



Venttk

MICRO CHANNEL HEAT EXCHANGER
— PROFESSIONAL MANUFACTURER

SHANGHAI VENTTECH REFRIGERATION EQUIPMENT CO., LTD

上海樊太制冷设备有限公司

ADD: Room B321, Building No.1, No.619, Longchang Road,
Yangpu District, Shanghai, China

地址：上海市杨浦区隆昌路619号1号楼B321室

Tel: +86-21-55890292

Fax: +86-21-55890297

E-mail: sales@venttk.com

Web: www.venttk.com

SHANGHAI VENTTECH REFRIGERATION EQUIPMENT CO., LTD

上海樊太制冷设备有限公司

PRODUCTS

产品展示

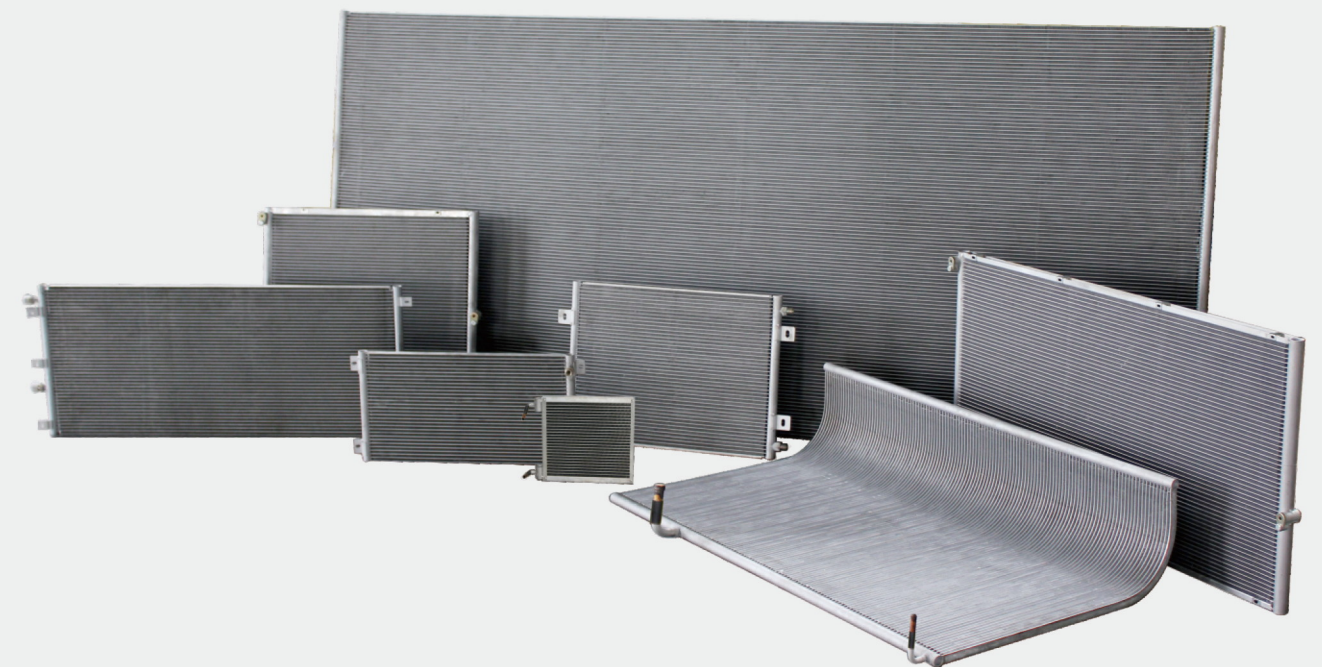
WITH SCIENTIFIC MANAGEMENT CONCEPT OF INNOVATION TO
PROVIDE CUSTOMERS WITH QUALITY PRODUCTS AND SERVICES

