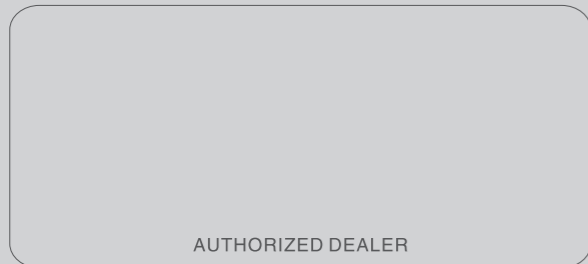


如有变更，恕不另行通知。

ADV accepts no responsibility for possible errors in catalogues, brochures and other printed materials. ADV reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequent changes being necessary in specifications already agreed.



ADV



万金油 TIGER BALM

- 精确设计 + 定制化 + 优质 + 高效
- Accurate design + Customized + high quality + timely delivery



THE TUBE AND FIN HEAT EXCHANGER
翅片式换热器

常州安迪维换热器有限公司

Changzhou ADV
Heat Exchanger Co., Ltd

ADV

常州安迪维换热器有限公司
Changzhou ADV Heat Exchanger Co., Ltd

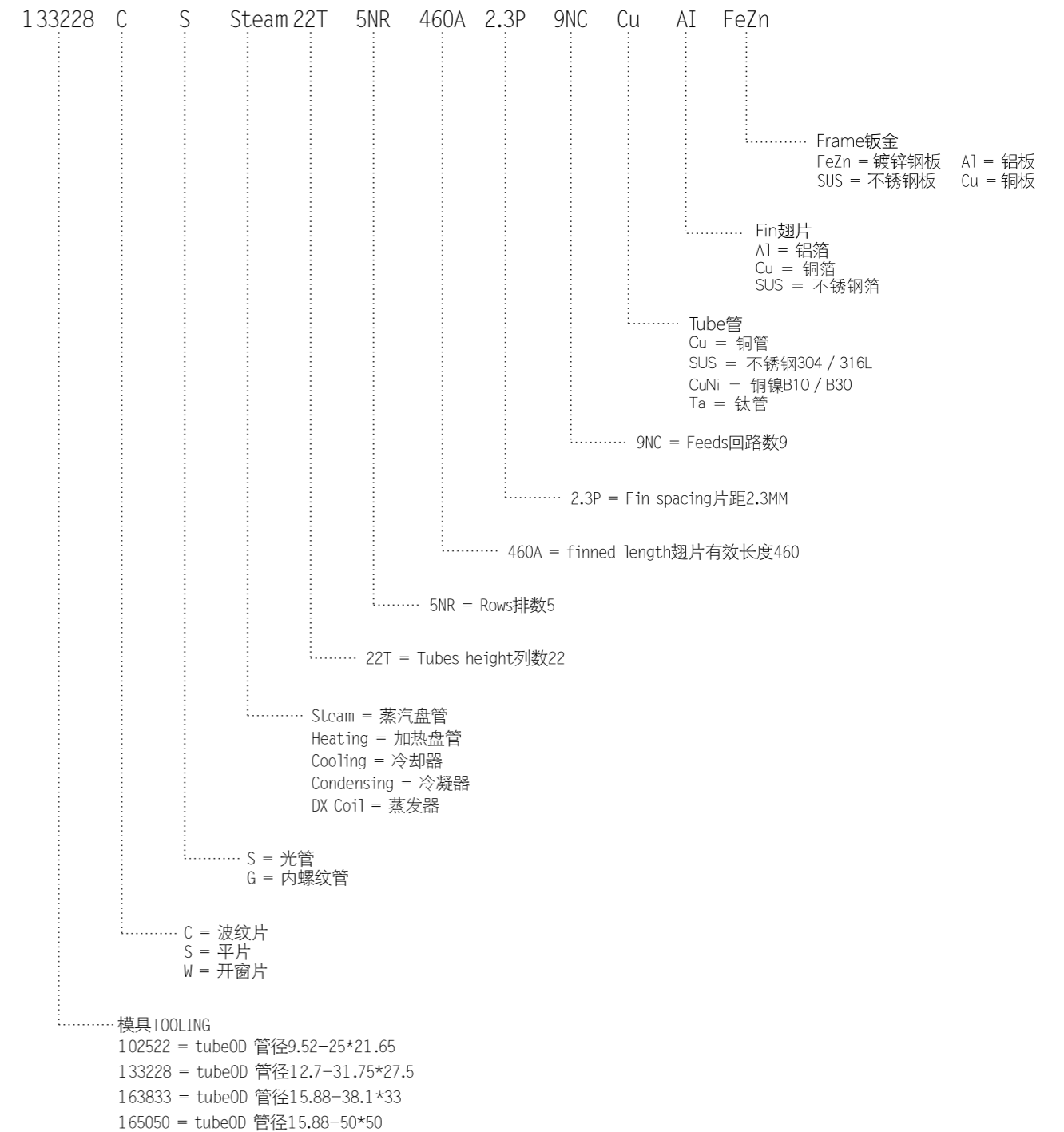
www.advcooler.com

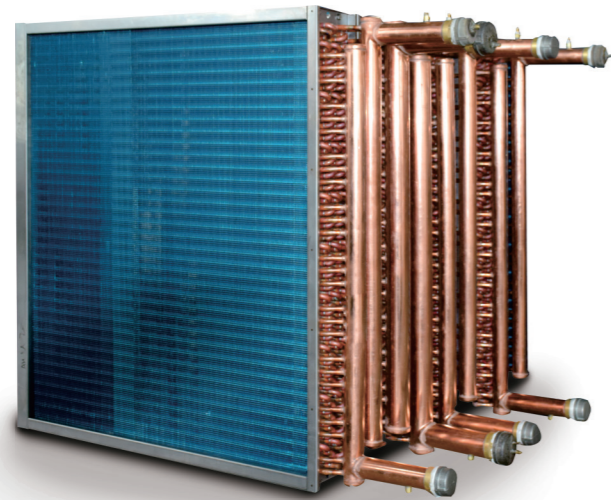
中国常州市武进区雪堰镇雪马路29号
Changzhou ADV Heat Exchanger Co., Ltd

www.advcooler.com

目录 Directory

| | | |
|-----------------|---|----|
| 换热器的命名规则 | Heat-exchange Nomenclature | 01 |
| 优势/可选择项目 | The advantage and option | 02 |
