

Official website: www.aodetcu.com

苏州奥德高端装备股份有限公司 (总部一厂区)
Suzhou AODE Precise Equipment Co., Ltd.
(Headquarter & Plant 1)

地址: 苏州昆山市高新区城北五联路228号
Add: NO.228 Wulan road, Chengbei, High-tech Zone, Kunshan
City, Jiangsu Province, China.
电话/Tel: +86-512-57885715
邮箱/E-mail: mkt@aodejx.com
海外业务电话/Overseas Business Contact: +86-18020208608

苏州奥德高端装备股份有限公司 锅炉事业部 (二厂区)
Boiler Business Division (Plant 2)
Suzhou AODE Precise Equipment Co., Ltd.

地址: 江苏省昆山市玉山镇玉杨路366号
Add: No.366 Yuyang Road, Yushan Town, Kunshan City, Jiangsu
Province, China.
电话/Tel: +86-512-36820166

苏州奥德高端装备股份有限公司 制冷事业部 (三厂区)
Refrigeration Business Division (Plant 3)
Suzhou AODE Precise Equipment Co., Ltd.

地址: 江苏省昆山市玉山镇勤昆路66号8号房
Add: Room 8, 66 Qinkun Road, Yushan Town, Kunshan City,
Jiangsu Province, China.
电话/Tel: +86-512-57885715

深圳市奥德机械有限公司
AODE Machinery (Shenzhen) Co., Ltd.

地址: 深圳市宝安区松岗镇东方大道田洋三路9号
Add: NO.9, Tianyang Three Road, Dongfang Avenue, Songgang
Town, Baoan District, Shenzhen city, Guangdong Province, China.
电话/Tel: +86-755-23116643

天津莱奥德机械有限公司
Tianjin Lai' AODE Machinery Co., Ltd.

地址: 天津市北辰区中关村可信产业园B2-3-2楼
Add: Floor B2-3-2, Zhongguancun Kexin Industrial Park, Beichen
District, Tianjin Municipality, China.
电话/Tel: +86-512-57885715

昆山奥兰克泵业制造有限公司
AULANK Pumps Manufacturing Co.,Ltd.

地址: 江苏省昆山市巴城镇东荣路151号1号厂房
Add: Plant 1 No.151 Dongrong Road, Bacheng Town, Kunshan
City, Jiangsu Province, China.
电话/Tel: +86-512-55193403



Official Accounts

Video number

YouTube

Tik tok



AODE 奥德

FOCUS ON SOPHISTICATED
INDUSTRIAL
TEMPERATURE CONTROL

VERSION 202410



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TEMPERATURE CONTROL



20 YEARS+
ACCUMULATION

50000m²+
PRODUCTION AREA

11000+
CUSTOMER CASES

10000+
PRODUCTION CAPACITY

306+
PATENTS



ABOUT AODE

Founded in Shenzhen in 2004 and established its headquarters in Suzhou in 2007, AODE has been focusing on the industrial temperature control field and is a temperature control equipment manufacturer integrating R&D, production and sales. After 20 years of innovative development and precipitation, AODE products from a single heating series development to heating, cooling, cooling and heating in one and centralised cooling, centralised heating of a full range of product matrix, with different industries to provide diversified, customised temperature control product solutions. At present, there are 5 production bases in East China and South China, and sales and service centres in Tianjin, Chongqing and Qingdao. So far, AODE has successfully provided more than 11,000 enterprises with efficient and stable temperature control product services, and set up a benchmark in the industry.



-120[°]C
+400[°]C

FULL RANGE OF PRODUCTS TO MEET THE NEEDS OF DIFFERENT APPLICATION SCENARIOS

MOULD TEMPERATURE MACHINE SERIES

Main products: oil temperature machine, water temperature machine, 320 °C die-casting mould temperature machine, 200 °C high-temperature water temperature machine, 400 °C ultra-high-temperature oil temperature machine, rapid cooling and rapid heating of high-gloss mould temperature machine, electrically heated organic heat carrier furnace.



CHILLER SERIES

Main products: air-cooled/water-cooled chiller, air-cooled chiller/oil chiller, air-cooled/water-cooled screw chiller, water-cooled screw low-temperature chiller, evaporative cooled screw chiller, -120°C compound stacked ultra-low-temperature machine and so on.