以科学管理的创新理念为客户提供优质产品及服务

Venttk Is Your Best Choice

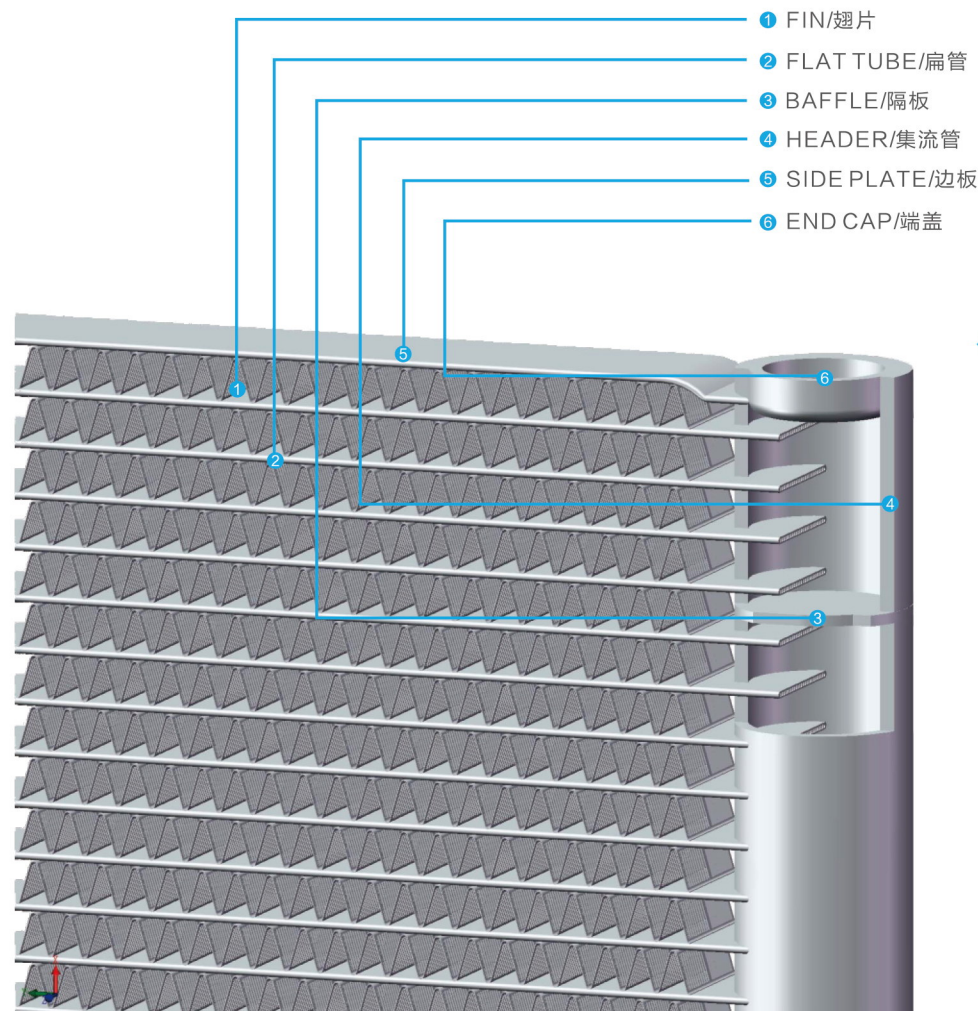
樊太是您最好的选择

- We pursue to create value for customers and provide professional products and services.
- 我们追求为客户创造价值，提供专业的产品和服务。
- Based on professional technology and reliable products quality, Venttk has offered products to 270 customers in 30 countries and areas.
- 凭借专业的技术优势和可信赖的产品品质，Venttk 已为全球超过30个国家和地区270多家客户提供产品和服务。



Micro channel heat exchanger suits for all kinds of normal refrigerant and new refrigerants.
微通道换热器适用于各种常规制冷剂和新型制冷剂。

- Working pressure 工作压力: 3.0Mpa-4.5Mpa (30bar-45bar).
Burst pressure 爆破压力: 13.5Mpa (135bar).
Normal refrigerant 常规制冷剂: R22, R134A, R404A, R407C, R410A, R600, R507A etc.
New refrigerant 新型制冷剂: R448A, R449A, R32, R290, R452 etc.
- Dry cooler for water or water and ethylene glycol mixture liquid.
干冷器 (水或水和乙二醇的混合液).
Working Pressure工作压力: 0.5Mpa-1Mpa (5bar-10bar).
Burst Pressure爆破压力: 3.0Mpa-5.0Mpa (30bar-50bar).
- Venttk can offer bending MCHE coils, L, U, C shape. 樊太提供折弯产品L, U, C型。