| 模具规格/设备 | Fin Tooling Specification/Equipment | 03 |
| 蒸发器选型 | Evaporator coil Select | 04 |
| 冷凝器选型 | Condenser coil Select | 05 |
| 表冷器选型 | Cooling coil Select | 06 |
| 干冷器、油冷器、热水加热器选型 | Dry Cooler / Oil Cooler / Hot Water coil Select | 07 |
| 蒸汽加热器选型 | Steam coil Select | 08 |
| 载冷剂物理性质表 | HYCOOL 45 & Dynalene HC-50 Physical Data | 09 |





| | | |
|------------------------------|---|---|
| 设计软件 Design software | 引进欧洲成熟的设计软件，根据实际需求精确设计换热器，可以满足最新制冷剂R410A、CO2、R507A以及特殊的低温载冷剂等产品的设计需求。 | Using the mature European design software, according to the actual demand accurate design of heat exchanger, can design the latest refrigerant CO2,R410A, R507A and special low temperature cold agent etc. |
| 换热器尺寸 Condenser structure | 换热器长度到12米，宽度到2.7米。 | Finned length up to 12m, Finned height up to 2.7m. |
| 经营方向 Business Philosophy | 自制率95%，服务于小批量需求。 | Self-production 95%,serviced to small-batch customers. |