HIGH AND LOW TEMPERATURE SERIES

Main products: High and low temperature integrated intelligent control machine, applications: semiconductor, automotive parts testing, chemical and pharmaceutical.



POINT COLD SERIES

Main products: high-pressure point cooler, multi-channel high-temperature water heater, mould cooling station, mould cooler, mould temperature control monitoring system, die-casting workshop whole plant water supply temperature control system, integrated control system, etc.



CUSTOM STANDARD + CUSTOMISED

BOILER SERIES

Main products: fuel oil (gas) organic heat carrier boiler, fuel oil (gas) steam boiler, fuel oil (gas) hot water boiler, electrically heated organic heat carrier boiler and so on.



PUMP SERIES

Main products: high and low temperature magnetic drive centrifugal pumps, high and low temperature magnetic drive vortex pumps, high-pressure vane pumps, precision vortex pumps, non-leakage vertical pumps, high-flow centrifugal pumps, stainless steel centrifugal pumps, chemical pumps and so on.



HIGH PRECISION OF TEMPERATURE CONTROL

The temperature control precision of the product can reach $\pm 0.1^{\circ}\text{C}$, which is at the leading level of the same industry in China, breaking the temperature control technology blockade of Europe and the United States in the field of optical lens.

WIDE RANGE OF TEMPERATURE CONTROL

The temperature control range of industrial temperature control equipment is between -120°C and +400°C, and the temperature resistance range of high and low temperature pump is between -196 °C and +400°C.

FAST RATE OF TEMPERATURE CONTROL

AODE's self-developed "water/oil hot and cold rapid switching technology" can achieve rapid cooling and heating automatic switching temperature control, providing efficient and accurate temperature control for various industrial applications.

SAFE AND STABLE

AODE products are designed to take multiple protection measures (power supply phase sequence detection, motor overload protection, flow detection, pressure detection, temperature detection, etc.) to ensure the safe and stable operation of the equipment.

ENERGY EFFICIENT AND ENVIRONMENTALLY FRIENDLY

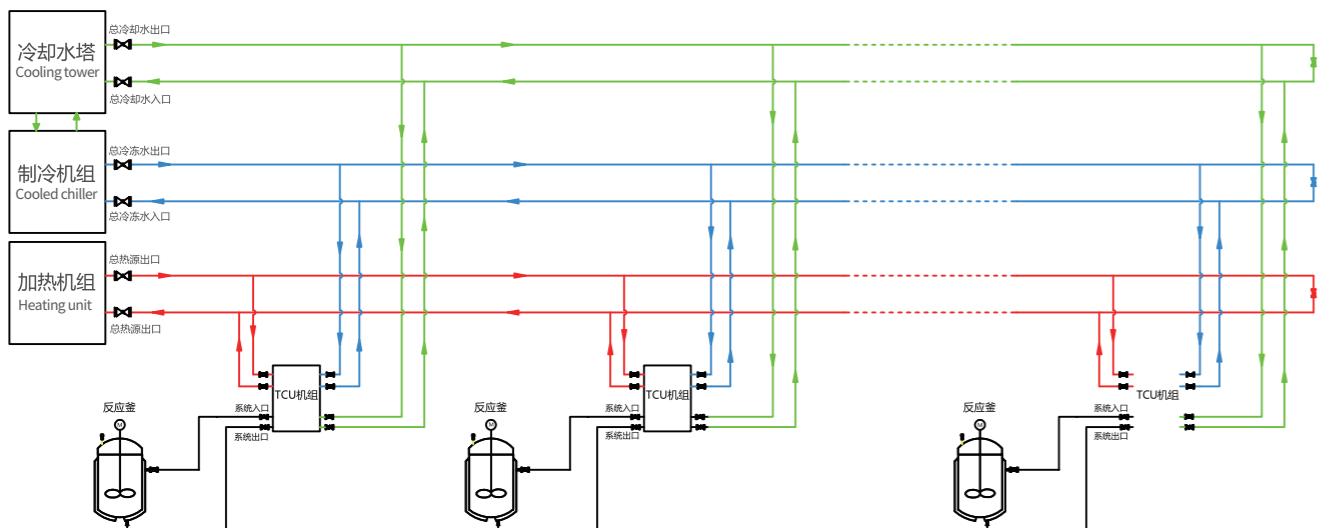
Through multiple innovations such as "High-efficiency Low-NOx Gas Condensing Boiler Technology" and "VOCs Condensing Recovery Refrigeration Technology", AODE is able to effectively improve the heating/cooling efficiency and reduce NOx and carbon emissions.