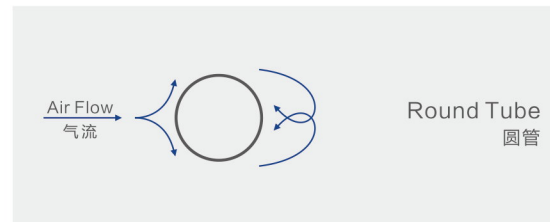
MICRO CHANNEL HEAT EXCHANGER
◆ 微通道换热器



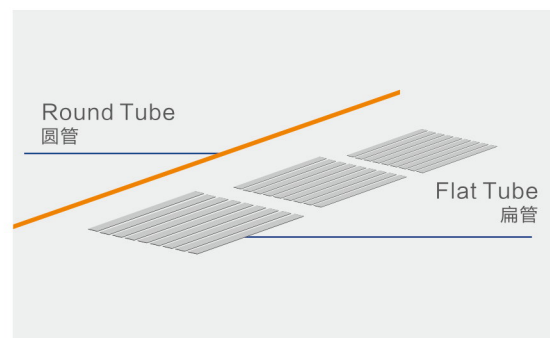
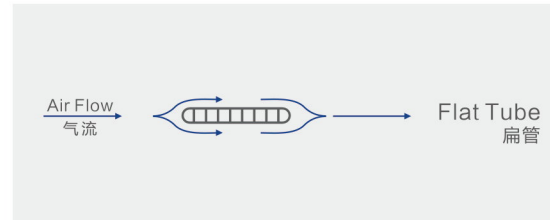
Integral NOCOLOK Brazing, low thermal contact resistance. Improve the heat transfer performance perfectly, AL-AL structure, without electric potential difference, high corrosion resistance.

一体化NOCOLOK钎焊焊接，翅片与铝合金扁管冶金结合，接触热阻小，能显著提高传热性，高铝扁管与铝翅片间，无电位差腐蚀，抗腐蚀性

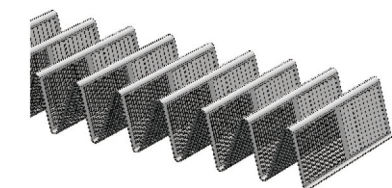
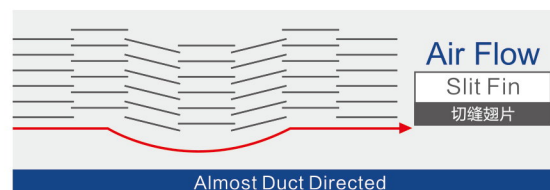
TECHNOLOGY OF MICRO CHANNEL HEAT EXCHANGER
◆ 微通道换热器技术



- Smaller diameter, more tube holes and larger internal surface intensify unit capacity as per volume.
- Small cross sectional area, low air flow resistance, small eddy area, low noise.
- 孔径小，孔数多，内表面积大，单位体积换热量大。
- 横截面积小，空气流动阻力小，涡流区域小，噪音低。