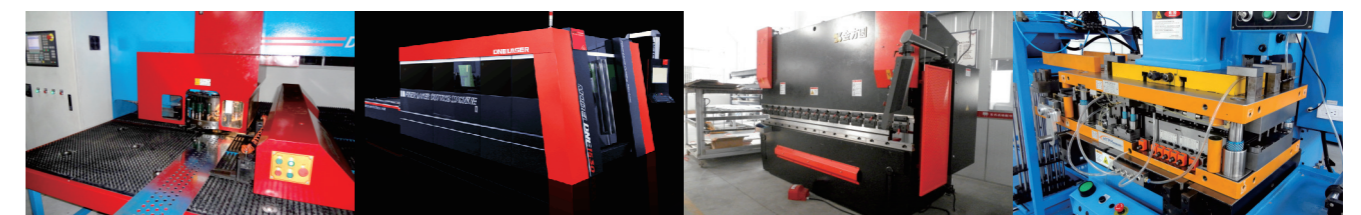
OEM 选择项目 OEM Optional

| 外壳 Frame | 翅片 Fin | 换热管 Heat-exchange Tube | 配管 Head |
|----------------------------|--|----------------------------|----------------------------|
| 电镀锌板 galvanized sheet | 铝翅片 Al | 铜管 Copper Tube | 铜管 Copper Tube |
| 铝 Aluminum | 亲水铝翅片 Hydrophilic Al Fin | 不锈钢304 Stainless steel 304 | 无缝钢管 Seamless Steel Pipe |
| 不锈钢304 Stainless steel 304 | 铝镁翅片 Almg 25 | 不锈钢316 Stainless steel 316 | 不锈钢304 Stainless steel 304 |
| 不锈钢316 Stainless steel 316 | 铜翅片 Copper Fin | 铜镍合金 B10 | 不锈钢316 Stainless steel 316 |
| 铜Cu | 环氧树脂预涂层翅片 Pre-coated Epoxy Fin | 铜镍合金 B30 | 铜镍合金 B10 |
| | 镀锡铜翅片 Copper Tinned Fin | 钛 Titanium | 铜镍合金 B30 |
| | 喷涂翅片 Heresite/Blygold/Epoxy Coated Fin | | 钛 Titanium |

模具规格 Fin Tooling Specification

| No. | 模具规格 Tooling Type | 排布方式 Hole Layout | 翅片间距 Fin Distance | 翅片形状 Fin Surface | 翅片边缘形状 Edge Type | 铝箔 8011-H0 厚度 Al Fin Thickness | 铜箔 T _M 厚度 Cu Fin Thickness | 不锈钢箔厚度 SUS 304/316 Fin Thickness | Tube(管) | |
|-----|----------------------|--|----------------------|---------------------------------|---------------------|-----------------------------------|--|-------------------------------------|---------------------|-------------------------------|
| | | | | | | | | | 光管/内螺纹 Tube type | 管外径和壁厚 Tube OD & thickness |
| 1 | 3/8" | 25*21.65 等边三角形 EQUILATERAL TRIANGLE | 1.8~7mm | 波纹片SINE- WAVE&V-WAVE | 直边+波纹 FLAT+WAVE | 0.12/0.15/ 0.175/0.2/0.25 | 0.12/0.15/0.2 | // | 内螺纹 | Φ9.52×0.30+0.17 |
| | | | | | | | | | 光管 | Φ9.52×0.31/0.75 |
| 2 | 1/2" | 31.75*27.5 等边三角形 EQUILATERAL TRIANGLE | 1.8~8mm | 波纹片SINE- WAVE&V-WAVE | 直边+波纹 FLAT+WAVE | 0.12/0.15/ 0.175/0.2/0.25 | 0.12/0.15/0.2 | // | 内螺纹 | Φ12.7×0.41+0.25 |
| | | | | | | | | | 光管 | Φ12.7×0.38/0.75 |
| 3 | 5/8" | 38.1*33 等边三角形 EQUILATERAL TRIANGLE | 1.8~9mm | 波纹片SINE- WAVE&V-WAVE | 直边+波纹 FLAT+WAVE | 0.12/0.15/ 0.175/0.2/0.25 | 0.12/0.15/0.2 | // | 内螺纹 | Φ15.88×0.40+0.25 |
| | | | | | | | | | 光管 | Φ15.88×0.41/0.635/0.89/2.0 |
| | | | | | | | | | SUS304 SUS316 | Φ15.88×0.6 Φ15.88×0.9 |
| 4 | 5/8" | 50*50 正方形 Tube Pattern | 2.5~12mm | 波纹、平片 Corrugated / Smooth | 直边 Straight | 0.2/0.25/0.3/0.33 | 0.15/0.2 | 0.15/0.2/0.3 | 内螺纹 | Φ15.88×0.41+0.25 |
| | | | | | | | | | 光管 | Φ15.88×0.41/0.635/0.89 |
| | | | | | | | | | SUS304 SUS316 | Φ15.88×0.6 Φ15.88×0.9 |

