1"	1"	1"	1-1/2"	1-1/2"	2"	2"	2"	2-1/2"	2-1/2"
输入功率Input power		KW	3.18	4.86	5.61	7.25	9.4	10.9	13.5	18.8	22.55	28.5	37.5
最大运行电流Max Current		A	7.8	12	13.7	18	23	26.5	33	46	55	69	91
电源Power source			3PH～380V/415V/480V～50HZ/60HZ(3PH～200V/220V 50HZ/60HZ)										
冷媒 Refrigerant	名称Type		R22(R404A/R507)										
	控制方式Control		外平衡热力膨胀阀Thermostatic expansion valve										
压缩机 Compressor	类型Type		全封闭涡旋式（活塞式）Hermetic scroll (Piston)										
	功率Power	KW	2.25	3.75	4.5	6	7.5	9	11.3	7.5*2	9.37*2	11.3*2	30
冷凝器 Condenser	类型Type		高效紫铜铜管套铝翅片式+低噪音外转子风机 Efficient finned copper tube with aluminum+Low noise external rotor fan										
水泵 Water pump	功率Power	KW	0.75	0.75	0.75	0.75	1.1	1.1	1.5	2.2	2.2	4	5.5
	最高扬程Max lift	m	20	20	20	20	20	20	20	20	20	25	20
安全保护 Protection			压缩机过热保护，过流保护，高低压保护，超温保护，流量保护， 电器相序/缺相保护，低液位保护，防冻保护等 Compressor inner protection, over current protection, high/low pressure protection, over temperature protection, flow rate protection, phase sequence/phase missing protection, low level coolant protection, anti freezing protection.										
外形尺寸 Dimension	长Length	mm	980	1150	1150	1350	1500	1500	1860	2020	2020	2200	2350
	宽Width	mm	520	560	560	680	760	760	850	950	950	1150	1350
	高Height	mm	1170	1215	1215	1530	1660	1660	1900	2000	2000	1980	2000
机组净重Net weight（KG）		Kg	135	165	210	310	450	530	750	835	920	1080	1125

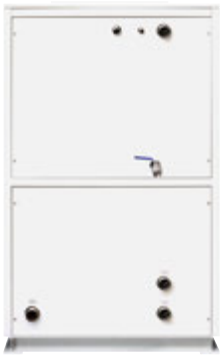
备注Note:

以上参数依据下列工况设计The above specifications are according to the following design conditions:

1, 冷冻水进出水温差3℃/8℃.Chilled water inlet/outlet temperature difference 3℃/8℃.

2, 冷却风进出风温度30℃/38℃.Cooling air inlet/outlet temperature 30℃/38℃

规格性能因产品改良有所改动恕不另行通知。We reserve the right to modify the specification without further notice.



TopChiller 水冷式低温冷水机优点：

- 主机精选欧、美全新世界名牌压缩机，制冷效率高，噪音低，节省电能，安全稳定，环保耐用。
- 控制电气采用国际品牌控制电器，保证机器工作稳定，寿命长久，安全可靠。
- 知名品牌低温泵，大排量，低能耗，省电耐用，扬程和泵体材质可选配。
- 配备精密式数显温度控制器，操作方便。能精确控制水温 ±1℃，设定温度范围 0 ℃ ~–30 ℃，可直接分析机组的运行状况。
- 标配水箱盘管式蒸发器（可选不锈钢板式蒸发器或干式壳管式蒸发器），清洗维护方便快捷。
- 冷凝器采用高效能壳管式换热器（可选配不锈钢板式换热器），内置高效换热齿牙管，设计合理，换热效果良好，需外接冷却塔。
- 静电喷塑外壳、欧化设计、美观大方，外表板采用快速拆装形式，方便使用和维护。
- 机组尺寸可根据客户现场要求定制。

ge –30°C to 0°C.

Danfoss/Copeland hermetic scroll compressor.

For temperature below –15℃ , semi–hermetic piston type compressor salso arailable.

Shell and tube evaporator, plate type heat exchanger for option. Water cold shell and tube condenser, comnet with cooling tower.

Multi–protection devices to make sure the chiller and the equipment running safely.

Large flow volume centrifugal pump, higher pressure available on request.

Schneider electrical components. Danfoss/Emerson thermal components.

Compressor inner protection, Over current protection, High/low pressure protection, Over temperature protection, Flow switch, Phase sequence/phase missing protection, Low coolant level protection, Anti freezing protection, Exhaust overheat protection