INTELLIGENT CONTROL

The products produced by AODE can achieve energy consumption detection, online monitoring, data analysis, remote control, alarm linkage and so on.

INDUSTRIAL TEMPERATURE CONTROL SYSTEM INTEGRATION

工业温控装备系统集成

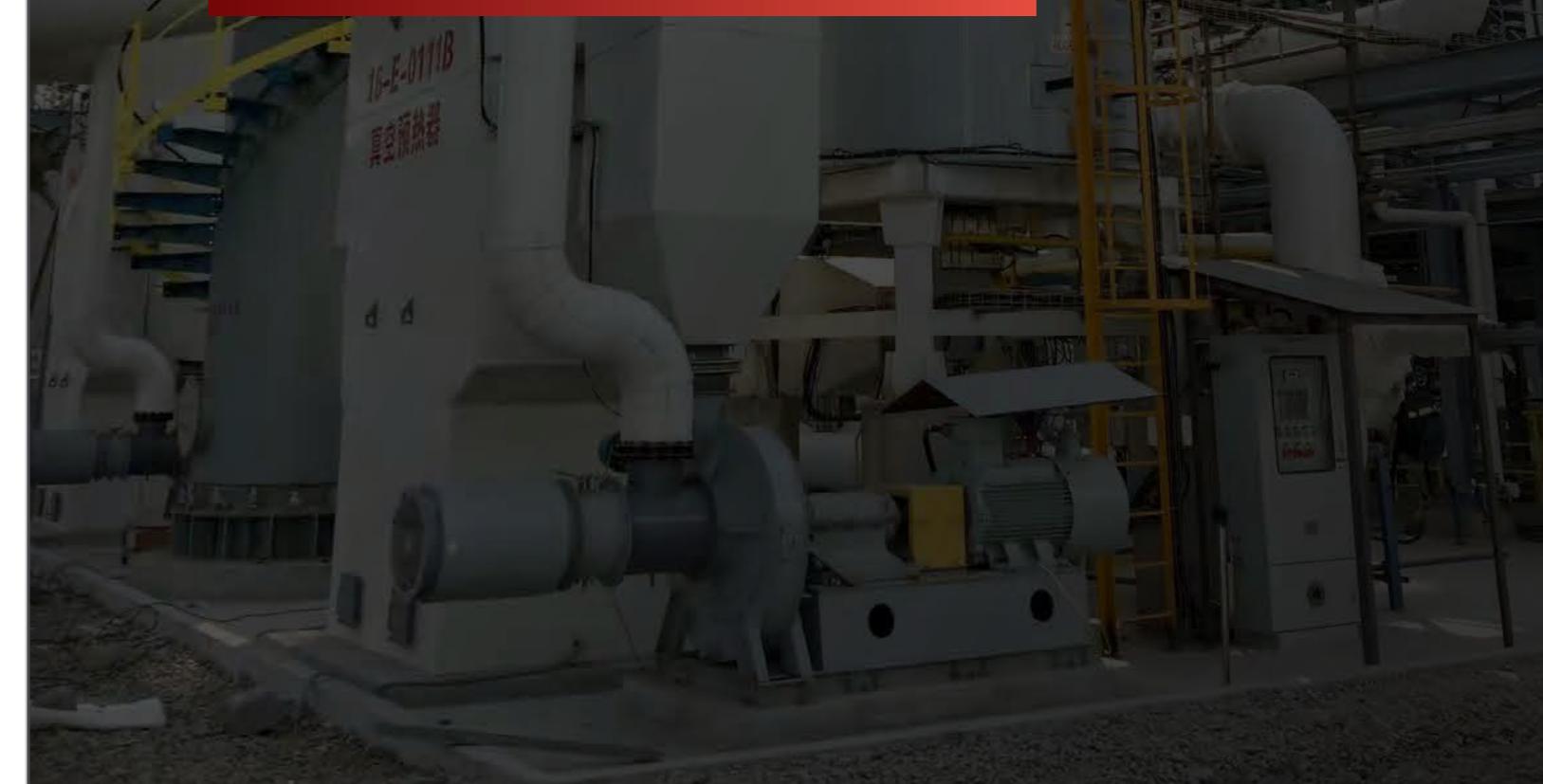
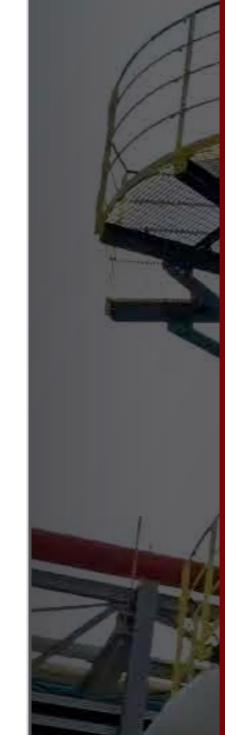