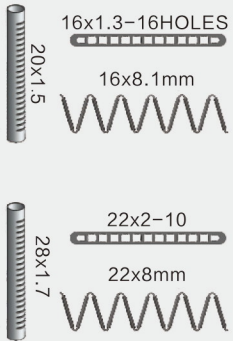
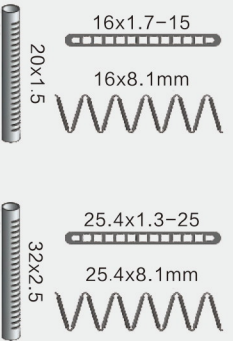
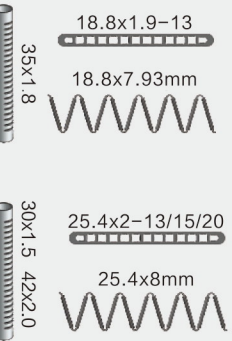
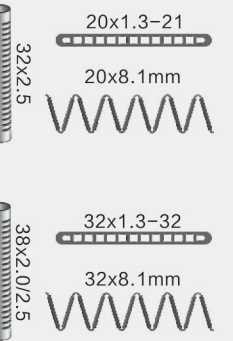
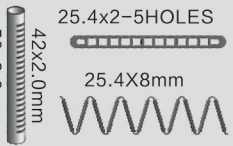
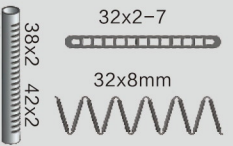
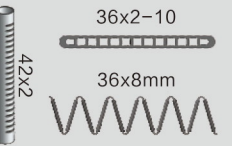
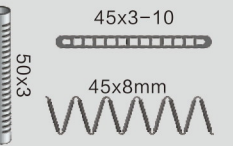
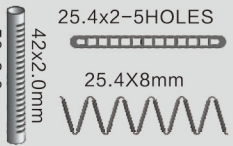
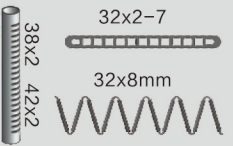
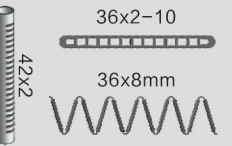
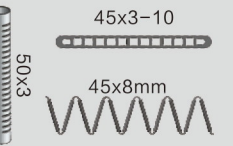
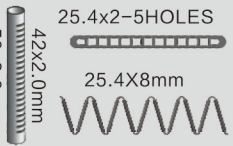
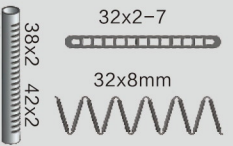
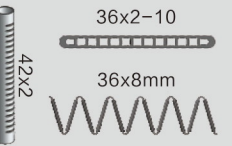
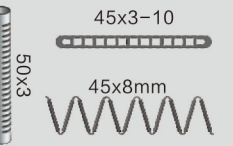


- Parallel arrangement of flat tubes enlarge refrigerant circulation area.
- Adjust the position and quantity of baffles to adapt to the refrigerant phase transition and optimize heat transfer and pressure drop.
- 多根扁管平行布置，制冷剂流通面积大。
- 调整隔板位置和数量，优化传热和压降。

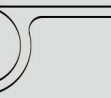
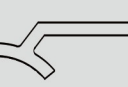


- The structure effectively breaks air thermal boundary layer, reduce heat exchanging resistance.
- Waving path makes the contact longer to intensify heat exchanging.
- 有效打破空气热边界层，降低传热阻力。
- 空气波浪路径流动与翅片接触时间长，强化传热。



Material 材料	Flat tube 扁管	LLA9153+Zn AA3102+Zn	Long life alloy Normal alloy	长寿命合金 常规合金
	Fin 翅片	AA4343/3003/4343		
	Header 集流管	AA4045/3003 AA4045/3005	Normal alloy High strength alloy	常规合金 高强度合金
	LLA (Long Life Alloy) Material Coil SWAAT time can be more than 4000 hours. 长寿命管材质产品盐雾试验时间可以超过4000小时。			
Heat Exchanger 冷凝器模具				
				
Dry Cooler 干冷器模具				
				

A variety of side plate and brackets suit for all kinds of installation.
各种不同的边板和支架可满足各种形式的安装。

Side Plates 型材边板				
				
Mounting Brackets 安装支架				
				

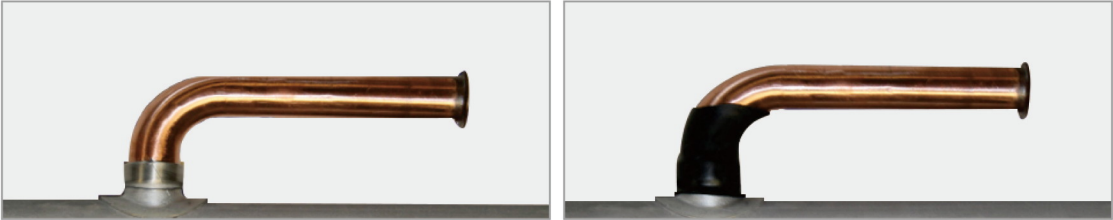
Venttk has more than 30 kinds different specification main material for heat exchanger and dry cooler.
樊太有超过 30种不同的主材微通道换热器规格。