水冷式低温冷水机Water Cooled Glycol Chiller Technical Specifications

项目Item / 型号Model		Temp	TPL-3WL	TPL-5WL	TPL-6WL	TPL-8WL	TPL-10WL	TPL-12WL	TPL-15WL	TPL-20WL	TPL-25WL	TPL-30WL	TPL-40WL
名义制冷量 Cooling capacity	KW 50HZ/60HZ	-10℃	4.50 5.40	7.70 9.30	9.10 11.00	11.70 14.10	16.10 19.30	19.10 22.90	23.30 28.00	32.20 38.60	38.20 45.80	46.60 56.00	62.50 75.00
		-20℃	2.70 3.24	4.10 4.92	5.30 6.24	8.10 9.72	9.80 11.76	10.60 12.72	13.60 16.32	20.40 24.48	25.00 28.80	29.4 35.28	38.50 46.20
		-30℃	1.31 1.57	2.10 2.52	2.80 3.36	4.30 5.36	4.90 5.88	5.60 6.72	7.90 9.48	11.20 13.44	13.70 16.44	16.1 19.32	21.20 25.44
		-35℃	0.85 1.02	1.30 1.56	1.90 2.28	2.80 3.36	3.30 3.96	3.80 4.56	5.30 6.36	7.80 9.36	9.40 11.28	13.8 16.56	17.80 21.36
冷凝器 Condenser	类型Type		壳管式 Shell and tube type										
	冷却水量 Cooling water（m^3/h)	-10℃	1.00 1.21	1.70 2.06	2.03 2.44	2.62 3.14	3.60 4.32	4.27 5.12	5.20 6.24	7.23 8.67	8.54 10.25	10.40 12.50	14.00 16.80
		-20℃	0.61 0.74	0.92 1.11	1.09 1.31	1.82 2.18	2.03 2.43	2.37 2.84	3.04 3.65	4.56 5.48	5.60 6.71	6.58 7.90	8.61 10.33
		-30℃	0.31 0.37	0.49 0.58	0.65 0.78	1.00 1.20	1.14 1.36	1.30 1.56	1.84 2.20	2.61 3.13	3.19 3.82	3.74 4.49	4.93 6.00
		-35℃	0.20 0.24	0.31 0.36	0.44 0.52	0.65 0.78	0.77 0.92	0.89 1.06	1.23 1.48	1.81 2.17	2.18 2.62	3.20 3.84	4.13 4.96
	进出水管径 Outlet pipe	Inch	1-1/2"	1-1/2"	1-1/2"	1-1/2"	1-1/2"	1-1/2"	2"	2"	2-1/2"	3"	3"
蒸发器 Evaporator	类型Type		壳管式/板式换热器 Shell and tube type/Plate type heat exchanger										
	冷冻水 Chilled water(m^3/h)	-10℃	0.77 0.93	1.33 1.59	1.56 1.88	2.01 1.73	2.77 3.32	3.28 3.94	4.00 4.8	5.56 6.65	6.57 7.89	8.01 9.62	10.75 12.30
		-20℃	0.47 0.56	0.71 0.85	0.91 1.10	1.40 1.67	1.69 2.02	1.82 2.19	2.34 2.81	3.51 4.21	4.30 5.16	5.06 6.07	6.62 7.94
		-30℃	0.23 0.27	0.36 0.44	0.48 0.58	0.74 0.89	0.84 1.01	0.96 1.16	1.36 1.63	1.93 2.31	2.36 2.83	2.77 3.32	3.65 4.48
		-35℃	0.15 0.18	0.22 0.27	0.33 0.39	0.48 0.58	0.57 0.68	0.65 0.78	0.92 1.10	1.34 1.61	1.62 1.94	2.37 2.85	3.06 3.67
	管径 Inlet/ outlet pipe	Inch	1"	1"	1"	1"	1-1/2"	1-1/2"	2"	2"	2-1/2"	2-1/2"	3"
输入功率Input power		KW	3	4.5	5.25	6.75	8.6	10.1	12.8	4.56	21	26.5	34
最大运行电流Max Current		A	7.5	11	13	16.5	21	25	31	42	51	64	83
电源Power source			3PH～380V/415V/480V～50HZ/60HZ(3PH～200V/220V 50HZ/60HZ)										
冷媒 Refrigerant	名称Type		R22(R404A/R507)										
	控制方式Control		外平衡热力膨胀阀Thermostatic expansion valve										
压缩机 Compressor	类型Type		全封闭涡旋式（活塞式）Hermetic scroll (Piston)										
	功率Power(KW)	KW	2.25	3.75	4.5	6	7.5	9	11.3	7.5*2	9.4*2	11.3*2	30
水泵 Water pump	功率Power	(KW)	0.75	0.75	0.75	0.75	1.1	1.1	1.5	2.2	2.2	4	4
	最高扬程Max lift	m	18	18	18	18	20	20	20	20	20	25	20
安全保护Safety protection			压缩机过热保护，过流保护，高低压保护，超温保护，流量保护，电器相序/缺相保护，低液位保护，防冻保护等 Compressor inner protection, over current protection, high/low pressure protection, over temperature protection, flow rate protection, phase sequence/phase missing protection, low level coolant protection, anti freezing protection										
外形尺寸 Dimension	长Length	mm	910	910	910	1250	1250	1250	1600	1600	1950	1950	2000
	宽Width	mm	480	480	480	680	680	680	750	750	850	850	980
	高Height	mm	1000	1000	1000	1380	1380	1380	1600	1600	1700	1700	1700
机组净重Net weight（KG）		Kg	130	150	180	230	260	330	420	460	680	720	870

备注Note:

以上参数依据下列工况设计The above specifications are according to the following design conditions:

1, 冷冻水进出水温差3℃/8℃.Chilled water inlet/outlet temperature difference 3℃/8℃.

2, 冷凝温度40℃.condensing temperature 40℃.

规格性能因产品改良有所改动恕不另行通知。We reserve the right to modify the specification without further notice.

TopChiller 风冷式低温螺杆冷水机优点：

风冷式低温螺杆冷水机是针对冷冻、冷藏及工业冷却等需低温处理的生产工艺，自行开发设计、生产的系列产品。适用范围：电镀、电子、真空、化工、医疗、冶金、建筑、食品加工、冷藏及各种特殊低温要求的工业、商业冷却系统。

- 型号齐全，冷冻水出水温度范围为 -30℃～ 0℃，满足不同冷量、温度需求的使用场所。
- 投资少：模块式设计，减少初投资和设备后期维护保养费。
- 智能：用智慧型微电脑触摸屏控制系统，提供最周到的服务与最简易的维修资讯，并可接驳用户中央控制系统，全方位监控机组运行。
- 高效：螺杆压缩机匹配优质冷凝器与蒸发器。所有产品通过国家级检测系统测试，符合国家标准。
- 安全：具备机组运行安全保护措施，保证机组运行及客户使用安全。
- 可靠：机组提供多项保护装置，性能稳定、噪音低、使用寿命长。

Advantages:

Air cooled glycol screw chiller is widely adopted in manufacturing process for industries such as non-ferrous smelting, chemical and pharmaceutical, food and beverage, etc.

Water temperature range -30°C to 0°C.

Semi-hermetic screw compressor. 4 grade capacity control, 25%-50%-75%-100%.

Shell and tube evaporator, high efficiency and cleanable (plate type heat exchanger available on request). Aluminum fin type condenser with adequate heat exchanging surface.

Refrigeration solenoid valve to protect compressor when stop.

Refrigerant sight glass to further monitor the refrigerant status in the system, so to check the unit running status.

Siemens PLC control, overall monitoring of unit running status.

Axial fan motor with independent motor support bracket.

Schneider electrical components. Danfoss/Emerson thermal components.

Unit Safety Protection:

Compressor internal protection, Over current protection, High/low pressure protection, High discharge temperature alarm, Over temperature protection, Flow switch, Phase sequence/phase missing protection, Anti freezing protection.