INDUSTRIAL BOILER SERIES 锅炉系列

Boiler series products include: oil (gas) organic heat carrier boiler, oil (gas) steam boiler, oil (gas) hot water boiler, electrically heated organic heat carrier boiler and so on.

THE MAIN PURPOSE OF THE PRODUCT

- Chemical industry--Heating and cooling of reaction, distillation, melting, concentration, drying and other processes.
- Plastic industry - heating of extruder, bi-directional stretch film production line, heating moulding machine.
- Rubber industry - heating of sulphurisation machine.
- Corrugated industry - heating of corrugator, melting of wax.
- Food industry - heating between cooking, drying and frying.
- Asphalt industry - heating of melting equipment.
- Electronic industry - lamination of copper foil substrate, glass fibre cloth impregnation machine, etc.
- Paint and automotive industry - reaction of resin paint, drying of coating surface, lithium battery diaphragm.
- Synthetic fibre industry - heating of melt spinning machine.



GAS/FUEL FIRED ORGANIC HEAT TRANSFER MATERIAL HEATERS

燃气有机热载体锅炉 +25°C +300°C



- No oil collection plate, no dead angle of the flow of heat medium oil, but also to prevent the oil collection plate high pressure to produce the risk of oil leakage breakage.
- Front and rear doors can be opened quickly to provide quick inspection and maintenance.
- With a fire view window, you can clearly monitor the combustion condition. With explosion-proof ports, to prevent the furnace ignition and deflagration in time to relieve the pressure, other boilers generally do not have this device.
- Three-layer boiler shell insulation, the inner ceramic fibre, the middle rock wool boards, the outer lightweight cement, in order to reduce the loss of accumulation and improve the strength of the outer shell
- Three-circuit tube coil design, heat transfer area than the general thermal media boiler on the market of about 30%, in order to reduce the exhaust gas temperature and greatly improve the efficiency of the boiler.
- Large combustion chamber, to avoid flame contact with the tube wall and damage, and reduce NOx emissions.