TUBE CONNECTING TYPE ◆ 接管形式

Multiple ways of connection, easy for field connection.
多种连接方式，方便现场连接。

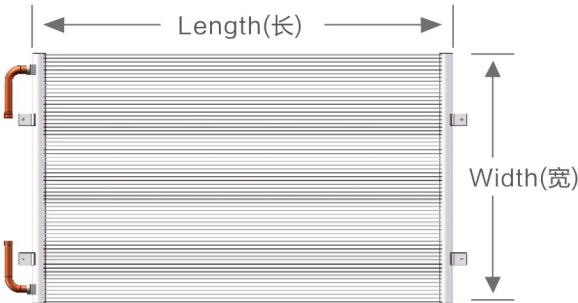


CU-AL welding parts is protected by heat shrinkable tube to avoid the corrosion potential difference.
铜铝焊接点采用热缩套保护，防止电位差腐蚀。



STRUCTURE PARAMETERS ◆ 结构参数

Various mould specification for flat tube and capacity choice: 0.8kw to 100kw for wide application area.
多种扁管和翅片模具，覆盖0.8KW到100KW的换热量，适应各种应用领域。



Coil/芯体
Max.Product Dimension/最大产品尺寸
6000mm*1600mm (L*H)/236"*63"(L*H)
Min.Product Dimension/最小产品尺寸
80mm*80mm(L*H) /3.15"*3.15"(L*H)
Coil thickness from 12mm, 16mm....., 32mm, 36mm, 45mm.

COMMERCIAL AIR-CONDITIONER-AIR COOLED WATER CHILLER 商用空调-风冷冷水机组

Reduce the size of whole machine, easily installation and transportation, long using life and low cost.
能减小整机产品体积，方便安装和运输，更长的使用寿命，成本低。

CONDENSING UNIT 冷凝机组

Widely used freezing and frozen storage, Such as cold room projects, ice maker, ice cream machine, food display, milk fresh and beer refrigeration etc.
广泛应用于冷冻冷藏行业，冷库工程，制冰机，冰淇淋机，展示柜，牛奶保鲜以及啤酒制冷等。

PRECISION DATA CENTER AIR-CON 精密机房空调

MCHE is with better dehumidification and refrigeration capacity, which can keep a better constant temperature and humidity effect, also with a low electric consumption, which is widely used in the world.
微通道有良好的除湿以及制冷能力，具有恒温恒湿及耗电量低等特点，已被广泛使用。

RAILWAY AIR-CON 轨道交通

Venttk provides micro-channel heat exchangers for railway air-conditioner domestic and overseas.
樊太为国内外的列车空调提供微通道换热器。

TELECOMMUNICATION CONTROL AIR-CON 通讯控制

High energy efficiency, small size and low power consumption.
能效比高，体积小，耗电量低。

APPLYING FIELD 应用领域

TRANSPORT REFRIGERATION 冷藏车

Light Weight Structure MCHE products has a good performance in the cold chain transport.
轻量化的结构使得产品在冷藏运输中有着出色的表现。