我们的设备 Our Equipment



数控冲床 CNC Punch Machine

激光切割机 Laser Cutting Machine

数控折弯机 CNC Bending Machine

翅片模具 Fin Tooling



高速翅片生产线 Fin Press Machine

涨管机 Expanding Machine

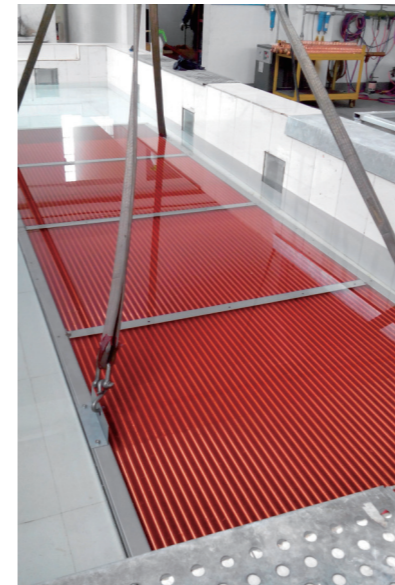
数控弯管机 CNC Bender Machine

自动焊接 Auto Welding



应用Application

- 速冻隧道
Tunnel Freezers
- 冰箱冰柜
Refrigerator Freezers
- 工艺空调
Process Air Handlers
- 风冷冷水机组
Air-cooled Chillers

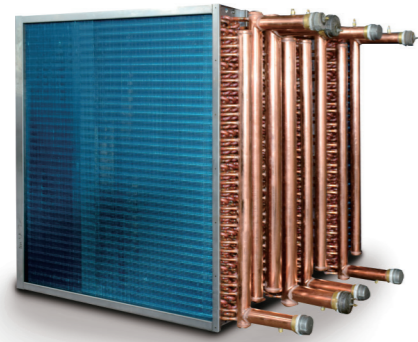


应用Application

- 工业制冷
Industrial refrigeration
- 商业制冷
Commercial refrigeration
- 商用空调和家用空调
Commercial and residential
air conditioning
- 热泵
Heat pump

| 蒸发器类型 | | 直接膨胀DX Coil 泵供液Pump Evaporator | |
|-----------------|---------------------------|--------------------------------|--------------|
| 制冷量 | Capacity | kW | |
| 出风温度 | Outlet temp (DB) | °C | |
| 制冷剂 | Refrigerant | | |
| 蒸发温度 | Evaporating temp | °C | |
| 过热度 | Overheating | k | |
| 冷凝温度 | Condensing temp | °C | |
| 过冷度 | Subcooling | k | |
| 循环倍率 | Recirculation ratio | n | |
| 风量/迎面风速 | Air flow/Face Velocity | m³/h m/s | |
| 进气干球温度 | Inlet temp (DB) | °C | |
| 进气湿球温度/相对湿度 | Inlet temp (WB) | °C/% | |
| 尺寸限制 | Frame dimension | mm | 长___宽___高___ |
| 其他要求 | Other Requirment | | |
| 材料 Material | 换热管 Heat-exchange Tube | | 铜管/Cu |
| | | | 不锈钢/SUS304 |
| | | | 不锈钢/SUS316L |
| | 翅片 Fins | | 铜镍/CuNi |
| | | | 钛管/Ta |
| | | 亲水 | 铝箔/AL |
| | | Epoxy | 铜箔/Cu |
| | | Blygold | 不锈钢/SUS304 |
| | | Heresite | 不锈钢/SUS316L |
| | 结构件 Frame | | 钛箔/Ta |
| | | | 镀锌钢板/DC51D+Z |
| | | | 铝板/AL |
| 配管 Head Pipe | | 不锈钢/SUS304 | |
| | | 不锈钢/SUS316L | |
| | | 铜/Cu | |
| | | 铜管/Cu | |
| | | 无缝钢管/Steel | |
| | | 不锈钢/SUS304 | |
| | 不锈钢/SUS316L | | |
| | 铜镍/CuNi | | |
| | 钛管/Ta | | |