ITEM	UNIT	YY(Q)W-1800Y、Q	YY(Q)W-2400Y、Q	YY(Q)W-3000Y、Q	YY(Q)W-3500Y、Q	YY(Q)W-4000Y、Q	YY(Q)W-4600Y、Q	YY(Q)W-6000Y、Q	YY(Q)W-7000Y、Q	YY(Q)W-8200Y、Q	YY(Q)W-9300Y、Q	YY(Q)W-12000Y、Q	YY(Q)W-14000Y、Q
Rated Thermal Power	kcal/h	150*10 ⁴	200*10 ⁴	250*10 ⁴	300*10 ⁴	350*10 ⁴	400*10 ⁴	500*10 ⁴	600*10 ⁴	700*10 ⁴	800*10 ⁴	1000*10 ⁴	1200*10 ⁴
	KW	1800	2400	3000	3500	4000	4600	6000	7000	8200	9300	12000	14000
Thermal Efficiency	%												
Design Pressure	MPa												
Design Temperature	°C												
Oil Capacity Inside Furnace	m ³	1.7	2.0	2.54	2.9	3.6	4.1	4.9	5.6	8	9	11.2	12.3
Pump Power	KW	30	37	45	55	55	75	90	130	75*2	75*2	90*2	90*2
Pump flow	m ³ /h	132	176	220	256	293	337	418	406	250*2	300*2	400*2	450*2
Pump head	m	56	55	55	55	52	60	56	56	56	53	53	
Connecting Pipe Size	mm	125	150	150	200	200	200	250	250	300	300	300	350
Max. power consumption	KW	40	50	62	72	72	95	115	170	195	200	235	250
Gas Consumption	m ³ /h	190	253	316	379	442	506	632	758	885	1011	1264	1517
Oil Consumption	kg/h	160	213	266	320	373	426	533	639	746	853	1066	1279

STEAM BOILER OF NWNS TYPE

NWNS型蒸汽锅炉 +25°C +300°C



- High boiler efficiency: flue tube type large diameter furnace chamber design, equipped with high efficiency energy saver and condenser, the efficiency can reach more than 100%.
- Low heat dissipation loss: three-layer boiler shell insulation, inner layer of ceramic fibre, intermediate rock wool boards, outer lightweight cement, to reduce heat dissipation loss and improve the strength of the outer shell.
- Superior Durability: Wetback back wall WET-BACK construction with ample heat transfer area for rugged durability.
- Short start-up time: from automatic ignition to the generation of steam at a pressure of 8 kg/cm² in about 10 minutes.
- Complete safety control: the use of highly reliable triple water level and triple pressure safety controls ensures the safe operation of the system.

ITEM	UNIT	NWNS1	NWNS2	NWNS3	NWNS4	NWNS5	NWNS6	NWNS8	NWNS10	NWNS12	NWNS15	NWNS20
Rated evaporation capacity	kg/hr	1000	2000	3000	4000	5000	6000	8000	10000	12000	15000	20000
Rated vapour pressure	MPa											
Combustion method												
Full capacity	kg	4600	7100	8600	12000	12900	15400	17000	19600	23400	32500	39300
Water retention	kg	3600	5700	9300	9700	10300	11400	14200	16300	19700	27900	34200
Approximate boiler weight	kg	5900	8300	10500	13400	15600	18000	20300	23500	28500	37800	43300
Thermal efficiency	%											
Fuel Consumption												
Diesel oil	kg/h	65	128	190	252	315	375	499	627	749	932	1243
Petroleum	Nm ³ /h	77	154	227	301	375	448	597	747	895	1112	1473
Connection port diameter												
Diesel fuel port	mm	20	20	20	20	20	20	20	25	25	25	25
Natural gas port	mm	40	50	50	50	50	65	65	80	80	100	100
Main Steam Port	mm	50	80	80	100	125	125	150	150	200	200	200
Water outlet	mm	25	32	32	40	40	40	40	50	50	65	65
Sewer outfall	mm	40	50	50	50	50	50	50	50	50	65	65
Safety valve port	mm	40	50	65	50*2	50+65	65*2	65+80	80*2	80*2	100+80	100*2
Chimney diameter	mm	300	400	450	500	550	600	700	800	850	900	950

APPLICATIONS

应用领域

TO ACHIEVE INDUSTRY-WIDE COVERAGE IN THE INDUSTRIAL SECTOR AND IMPORT SUBSTITUTION OF HIGH-END PRODUCTS.

5G materials, 3C communications, energy storage, integrated die-casting, circuit boards, semiconductors, military, new energy, aerospace, scientific research, rail transportation, automotive parts, chemicals, pharmaceuticals, precision injection moulding, rubber, sheet/sheet/film, food, printing and dyeing, packaging, drying, composite materials, carbon fibre products and so on.



COMPONENT

选用配件

Germany BITZER, Germany BOCK, Taiwan HANZHONG, the United States of America Copeland, Denmark Danfoss, Japan Panasonic compressor; Denmark Grundfos pump, Germany speck pump; Alfa Laval heat exchanger



High-efficiency condenser, evaporator; Danish Danfoss, Italy Carle throttle device; Danish Danfoss pressure transmitter; Japan ARK air filter; Italy OR solenoid valve; Germany RTK proportional valve and so on.