风冷低温螺杆冷水机参数表Air Cooled Glycol Screw Chiller Specifications

项目Item / 型号Model				TPAS-40ASL	TPAS-50ASL	TPAS-60ASL	TPAS-70ASL	TPAS-80ASL	TPAS-90ASL	TPAS-100ASL	TPAS-120ASL	TPAS-140ASL
名义制冷量 Cooling capacity	Temp	-10℃	KW	64	85	92	112	123	146	168	201	239
		-20℃		43	56	61	75	82	97	112	133	159
		-30℃		32	42	45	56	61	72	83	100	118
输入功率Input power			KW	43.6	53.2	59.8	71.8	77.8	89.2	101.4	121.4	142.6
最大运行电流Max Current			A	75	95	103	125	135	151	173	211	246
电源Power source				3PH～380V/415V/480V～50HZ/60HZ(3PH～200V/220V 50HZ/60HZ)								
冷媒 Refrigerant	名称Type			R22/R404A								
	充注量Charge		kg	31	39	47	54	62	70	77	93	109
	控制方式Control			外平衡热力膨胀阀Thermostatic expansion valve								
压缩机 Compressor	类型Type			半封闭螺杆Semi-hermetic screw								
	功率Power		KW	40	50	55	67	73	82	95	115	133
	启动方式Start mode			Y-△								
	能量调节 Capacity control		%	0-25-50-75-100								
蒸发器 Evaporator	类型Type	温度Temp		壳管式（不锈钢板式）Shell and tube (SS plate heat exchanger)								
	冷冻水 Chilled water	-10℃	m^3/h	11	14.6	15.8	19.3	21.2	25.1	28.9	34.6	41.4
		-20℃		7.4	9.6	10.5	12.9	14.1	16.7	19.3	22.9	27.3
		-30℃		5.5	7.2	7.7	9.6	10.5	12.4	14.3	17.2	20.3
	压力Water pressure		KPa	32	35	38	42	42	45	43	43	41
	管径Pipe connection		Inch	3"	3"	4"	4"	4"	4"	4"	5"	5"
冷凝器 Condenser	类型Type			空气冷却式高效内螺纹铜管套铝翅片 Air cooled type high efficiency finned cooper tube								
风扇Fan	类型Type		m^3/h	大风量低噪音外转子风机Big volume & low noise axil fan								
	功率Power		KW	1.1x6	0.78x8	1.1x8	1.1x10	1.1x12	1.1x12	1.1x16	1.1x16	1.1x20
	风量Air volume		m^3/h	80000	100000	116000	145000	165000	180000	205000	242000	285000
安全保护装置 Safety protection devices				压缩机过热保护，过流保护，高低压保护，超温保护，流量保护，电器相序/缺相保护，低液位保护，防冻保护等. Compressor inner protection, over current protection, high/low pressure protection, over temperature protection, flow rate protection, phase sequence/phase missing protection, low level coolant protection, anti freezing protection, exhaust overheat protection.								
外形尺寸 Dimension	长Length		mm	2350	2600	2600	2650	2650	3400	3400	3800	4800
	宽Width		mm	1350	1500	1500	1900	1900	1700	1700	1900	1900
	高Height		mm	2000	2100	2100	2200	2200	2200	2200	2200	2200
机组净重Net weight			kg	1350	1650	1950	2250	2400	2600	2860	3000	3250
运行重量Running weight			kg	1550	1890	2250	2580	2750	3000	3300	3450	3700

备注Note:

以上参数依据下列工况设计The above specifications are according to the following design conditions:

1, 冷冻水进出水温差3℃/8℃.Chilled water inlet/outlet temperature difference 3℃/8℃.

2, 冷却风进出风温度30℃/38℃.Cooling air inlet/outlet temperature 30℃/38℃

规格性能因产品改良有所改动恕不另行通知。We reserve the right to modify the specification without further notice.

TopChiller 水冷式低温螺杆冷水机优点：

水冷式低温螺杆冷水机是针对冷冻、冷藏及工业冷却等需低温处理的生产工艺自行开发设计、生产的系列产品。适用范围：电镀、电子、真空、化工、医疗、冶金、建筑、食品加工、冷藏及各种特殊低温要求的工业、商业冷却系统。

- 型号齐全，冷冻水出水温度范围为 -30℃～ 0℃，满足不同冷量、温度需求的使用场所。
- 智能：用智慧型微电脑触摸屏控制系统，提供最周到的服务与最简易的维修资讯，并可接驳用户中央控制系统，全方位监控机组运行。
- 高效：螺杆压缩机匹配优质冷凝器与蒸发器。所有产品通过国家级检测系统测试，符合国家标准。
- 安全：具备机组运行安全保护措施，保证机组运行及客户使用安全；机组提供多项保护装置，性能稳定、噪音低、使用寿命长。

Advantages:

Water cooled screw glycol chillers features top brand semi-hermetic screw compressor such as Germany Bitzer & Taiwan Hanbell brand. Same as other water chillers with screw compressor, water cooled screw glycol chillers are also equipped with Siemens PLC and 10-inch touch screen, 4-grade capacity control for minimizing compact to electricity grid.l Minimum cooling water temperature -30℃ .

Bitzer/Hanbell semi-hermetic screw compressor, 4 grade capacity control to minimize the impact to power network

Danfoss/Alco thermal components.

Schneider electricity parts, Siemens programable logic controller.

10 inch touch screen user-friendly interface.

Uniquely designed shell and tube condensers.

Rationally structured shell and tube evaporator, avoid blockage to the maximum.

Reserved port for chilled water pump control.

Optional Features:

Complete corrosion resistance water loop for bine coolant application.

Remote control for distance operation.

Central integrated control for multi-units.

Plate type evaporator and condenser to get more compact unit size(only recommend for high water quality application)

Flooded shell and tube evaporator.

水冷低温螺杆冷水机参数表Water Cooled Glycol Screw Chiller Specifications

项目Item / 型号Model				TPWS-40WSL	TPWS-50WSL	TPWS-60WSL	TPWS-70WSL	TPWS-80WSL	TPWS-90WSL	TPWS-100WSL	TPWS-120WSL
名义制冷量 Cooling capacity	Temp	-10℃	KW	72	93.8	102	124	136	161	186	222
		-20℃		48	63	69	84	92	108	125	149
		-30℃		29.5	41.3	49	60	66	78	90	107
输入功率Input power			KW	30	38	42	51	56	63	73	88
最大运行电流Max Current			A	91	121	128	153	171	193	220	268
电源Power source				3PH～380V/415V/480V～50HZ/60HZ(3PH～200V/220V 50HZ/60HZ)							
冷媒 Refrigerant	名称Type			R22/R404A							
	充注量Charge		kg	28	36	43	50	58	65	72	86
	控制方式Control			外平衡热力膨胀阀Thermostatic expansion valve							
压缩机 Compressor	类型Type			半封闭螺杆Semi-hermetic screw							
	功率Power		KW	30	38	42	51	56	63	73	88
	启动方式Start mode			Y-△							
	能量调节 Capacity control		%	0-25-50-75-100							
蒸发器 Evaporator	类型Type	温度Temp		壳管式（不锈钢板式）Shell and tube (SS plate heat exchanger)							
	冷冻水 Chilled water	-10℃	m^3/h	12.4	16.1	17.5	21.3	23.4	27.7	32	38.2
		-20℃		8.3	10.8	11.9	14.4	15.8	18.6	21.5	25.6
		-30℃		5.1	7.1	8.4	10.3	11.3	13.4	15.5	18.4
	压力Water pressure		KPa	32	35	38	42	42	45	40	43
	管径Pipe connection		Inch	3"	3"	3"	3"	4"	4"	4"	5"
冷凝器 Condenser	类型Type			壳管式Shell and tube							
	冷却水量Cooling water		m^3/h	25	32.3	35.5	43.3	47.5	60	65	77
	压力Water pressure		KPa	42	42	45	43	43	45	48	46
	管径Pipe connection		Inch	3"	3"	3"	3"	4"	4"	4"	5"
安全保护 Protection				压缩机过热保护, 过流保护, 高低压力保护, 超温保护, 流量保护, 相序/缺相保护, 低液位保护, 防冻保护, 排气过热保护,水流开关等 Inner thermostat for compressor motor, unit overload relay,high and low pressure switch, freeze protection thermostat, reverse phase protection relay, discharge gas thermostat, flow switch.							
外形尺寸 Dimension	长Length		mm	2500	2550	2600	2750	2800	2800	2900	3000
	宽Width		mm	780	780	780	780	950	950	950	1200
	高Height		mm	1650	1650	1650	1650	1800	1950	1950	1580
机组净重Net weight			kg	920	1100	1250	1600	1850	1900	2100	2550
运行重量Running weight			kg	1050	1260	1430	1850	2150	2200	2400	2750