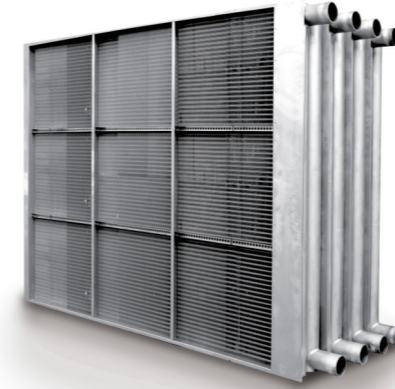
| 冷凝器 | | Condenser coil Select | |
|-----------------|---------------------------|-----------------------|--------------|
| 散热量 | Capacity | kW | |
| 制冷剂 | Refrigerant | | |
| 冷凝温度 | Condensing temp | °C | |
| 过冷度 | Subcooling | k | |
| 海拔/大气压力 | Altitude/AP | m/Pa | |
| 风量/迎面风速 | Air flow/Face Velocity | m³/h | |
| 进气干球温度 | Inlet temp (DB) | °C | |
| 尺寸限制 | Frame dimension | mm | 长___宽___高___ |
| 其他要求 | Other Requirment | | |
| 材料 Material | 换热管 Heat-exchange Tube | | 铜管/Cu |
| | | | 不锈钢/SUS304 |
| | | | 不锈钢/SUS316L |
| | 翅片 Fins | | 铜镍/CuNi |
| | | 亲水 | 铝箔/AL |
| | | Epoxy | 铜箔/Cu |
| | | Blygold | 不锈钢/SUS304 |
| | | Heresite | 不锈钢/SUS316L |
| | | | 镀锌钢板/DC51D+Z |
| | 结构件 Frame | | 铝板/AL |
| | | | 不锈钢/SUS304 |
| | | | 不锈钢/SUS316L |
| 配管 Head Pipe | | 铜/Cu | |
| | | 铜管/Cu | |
| | | 无缝钢管/Steel | |
| | | 不锈钢/SUS304 | |
| | | 不锈钢/SUS316L | |
| | | 铜镍/CuNi | |



应用Application

- 化工气体冷凝
Chemical gas condensation
- 商业和工业制冷
Commercial and industrial refrigeration
- 能量回收系统
Energy recovery systems
- 污染气体回收
Pollution gas recovery systems

| 表冷器 | | Cooling coil Select | |
|-----------------|--|--|-----------------|
| 制冷量 | Capacity | kW | |
| 载冷剂类型 | 水(Water) | 其他传热介质 <small>Other heat transfer medium</small> _____ % | |
| | 乙二醇 <small>ETHYLENE GLYCOL / WATER</small> _____ % | 丙二醇 <small>PROPYLENE GLYCOL / WATER</small> _____ % | |
| 进液温度 | Inlet temp (DB) | °C | |
| 进液温度 | Inlet temp (DB) | °C | |
| 流量 | Flow | m ³ /h | |
| 进气干球温度 | Inlet temp (DB) | °C | |
| 进气湿球温度/相对湿度 | Inlet temp (WB) | °C/% | |
| 风量/迎面风速 | Air flow/Face Velocity | m ³ /h m/s | |
| 出风温度 | Outlet temp (DB) | °C | |
| 尺寸限制 | Frame dimension | mm | 长____宽____高____ |
| 其他要求 | Other Requirment | | |
| 材料 Material | 换热管 Heat-exchange Tube | | 铜管/Cu |
| | | | 不锈钢/SUS304 |
| | | | 不锈钢/SUS316L |
| | 翅片 Fins | | 铜镍/CuNi |
| | | | 钛管/Ta |
| | | 亲水 | 铝箔/AL |
| | | Epoxy | 铜箔/Cu |
| | | Blygold | 不锈钢/SUS304 |
| | | Heresite | 不锈钢SUS316L |
| | 结构件 Frame | | 钛箔/Ta |
| | | | 镀锌钢板/DC51D+Z |
| | | | 铝板/AL |
| | | 不锈钢/SUS304 | |
| 配管 Head Pipe | | 不锈钢SUS316L | |
| | | 铜/Cu | |
| | | 无缝钢管/Steel | |
| | | 不锈钢/SUS304 | |
| | | 不锈钢/SUS316L | |
| | | 铜镍/CuNi | |
| | | 钛管/Ta | |
| | 铜管/Cu | | |