Germany Siemens controller, human-machine interface, contactor, thermal relay, Japan Omron phase sequence protection and other well-known brands of electronic components



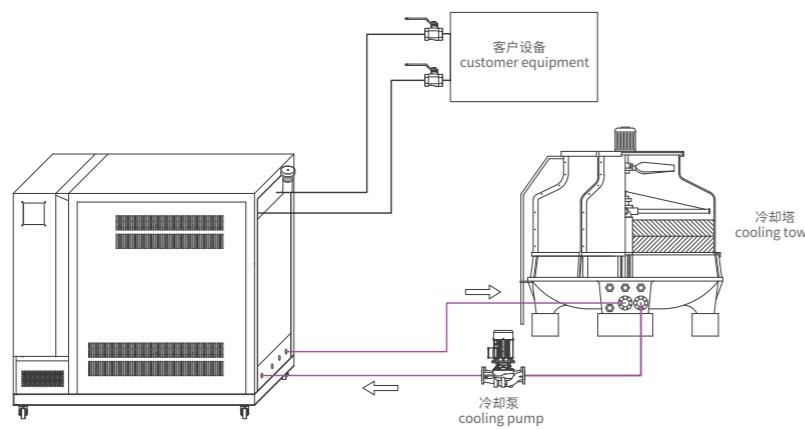
COOPERATION BRANDS

合作品牌



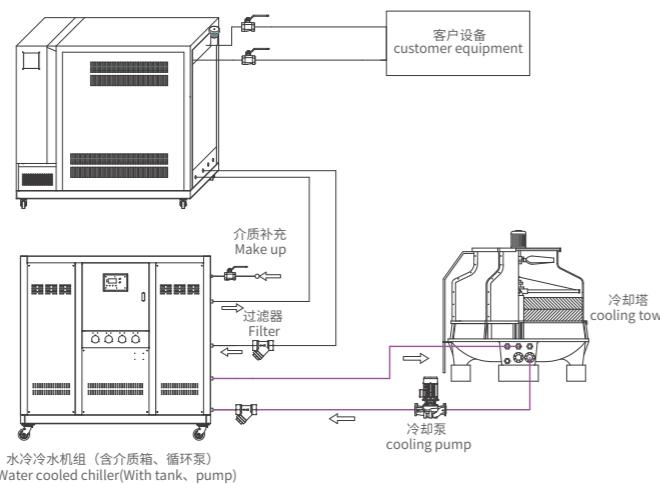
模温机安装管路流程图

MOLD TEMPERATURE CONTROL UNIT PIPELINE INSTALLATION DRAWING



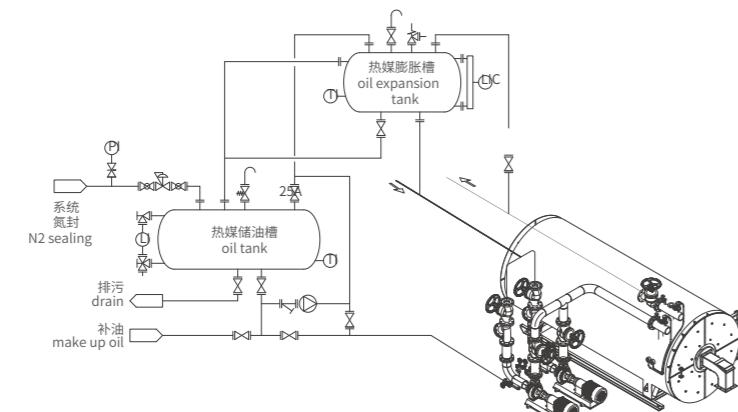
模温机、冷水机组合外部管路连接图

MOLD TEMPERATURE CONTROL UNIT AND CHILLER'S PIPELINE CONNECTION DIAGRAM



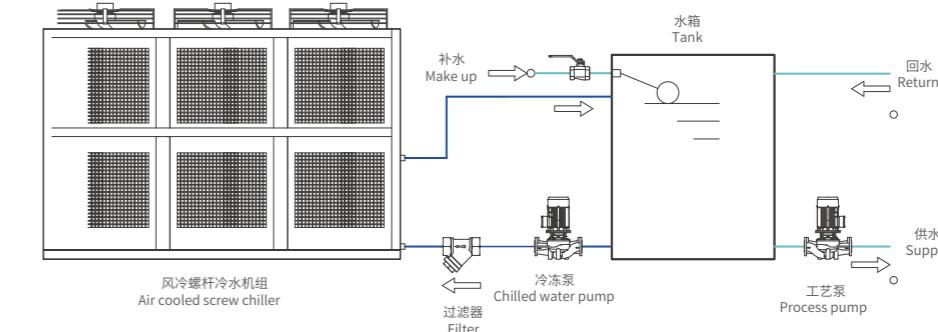
燃气(油)有机热载体炉外部连接管路

GAS / FUEL FIRED ORGANIC HEAT TRANSFER MATERIAL HEATER PIPELINE DRAWING