备注Note:

以上参数依据下列工况设计：The above specifications are according to the following design conditions:

冷冻水进出水温差3℃/8℃。Chilled water inlet/outlet temperature difference 3℃/8℃.

规格性能因产品改良有所改动恕不另行通知。We reserve the right to modify the specification without further notice.

TopChiller 行业专用不锈钢冷水机是针对精密实验设备、激光行业、半导体行业、MRI 核磁共振、焊接行业的特点和要求而设计制造的专用制冷机组。

- 规格型号多样，适合不同功率的精密设备的配套使用。
- 主机精选美日全新进口名牌压缩机，内置安全保护，噪音低，稳定耐用。
- 电气部分均为法国施耐德原厂产品，保证机器工作稳定，寿命长久。
- PID 数显温控，能精确控制水温于 ±1℃，全功能防错操作系统，并可选用远程控制。
- 316# 不锈钢水箱蒸发器和不锈钢水泵，防止纯水在输送过程中产生固体和其属杂质，内置自动补水装置，清洗维护方便快捷。
- 运行安全、可靠性高，高 / 低温和流量双重保护，设置流量保护开关，当水泵发生故障或水流量过少时自动开启保护装置。
- 安装简便，无论冷水机与主机高度是否匹配，均可正常开机使用。
- 静电喷塑外壳，美观大方，外表板采用快速拆装方式，自带刹车脚轮方便使用和维护。

Welding / Laser / Lab / MRI chiller is mainly applied for laser process machine, welding machine, LED industry, lab testing, medical CT and MRI system etc., for maintaining required temperature of processing equipment, so to ensure normal running.

Advantages:

Large volume 316# SS water storage tank and SS coil evaporator.

Built-in high pressure stainless steel chilled water pump, ensuring water quality and pressure.

Well-known brand exhaust fan with large volume, excellent heat dissipation and low noise.

Precision filtering device can be offered upon request, including particulate matter filtration and deionizer, ensuring high cooling water quality, extending chiller's service life.

Multi-protection devices: Flow switch, water pressure switch, acoustic and optical alarm system with romote control

Protection signal output: Water flow alarm signal output, water level alarm signal output, temperature protection alarm signal output, ensuring chiller running safely.

行业专用不锈钢冷水机 Welding / Laser / Lab / MRI Chiller Technical Specifications

项目Item	型号Model	AC-0.5AS	AC-1AS	AC-1.5AS	AC-2AS	AC-2.5AS	AC-3AS	AC-4AS	AC-5AS	AC-6AS	AC-8AS	AC-10AS	AC-12AS	AC-15AS
名义制冷量 Cooling capacity	Kcal/h 50HZ/60HZ	1419	2451	3182	4833	5848	7181	9288	11988	14534	18576	23994	29068	38270
		1703	2941	3784	5800	7018	8617	11146	14386	17441	22291	28793	34882	45924
	KW 50HZ/60HZ	1.65	2.85	3.7	5.62	6.8	8.35	10.8	13.94	16.9	21.6	27.9	33.8	44.5
		1.98	3.42	4.4	6.74	8.2	10.02	12.96	16.73	20.28	25.92	33.48	40.56	53.4
输入功率 Input power	KW	0.88	1.35	2	2.25	2.66	3.27	4.07	5.75	6.45	8.25	11.5	12.9	17.45
最大运行电流 Max Current	A	5.4	8.2	12	13.6	6.6	8.2	10.1	13.8	15.5	20	27.9	31.3	42.4
电源Power source		1PH~220V/3PH~220V/380V 50HZ/60HZ					3PH～380V/415V/480V～50HZ/60HZ(3PH～200V/220V 50HZ/60HZ)							
冷媒 Refrigerant	名称Type	R22/R407C/134a/404A/410A												
	控制Control	毛细管Capillary/外平衡热力膨胀阀Thermostatic expansion valve												
压缩机 Compressor	类型Type	全封闭活塞式Hermetic Rotary					全封闭涡旋式（活塞式）Hermetic scroll (Piston)							
	功率 Power(KW)	0.45	0.89	1.3	1.73	2.1	2.7	3.5	4.55	5.25	3.5×2	4.55×2	5.25×2	7×2
冷凝器 Condenser	类型Type	高效紫铜铜管套铝翅片式+低噪音外转子风机 Efficient finned copper tube with aluminum+Low noise external rotor fan												
	冷却风量 Air flow (m^3/h)	750	1000	1500	2000	2500	3000	4000	5000	6000	8000	10000	12000	15000
	风扇功率 Air blower	0.06	0.09	0.15	0.15	0.19	0.14×2	0.14×2	0.19×2	0.19×2	0.25×2	0.45×2	0.45×2	0.6×2
蒸发器 Evaporator	类型Type	不锈钢盘管/壳管式/不锈钢板式换热器 SS Tank coil/ Shell and tube type/Plate type heat exchanger												
	冷冻水量(m^3/h) Chilled water	0.28	0.49	0.64	0.97	1.12	1.44	1.86	2.4	2.91	3.71	4.8	5.81	7.65
		0.34	0.59	0.76	1.16	1.4	1.72	2.23	2.88	3.49	4.46	5.76	7	9.18
	水箱 Water tank(L)	10.6	18.3	27	27	50	50	60	60	110	120	200	200	270
	进出水管径(inch) Inlet/outlet pipe	1/2"	1/2"	1/2"	1/2"	1"	1"	1"	1"	1"	1-1/2"	2"	2"	2"
水泵 Water pump	功率 Power(kw)	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.75	0.75	0.75	1.5	1.5	2.2
	最高扬程 Max lift(m)	22	22	22	22	22	22	22	30	30	25	25	25	28
	最大流量 Max flow (m^3)	5.4	5.4	5.4	5.4	5.4	5.4	5.4	8.1	8.1	8.1	13.5	13.5	25.2
安全保护 Safety protection		压缩机过热保护，过流保护，高低压保护，超温保护，流量保护，电器相序/缺相保护，低液位保护，防冻保护等. Compressor inner protection, over current protection, high/low pressure protection, over temperature protection, flow rate protection, phase sequence/phase missing protection, low level coolant protection, anti freezing protection, exhaust overheat protection.												
外形尺寸 Dimension	长Length (mm)	550	550	600	600	720	980	980	1150	1150	1350	1500	1500	1860
	宽Width (mm)	350	450	500	500	550	520	520	560	560	680	760	760	850
	高Height (mm)	695	845	985	985	1350	1170	1170	1215	1215	1530	1660	1660	1900
机组净重Net weight（KG）		45	62	85	95	125	152	175	185	215	283	345	382	580