应用Application

- 商用空调
Commercial air conditioning
- 商业和工业制冷
Commercial and industrial refrigeration
- 能量回收系统
Energy recovery systems
- 污染气体回收
Pollution gas recovery systems

| 干冷器、油冷器、热水加热器 | | Dry Cooler / Oil Cooler / Hot Water coil Select | |
|-----------------|--|--|-----------------|
| 换热量 | Capacity | kW | |
| 载冷剂类型 | 水(Water) | 其他传热介质 <small>Other heat transfer medium</small> _____ % | |
| | 乙二醇 <small>ETHYLENE GLYCOL / WATER</small> _____ % | 丙二醇 <small>PROPYLENE GLYCOL / WATER</small> _____ % | |
| 进液温度 | Inlet temp (DB) | °C | |
| 出液温度 | Outlet temp (DB) | °C | |
| 流量 | Flow | m ³ /h | |
| 海拔/大气压力 | Altitude/AP | m/Pa | |
| 进气干球温度 | Inlet temp (DB) | °C | |
| 进气湿球温度/相对湿度 | Inlet temp (WB) | °C/% | |
| 风量/迎面风速 | Air flow/Face Velocity | m ³ /h m/s | |
| 尺寸限制 | Frame dimension | mm | 长____宽____高____ |
| 其他要求 | Other Requirment | | |
| 材料 Material | 换热管 Heat-exchange Tube | | 铜管/Cu |
| | | | 不锈钢/SUS304 |
| | | | 不锈钢/SUS316L |
| | 翅片 Fins | | 铜镍/CuNi |
| | | 亲水 | 铝箔/AL |
| | | Epoxy | 铜箔/Cu |
| | | Blygold | 不锈钢/SUS304 |
| | | Heresite | 不锈钢SUS316L |
| | | | 镀锌钢板/DC51D+Z |
| | 结构件 Frame | | 铝板/AL |
| | | | 不锈钢/SUS304 |
| | | | 不锈钢SUS316L |
| | | 铜/Cu | |
| 配管 Head Pipe | | 无缝钢管/Steel | |
| | | 不锈钢/SUS304 | |
| | | 不锈钢SUS316L | |
| | | 铜管/Cu | |
| | | 铜管/Cu | |



应用Application

- 化工气体加热
Chemical gas heating
- 工业加热系统
Industrial heating systems
- 商业加热系统
Commercial heating systems
- 商业和工业干燥应用
Commercial and industrial drying applications

| 蒸汽加热器 | | Steam coil Select | |
|----------------|---------------------------|-------------------|--------------|
| 换热量 | Capacity | kW | |
| 出风温度 | Outlet temp (DB) | °C | |
| 蒸汽压力 | Saturation Press | bar | |
| 风量/迎面风速 | Air flow | m³/h m/s | |
| 进气温度 | Inlet temp (DB) | °C | |
| 尺寸限制 | Frame dimension | mm | 长 宽 高 |
| 其他要求 | Other Requirment | | |
| 材料 Material | 换热管 Heat-exchange Tube | | 铜管/Cu |
| | | | 不锈钢/SUS304 |
| | | | 不锈钢/SUS316L |
| | 翅片 Fins | 亲水 | 铝箔/AL |
| | | Epoxy | 铜箔/Cu |
| | | Blygold | 不锈钢/SUS304 |
| | | Heresite | 不锈钢/SUS316L |
| | 结构件 Frame | | 镀锌钢板/DC51D+Z |
| | | | 铝板/AL |
| | | | 不锈钢/SUS304 |
| | 配管 Head Pipe | | 不锈钢/SUS316L |
| | | | 无缝钢管/Steel |
| | | 不锈钢/SUS304 | |
| | | 不锈钢/SUS316L | |
| | | 铜管/Cu | |