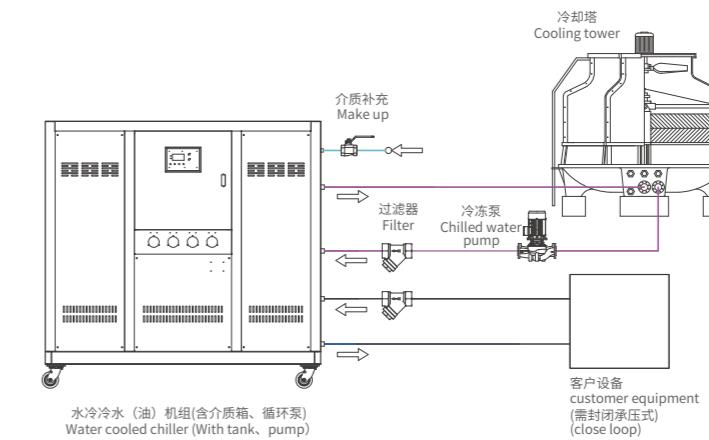
风冷螺杆冷水机组外部管路连接参考图

AIR COOLED SCREW CHILLER PIPE CONNECTION DIAGRAM



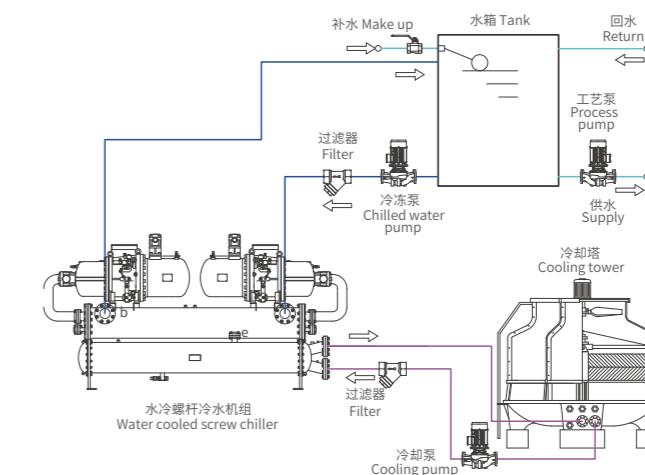
水冷冷水(油)机组外部管路连接参考图

WATER COOLED CHILLER PIPE CONNECTION DIAGRAM



水冷螺杆冷水机组外部管路连接参考图

WATER COOLED SCREW CHILLER PIPE CONNECTION DIAGRAM



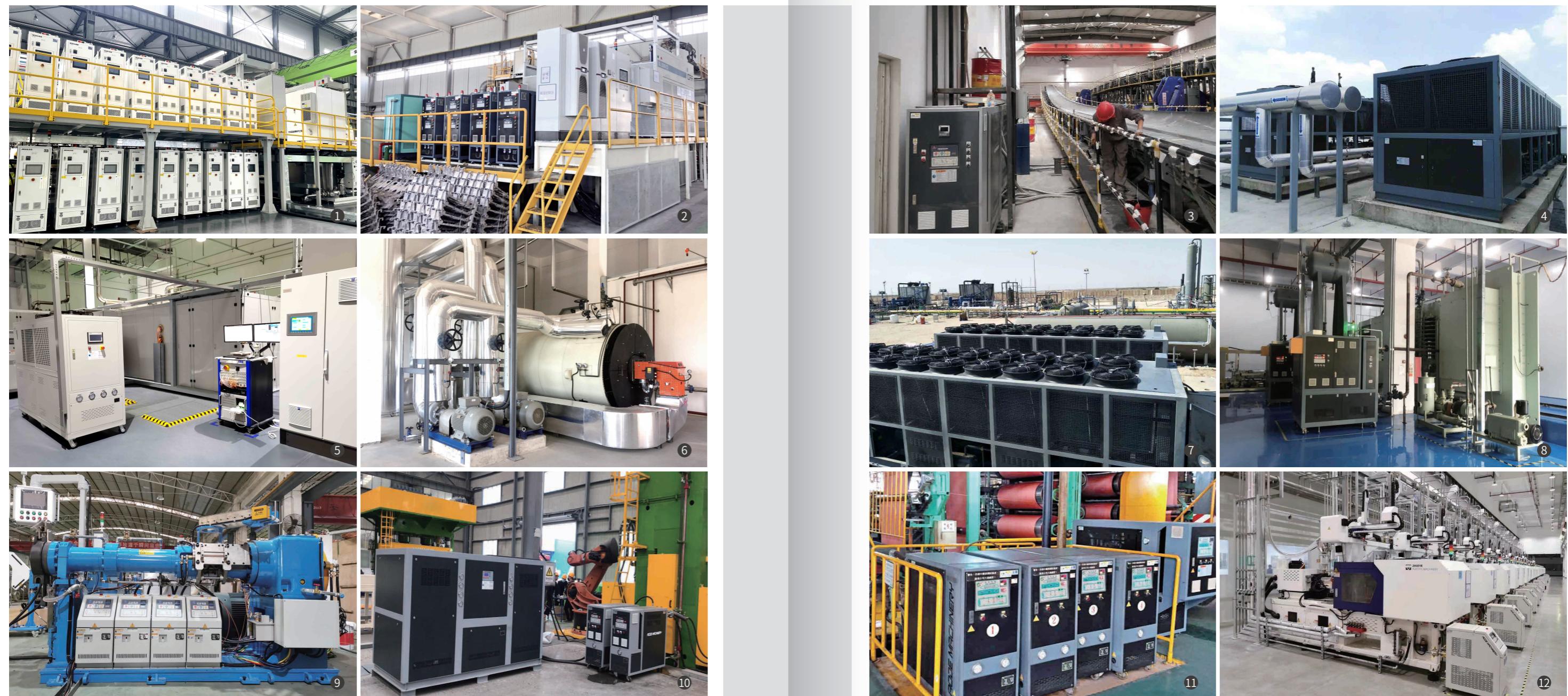
SUCCESSFUL CASES

成功案例

CHOOSE AODE

In China, Aode's professionalism makes the national brand replace the imported brand.
 Overseas, Aode's quality makes us the pride of Made in China. Temperature control we guarantee for you.
 For more cases, please visit the website : www.aodetcu.com

① Automotive integrated die-casting	② Die-casting industry	③ Wind power industry	④ chemical medicine
⑤ Testing Industry	⑥ Organic heat carrier furnace (chemical fibre)	⑦ petrochemicals	⑧ 5G circuit boards
⑨ Rubber industry	⑩ Moulding temperature control	⑪ Temperature control for calendering lines	⑫ Injection moulding industry





*以上列举部分合作品牌且排名不分先后

化工行业

CHEMICAL INDUSTRY



压铸行业

DIECASTING INDUSTRY



新能源/汽车部件检测

NEW ENERGY VEHICLE/AUTOMOTIVE COMPONENT TESTING



片板模

SHET/PLATE/fiLM INDUSTRY



橡胶行业

RUBBER INDUSTRY



塑胶行业

PLASTIC INDUSTRY



复材行业

COMPOSITE MATERIAL INDUSTRY



大学及科研院校

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