备注Note:

以上参数依据下列工况设计The above specifications are according to the following design conditions:

1, 冷冻水进出水温度12℃/7℃.Chilled water inlet/outlet temperature 12℃/7℃.

2, 冷却风进出温度33℃/38℃.Cooling air inlet/outlet temperature 33℃/38℃.

规格性能因产品改良有所改动恕不另行通知。We reserve the right to modify the specification without further notice.

TopChiller 工业冷油机应用范围及优点：

CNC 机床的机械主轴、低速电主轴、油压机及各类机械设备的液压站、润滑站。

- 放电加工设备的加工液冷却；减速箱的润滑及冷却系统。
- 控制系统采用液晶中英文转换电脑控制器，操作简单、直观、故障点能直接中英文显示。
- 具有“固定温度”和“室温同调”两种控制方式，用户根据实际需要任意选择。
- 具有多种保护功能并提供远程报警端子，将故障信号反馈给机床的 CNC 数控系统。
- 提供机外启动端子，易于实现机床与冷油机的联动控制；提供 RS485 通讯接口，可实现与主机的通讯。
- 防止 CNC 机床的主轴因油温变化而影响加工精度和主轴中心偏移或热变形，稳定机床精度和延长机床使用寿命；防止油温过高。

Oil Cooling Chillers designed to provide precise and accurate temperature control of industrial lubrication oils and hydraulic cutting fluids for a wide variety of industrial applications, with cooling capacities from 0.98kW to 21kW.

Extremely compact and easy to use,TopChiller is designed for safe and reliable operation in the most varied working conditions, providing precise and accurate control of hydraulic oil/cutting fluid temperature.

This Oil Chiller can be widely used for some typical industrial applications like Machine tools, Cutting machines, Plastic injection moulding machines, Other processes with hydraulic oil circuits

Advantages:

Hydraulic circuit composed of stainless steel components and stainless steel plate evaporator to prevent oil contamination.

Completely configurable with many options and kits to fit the needs of a wide variety of industrial applications

Maximum ambient temperature up to 48° C on standard units, tropicalization up to 53° C

Compact design provides a space saving and easy to install solution

High reliability and low energy consumption

工业冷油机技术参数表 Industrial Oil Chiller Technical Specifications

项目Item / 型号 Model			TP-0.2AO	TP-0.5AO	TP-0.8AO	TP-1AO	TP-1.5AO	TP-2AO	TP-3AO	TP-4AO	TP-5AO	TP-6AO
名义制冷量 Cooling capacity	Kcal/h 50HZ/60HZ		843	1419	1703	2451	3139	4859	7568	9890	12470	14448
			1011	1703	2043	2941	3767	5831	9082	11868	14964	17338
	KW 50HZ/60HZ		0.98	1.65	1.98	2.85	3.65	5.65	8.8	11.5	14.5	16.8
			1.2	2	2.4	3.4	4.4	6.8	10.6	13.8	17.4	20.2
输入功率 Input power	KW		0.64	0.84	1	1.39	1.72	2.65	3.68	5.93	7.2	9.4
电源Power source			3PH~220V/380V/415V/480V~50HZ/60HZ									
冷媒 Refrigerant	名称Type		R22/R407C/R134a/R404A/R410A									
	控制Control		毛细管Capillary/外平衡热力膨胀阀Thermostatic expansion valve									
压缩机 Compressor	类型Type		全封闭涡旋式（活塞式）Hermetic scroll (Piston)									
	功率Power(KW)		0.4	0.55	0.68	0.89	1.2	1.75	2.7	3.5	4.55	5.25
冷凝器 Condenser	类型Type		高效紫铜铜管套铝翅片式+外转子风机 Efficient finned copper tube with aluminum+Low noise air blower									
	风扇功率 Air blower（KW）		0.05	0.1	0.13	0.13	0.15	0.15	0.23	0.23	0.42	0.42
蒸发器 Evaporator	类型Type		不锈钢盘管/壳管式/不锈钢板式换热器 SS Tank coil/ Shell and tube type/Plate type heat exchanger									
	管径(inch) Pipe connection		1/4"	1/2"	1/2"	3/4"	3/4"	3/4"	1"	1"	1-1/4"	1-1/4"
油泵 Oil Pump	功率 Power(KW)		0.19	0.19	0.19	0.37	0.37	0.75	0.75	2.2	2.2	3.75
	流量Flow(m^3/h)		0.24	0.33	0.33	1.2	1.5	2.4	2.4	3.9	4.5	5.4
压力 Pressure	kgf/cm^2,max		3									
油粘度范围 Oil viscosity range			液压油 润滑油0.5-300 CST Hydraulic oil, lubricating oil0.5-300 CST									
油箱Oil tank	L		8	18	18	22	22	33	38	95	95	95
安全保护 Safety devices			压缩机过热保护，过流保护，高低压保护，超温保护，流量保护，电器相序/缺相保护等 Compressor inner protection, over current protection, high/low pressure protection, over temperature protection, phase sequence/phase missing protection,anti freezing protection, exhaust overheat protection.									
尺寸 Dimension	带油箱 With tank	长 L(mm)	460	460	460	570	570	620	620	850	850	950
		宽 W(mm)	325	325	325	430	430	600	635	800	800	800
		高 H(mm)	680	920	1050	1200	1200	1280	1420	1450	1450	1620
	不带油箱 Without tank	长 L(mm)	460	460	460	570	570	620	620	850	850	950
		宽 W(mm)	325	325	325	430	430	600	635	800	800	800
		高 H(mm)	680	720	850	1010	1010	1090	1230	1250	1250	1450
重量 Weight(KG)	带油箱 With tank		38	55	75	92	95	145	165	235	243	276
	不带油箱 Without tank		36	51	68	76	79	132	153	210	223	245

备注Note:

以上参数依据下列工况设计The above specifications are according to the following design conditions:

1, 冷冻油进出温度20℃/45℃.Chilled oil inlet/outlet temperature 20℃/45℃.