Dynalene HC Series-USA

| 温度 Temperature °C | 运动粘度 Viscosity mPa·s | 导热系数 Thermal Cond. W/m·K | 比热容 Specific Heat kJ/kg·K | 密度 Density kg/m³ |
|----------------------|-------------------------|-----------------------------|------------------------------|---------------------|
| -50 | 38.40 | 0.435 | 2.563 | 1378 |
| -40 | 20.40 | 0.445 | 2.583 | 1373 |
| -30 | 12.50 | 0.455 | 2.602 | 1367 |
| -20 | 8.40 | 0.465 | 2.622 | 1362 |
| -10 | 5.99 | 0.475 | 2.642 | 1356 |
| 0 | 4.70 | 0.485 | 2.661 | 1351 |
| 10 | 3.80 | 0.495 | 2.681 | 1345 |
| 20 | 3.20 | 0.505 | 2.701 | 1340 |
| 30 | 2.70 | 0.515 | 2.720 | 1334 |
| 40 | 2.40 | 0.525 | 2.740 | 1328 |
| 50 | 2.10 | 0.535 | 2.760 | 1323 |
| 60 | 1.80 | 0.545 | 2.780 | 1317 |
| 70 | 1.60 | 0.555 | 2.799 | 1312 |
| 80 | 1.50 | 0.565 | 2.819 | 1306 |
| 90 | 1.30 | 0.575 | 2.839 | 1301 |
| 100 | 1.20 | 0.585 | 2.858 | 1295 |
| 110 | 1.10 | 0.595 | 2.878 | 1290 |
| 120 | 1.00 | 0.605 | 2.898 | 1284 |
| 130 | 0.94 | 0.615 | 2.917 | 1279 |
| 140 | 0.87 | 0.625 | 2.937 | 1273 |
| 150 | 0.81 | 0.635 | 2.957 | 1267 |
| 160 | 0.76 | 0.645 | 2.977 | 1262 |
| 170 | 0.71 | 0.655 | 2.996 | 1256 |
| 180 | 0.66 | 0.665 | 3.016 | 1251 |
| 190 | 0.62 | 0.675 | 3.036 | 1245 |
| 200 | 0.58 | 0.685 | 3.055 | 1240 |
| 210 | 0.55 | 0.6945 | 3.075 | 1234 |

HYC00L 45-Europe

| 温度 Temp (°C) | 密度 Density (kg/m³) | 比热容 Specific heatcapacity (kJ/kgK) | 导热系数 Thermal conductivity (W/mK) | 动力粘度 Dynamic viscosity (mPas(cP)) | 运动粘度 Kinematic viscosity (mm²/s) |
|--------------------|--------------------------|--|--|---|--|
| 20 | 1318 | 2,62 | 0,51 | 2,4 | 1,8 |
| 15 | 1321 | 2,61 | 0,50 | 2,7 | 2,0 |
| 10 | 1323 | 2,60 | 0,49 | 3,0 | 2,3 |
| 5 | 1326 | 2,59 | 0,48 | 3,4 | 2,6 |
| 0 | 1329 | 2,58 | 0,48 | 4,0 | 3,0 |
| -5 | 1331 | 2,57 | 0,47 | 4,6 | 3,5 |
| -10 | 1334 | 2,56 | 0,46 | 5,5 | 4,1 |
| -15 | 1337 | 2,54 | 0,45 | 6,6 | 4,9 |
| -20 | 1339 | 2,53 | 0,44 | 8,1 | 6,0 |
| -25 | 1342 | 2,52 | 0,43 | 10,1 | 7,5 |
| -30 | 1345 | 2,51 | 0,42 | 12,8 | 9,6 |
| -35 | 1347 | 2,50 | 0,42 | 16,8 | 12,5 |
| -40 | 1350 | 2,49 | 0,41 | 22,8 | 16,9 |
| -45 | 1353 | 2,47 | 0,40 | 32,0 | 23,7 |