2, 冷却风进出温度30℃/40℃.Cooling air inlet/outlet temperature 30℃/40℃.

规格性能因产品改良有所改动恕不另行通知。We reserve the right to modify the specification without further notice.

TopChiller TP-MT 系列模具控温机广泛应用于塑胶成型、导光板、密炼、压铸、化工、橡胶轮胎、反应釜、粘合等行业。根据运行介质的不同可分为：运油式模温机、运水式模温机。

产品性能优点：

- 采用全数字 P.I.D. 分段式控温系统，在任何操作状态下均可维持稳定的模具温度，控温精度达到 ±0.5℃。
- 采用高效率高温泵浦，能适用于精密模具及小直径模具回路中的控温需求，实现精密控温和高效率热交换。
- 配置电源逆相保护、泵浦过载保护、超温保护、低液位保护等多项安全装置，当发生故障时，本机可自动侦测到异常，并有指示灯显示异常状况。
- 不锈钢一体成型，减少管阻及锈垢，管损小；电热部分选用进口加热装置，加热均匀。
- 完善的全自动控制系统，以及全自动检测异常显示装置，达到全功能防错效果。

Water/Oil Temperature Controller

Applications

TopChiller brand MTC is mainly employed to reduce Mold Pre-heating time, control mold temperature, prevent flow marks, or other undesirable phenomena on the molded surface, control constant temperature

Plastic & Rubber Industry, Die casting industry: Zinc, Aluminum, and Magnesium

Advantages:

Microcomputer system adopted, PID auto-temperature controller, capable of controlling temperature within ±1ºC.

Stainless steel heating barrel equipped, features fast heating and cooling, easy for cleaning.

High temperature pump with high efficiency adopted, features high pressure, big flow, low noise and high stability.

Compact, rugged and powder coated cabinet with elegant appearance, quick release side panels provides easy maintenance.

Equipped with alarm and Multi fault indicators, while fault happened, the alarm will be sound automatically, fault code showed, customer will know the fault and reason at the first time, and hand in time, which is to guarantee system running safely.

Equipped with phase-sequence protective device, short current protective device, liquid level protective device, electronic time relay, etc.

TP-MT运水运油式自动模具控温机技术参数
TP-MT Water/Oil Mould Temperature Controller Unit

项目Item / 型号Model			TP-6MT	TP-9MT	TP-12MT	TP-9MT	TP-12MT	TP-24MT	TP-9MT	TP-12MT	TP-24MT
传热媒体Heat transfer			水Water/油Oil								
温控范围Temperature		℃	30～120～200			30～150～300			30～180～350		
温控精度Stability			PID±1℃								
加热能量Heat power		KW	6	9	12	9	12	24	9	12	24
电　源 Power		Volt	3PH～380V/415V/480V～50HZ/60HZ(3PH～200V/220V　50HZ/60HZ)								
泵浦 Pump	功率 Power	KW	0.37	0.75	1.5	0.75	1.5	2.2	0.75	1.5	2.2
	最大流量 Flow rate	L/min	35	60	200	95	153	235	95	153	235
	最大压力 Pressure	kg/cm^2	3.5	4	4	6	6	6	12	12	12
最大能耗Consumption		KW	7	10	11	10	14	26	12	14	26
安全保护Protection			错、缺相/缺水油/超压/过载/欠压等 Phase wrong,missing/water oil lacking/over and low pressure/overload								
冷却方式 Mode			直接冷却 Direct			间接冷却 Indirect					
配管直径 Diameter	循环管 Inlet	Inch	3/8×2	3/8×4	3/8×4	3/8×4	3/8×4	3/8×4	3/8×4	3/8×4	3/8×4
	冷却管Outlet	Inch	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
外形尺寸 Dimension	长L	mm	625	625	625	1100	1100	1100	1100	1100	1100
	宽W		325	325	325	440	440	550	550	550	600
	高H		580	580	580	1250	1250	1250	1250	1250	1400
机械重量Weight		kg	62	65	75	120	150	180	220	300	360

备注 Note:

水式模温机接驳自来水时水压要≥2kg/cm^2，如有特殊要求，请在定制时注意要求。

Water pressure should be bigger than 2kg/cm^2 ,while water type mold temperature controller connectedto the tap water.

规格性能因产品改良有所改动恕不另行通知。We reserve the right to modify the specification without further notice.

TopChiller 冷热两用一体控温机

TopChiller TP-CH 系列冷热两用控温机广泛应用于塑胶、挤出、注塑、发泡机械，医药、化工行业，能急速加温，急速冷却设备所需温度，并能控制多个面路不同温度，快速循环于产品成型过程的周围，大大提高生产效率。

机组优点：

- 体积小、重量轻、安装容易、操作简单。
- 可根据生产所需提供冷却循环水给设备冷却或者提供热水进行升温，同时可将温度恒定在 ±1℃。
- 大功率加热装置一键操作，转换方便，升降温快。
- 主机精选国际全进口品牌压缩机，如美国产丹佛斯、日本三洋、松下、美国谷轮等，内置安全保护、低噪音、高稳定性、使用寿命长。
- 不锈钢开放式水箱，清洗维护方便、坚固耐用。
- 保护措施齐全，智能故障指示，蜂鸣报警，自动化程度高，无需专人操作。

TopChiller TP-CH series cooling and heating chiller, with dual function for offering hot and cold water , is widely used in Plastic products cooling, injection molding machine, extrusion, Foam equipment, Pharmaceutical and chemical industries.

This unit can rush to the cold water temperature to make sure the high production efficiency.

Advantages:

Compact design, light weight and easy for operation.

Offering hot water to increase the temperature or cold water to decrease the temperature according to the production demand and temperature can be kept at the set point with variation+/-1C, easy to operate, fast to increase and decrease temperature.

Original America and Japan brand compressor, featuring built-in safety protection, low noise and long service life.

Original SCHNEIDER brand electric components.

Open type storage tank equipped, easy for cleaning and maintenance.

Complete protection measures, intelligent fault indicator and alarm.

Elegant design, with rubber caster, easy for operation and maintenance.

R22 charged, CFC free R407C, R410A, R404A, R134A for option.

TP-CH 冷热两用一体机参数表 TP-CH Cooling And Heating Chiller

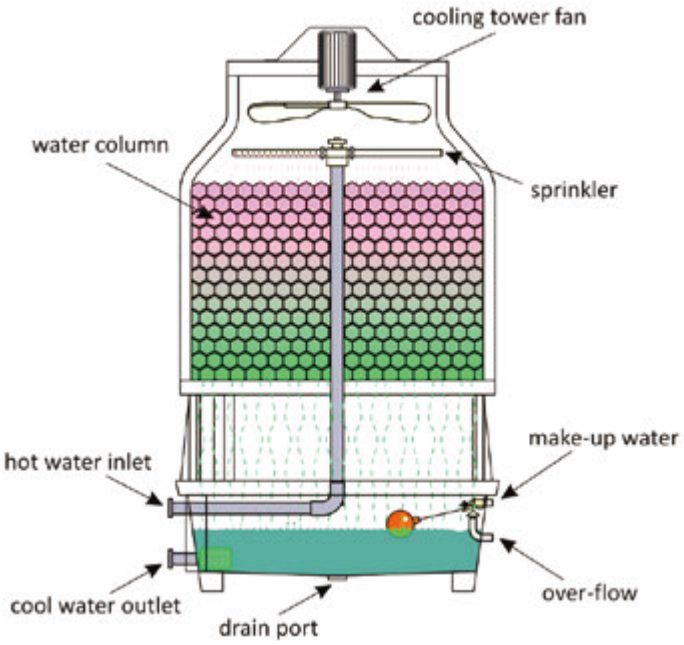
项目 Item / 型号Model		TP-3CH	TP-4CH	TP-5CH	TP-6CH	TP-8CH	TP-10CH	TP-12CH	TP-15CH	TP-15CH	TP-20CH
名义制冷量 Cooling capacity	Kcal/h 50HZ/60HZ	7181	9288	11988	14534	18576	23994	29068	38270	36120	49966
		8617	11146	14386	17441	22291	28793	34882	45924	43344	59959
	KW 50HZ/60HZ	8.35	10.8	13.94	16.9	21.6	27.9	33.8	44.5	42	58.1
		10.02	12.96	16.73	20.28	25.92	33.48	40.56	53.4	50.4	69.72
输入总功率 Input power	KW	12.27	13.07	17.75	18.45	23.25	29.5	30.9	41.45	41.1	51.73
最大运行电流 Max Current	A	21.2	23.1	33.8	35.5	47	61	64	86	87	107
电 源 Power supply		3PH～380V/415V/480V～50HZ/60HZ(3PH～200V/220V 50HZ/60HZ)									
冷媒 Refrigerant	名称 Type	R22/R407C/134a/404A/410A									
	控制方式 Control	毛细管/外平衡式热力膨胀阀 Capillary/Thermostatic expansion valve									
压缩机 Compressor	类型Type	全封闭涡旋式(活塞式) Hermetic scroll									
	功率 Power(KW)	2.7	3.5	4.55	5.25	3.5×2	4.55×2	5.25×2	7×2	4.55×3	8.96×2
冷凝器 Condenser	类型Type	高效紫铜管套铝翅片式+低噪音外转子风机 Finned coil + Low noise axil fan									
	冷却风量 Air volume(m^3/h)	3000	4000	5000	6000	8000	10000	12000	15000	15000	20000
	风扇 Fan power（KW)	0.14×2	0.14×2	0.19×2	0.19×2	0.25×2	0.45×2	0.45×2	0.6×2	0.6×2	0.78×2
蒸发器 Evaporator	类型 Type	水箱盘管/干式壳管式/不锈钢板式蒸发器 Tank with cooper coil / Shell and tube									
	冷冻水量 Chilled water (m^3/h)	1.44	1.86	2.4	2.91	3.71	4.8	5.81	7.65	7.22	10
		1.72	2.23	2.88	3.49	4.46	5.76	7	9.18	8.67	11.99
	水箱容量 Tank(L)	50	60	60	110	120	200	200	270	270	350
	进出水管径 Pipe diameter(inch)	1"	1"	1"	1"	1-1/2"	2"	2"	2"	2"	2"
水泵 Water pump	功率Power(kw)	0.37	0.37	0.75	0.75	0.75	1.5	1.5	2.2	2.2	2.2
	最高扬程Lift(m)	22	22	30	30	25	25	25	28	28	28
	最大流量Flow(m^3/h)	5.4	5.4	8.1	8.1	8.1	13.5	13.5	25.2	25.2	25.2
加热功率 Heating	KW	9	9	12	12	15	18	18	24	24	30
安全保护 Protection		压缩机过热保护，过流保护，高低压保护，超温保护，流量保护，电器相序/缺相保护，低液位保护，防冻保护等. Compressor inner protection, over current protection, high/low pressure protection, over temperature protection, flow rate protection, phase sequence/phase missing protection, low level coolant protection, anti freezing protection, exhaust overheat protection.									
外形尺寸 Dimension	长L（mm）	980	980	1150	1150	1350	1500	1500	1860	1860	2020
	宽W（mm）	520	520	560	560	680	760	760	850	850	950
	高H（mm）	1170	1170	1215	1215	1530	1660	1660	1900	1900	2000
机械重量Weight	Kg	152	175	185	215	283	345	382	580	580	650

备注Note:

制冷量是依据：冷冻水进出水温度12℃/7℃.冷却进出风温度30℃/35℃

Cooling capacity based on inlet and outlet water temperature 12℃/7℃. Cooling air inlet/outlet temperature 30℃/38℃.

规格性能因产品改良有所改动恕不另行通知。We reserve the right to modify the specification without further notice.



TopChiller 冷却塔产品优点：

- 电机：选用世界名牌西门子全封闭超低噪音电机，该电机绝缘等级为 F 级，防护等级为 IP55，效率高、使用寿命长、耐高温、适应电压变化能力强，能充分保证冷却塔的使用寿命和运行效果。
- 风机：选用大弦孤、低转速、大风量、高强铝合金静音型风机是普通铝合金板的 6–7 倍，精度保持性能良好；同时也具有重量轻、效率高、节能、平衡好、震动小、安全稳定、使用寿命长等优点。
- 传动：所用轴承选用 NSK 或 NTN 标准轴承，使用寿命长，不易损坏；皮带选用日本三星防水防滑型皮带，强度高、耐磨损、寿命长。
- 玻璃钢：选用台湾进口优质玻璃纤维毡和树脂合成，其抗拉强度高，硬度大，使用寿命约为 30 年以上，比常规玻璃纤维布及树脂合成玻璃钢制品使用寿命约长 10 年。
- 填料：选用无色透明新生 PVC 胶片，该种胶片的特点是亲水性好、强度高、耐高温和低温、抗老化性好、使用寿命长、绝对阻燃，该 PVC 胶片在 70℃的热水中，30 分钟不会变形，在 58.5℃的热水中，长期不会变形，所以这种材料对于提高冷却效率，延长冷却塔寿命有很大的益处。填料具散热、导风、收水伞合一功能，既确保了填料制冷交换效果，又降低了飞水损失。
- 钢架: 采用国标优质角钢和槽钢等型材制成，强度高，耐久性好; 并且所有钢支架均经过严格的热浸镀锌处理，防腐效果好，延长冷却塔使用寿命，该防腐过程符合英国热标准 BS ENISO1461：1999 标准。

TopChiller Round Counter flow water cooling tower with water flow range: 6m³/h – 1250 m³/h and Cooling water temperature range: 85℃ ~30℃ .

This cooling tower adopts high quality PVC heat radiation films and the designed shape of films effectively prolongs the contact time between high temperature water and the cooling air, therefore the cooling effect is excellent.The tower chassis, featuring anti–corrosion, strong ability of resistance of vile weather and beautiful appearance made of high strength glassfiber, and its rotation part and connection area is made of high quality raw materials, that greatly improves the service life and connection strength.

TopChiller cooling tower: anti–corrosion, light–weight, small size, attractive and durable. Convenience to transport, install and maintain. Especially applicable to air conditioning, refrigeration, air compressor station, heating furnace, and condensation process and other cooling water circulation system.

标准型冷却塔参数 Water Cooling Tower Technical Specifiations

型号 Model	流量 (m^3/h) Flow rate	外形尺寸 Dimension		电动功率 (KW) Motor power	风机直径 (MM) Fan diameter	风量 (CMM) Air volume	水压 (KPA) Water pressure	重量 (Kg)Weight	
		最大直径 (Dmax)	高度 (Height)					自重Dry	运行重Wet
ST-8T	6.2	Ø945	1380	0.18	Ø525	70	13	42	180
ST-10T	7.8	Ø945	1530	0.18	Ø60	85	13	46	190
ST-15T	11.7	Ø1195	1415	0.37	Ø600	140	13	54	290
ST-20T	15.6	Ø1195	1590	0.55	Ø730	160	14	67	300
ST-25T	19.5	Ø1400	1820	0.75	Ø730	200	16	98	500
ST-30T	23.4	Ø1650	1705	0.75	Ø730	230	16	116	530
ST-40T	31.2	Ø1650	1775	1.5	Ø890	280	16	130	550
ST-50T	39.2	Ø1830	1835	1.5	Ø890	330	17	190	975
ST-60T	46.8	Ø2145	1955	1.5	Ø1150	420	17	240	1250
ST-80T	62.6	Ø2145	2035	1.5	Ø1150	450	18	260	1280
ST-100T	78.1	Ø2900	2370	2.2	Ø1410	700	21	500	1690
ST-125T	97.5	Ø2900	2555	2.2	Ø1410	830	23	540	1640
ST-150T	117	Ø2900	2555	2.2	Ø1410	950	23	580	1680
ST-175T	136.8	Ø3110	2850	4	Ø1750	1150	30	860	1960
ST-200T	156.2	Ø3110	2850	4	Ø1750	1250	30	880	1980

设计工况Design Conditions：

进水温度Inlet water temp.：t1=37°C

出水温度Outlet water temp.：t2=32°C

湿球温度Wet bulb temp.：twb=27°C

干球温度Dry bulb temp.：tdb=31.8°C

大气压力Atmospheric presssure P0=9.94*104pa

TopChiller 除了制造工业冷水机以外还是一家各种装配式冷库（冷藏保鲜、冷冻、速冻）的专业生产厂家，我司冷藏冷库产品已经广泛应用于超市、工业、外贸、水产、畜牧、铁道、部队、宾馆、饭店、食品加工等行业。

公司生产的 PU（聚氨脂）保温板、PU 冷库门、从剪板、折板、压筋、定型均采用专业流水线设备，发泡采用进口高压发泡机高压发泡成套工艺，大大提高了库板质量，库板板面有彩钢板、不锈钢板、压花铝板等各种板面，美观坚固、防腐耐用，并可根据用户要求定制各种规格尺寸冷库手动平移门、电动平移门、回归门、半埋门、自由门等，另提供各类库门专用五金锁具及各种国产和进口制冷机组、冷风机、数显电控柜、冷却塔、风幕机等制冷配件。

我司拥有专业的冷库设计和安装队伍，承接国内外各项装配式冷藏库、冷冻库、速冻库、气调库、保鲜库、超低温库并提供设计、生产、销售、安装、售后及维修等交钥匙工程服务。

Beside industrial water chiller, TopChiller is also a cold room and refrigeration unit designer, manufacturer and exporter dedicated in supplying finest quality cold room solutions to worldwide customers can store Meat, vegetables, fruits, dairy, drink, Medicine, Chemical, etc.

Widely used for hotels, hospitals, blood banks, poultry slaughter and processing, aquaculture and processing, mushroom cultivation, agricultural product processing, dairy production, pharmaceutical processing We have over 20 professional cold room experts Our innovative, high quality products and solutions include Cold Room, Freezer Room, Unit Cooler, Condensing Unit, Cold Room Door, PU Panel, etc. Our Cold Storage Room project with below Characters:

1.Dimensions: depend on your stroage capacity. From 500kg to 500T is available

2. Room Temp.: –30˚C to 5 ˚C

3. Refrigerant: R22/R404a

4. Thickness of panel: depend on your require or we design

5. refrigeration Unit: according to the temp. and the dimensions

6. Door : Swing door or Sliding door and bifold door is optional

7. Documents: complete documents such as instruction, operation manual, wire diagram, good list, certification.

The main equipments and materials:

- Refrigeration system:
  1. Compressor: Copeland, Bitzer.
  2. Condensing units: air cooler.
  3. Evaporator: air cooler.
  4. Coolant: R22 or R404a is available.
- PU Insulation panel, cold store panels:
  1. Material: polyurethane (PU), metal sheet.
  2. Density of PU: 35~42kg/m3.
  3. Metal sheet:according to requirements.
  4. Thickness of panel: 50mm,75mm,100mm,120mm,150mm,200mm.
- Cold store door, air curtain machine, lighting:
- Sliding door, manual opening and closing.
- When door is opened, the air curtain machine and lights in cold storage can be running automatically.

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技术支持 服务客户
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