Reduce Size from
体积减小30%到50%

30%-50%

Weight Reduce
重量减轻10-60%

10%-60%

Cost Reduce
成本减少5% 到40%

5%-40%

Refrigerant Charge
Reduce more than
制冷剂充注和使用减少50%以上

50%

Fan Motor Consumption Reduce
风机功耗减少50%

50%

Compared with Cu-Al heat Exchanger. | 以上是跟传统铜管换热器对比。



COACH AND TRUCK AIR-CON
客车，卡车空调



AIR TO WATER HEAT PUMP
空气源热泵热水器



NEW ENERGY THERMAL MANAGEMENT
新能源热管理



MEDICAL EQUIPMENT
医疗机械



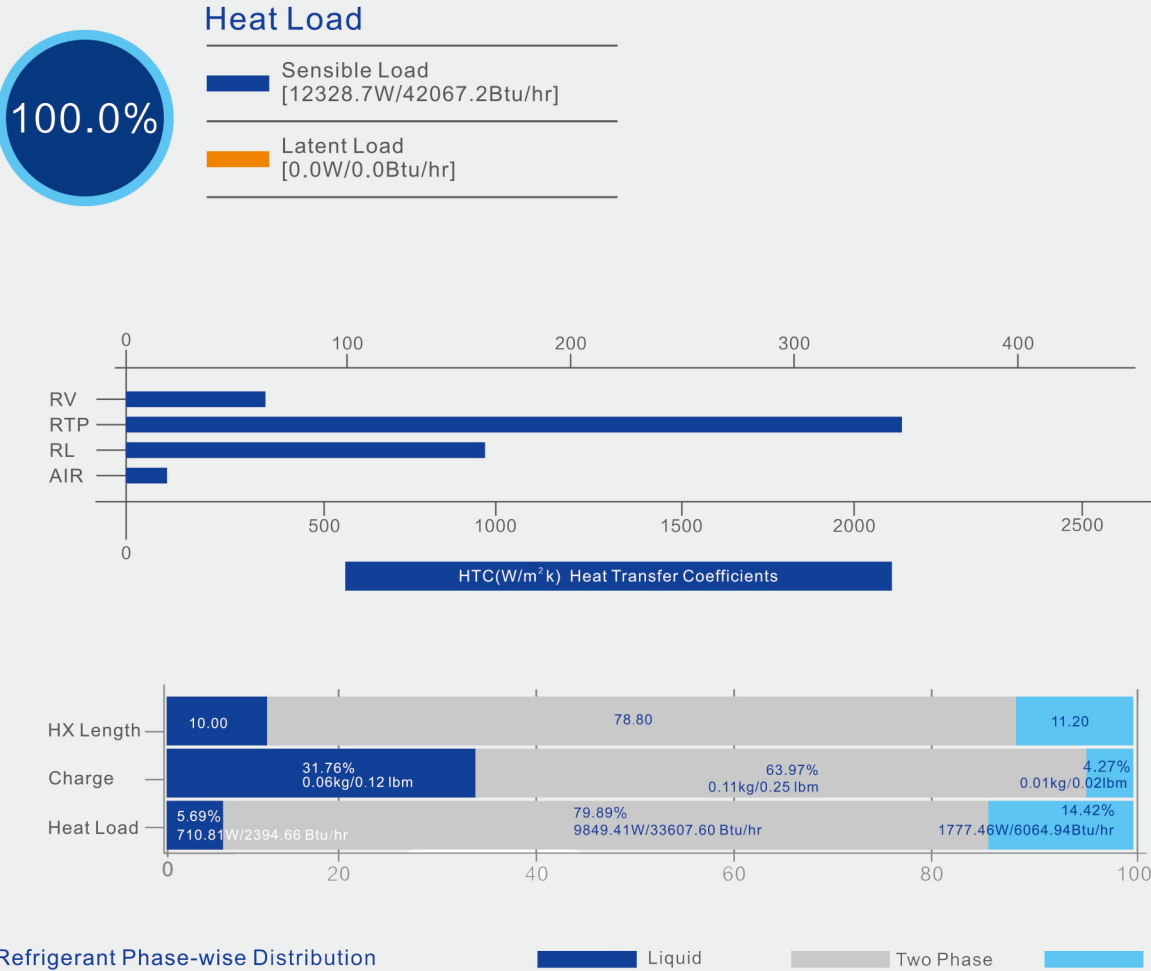
R&D EQUIPMENT

研发设备

- Products structure design based on CAE, optimize products thermal performance process, improve products R&D efficiency, reduce products design cost.
- Environmental simulation and thermal performance test ensure products function, mechanical strength and chemical composition analysis ensure product reliability.
- 计算机辅助设计产品结构，优化产品制冷剂传热流程，提高了产品研发效率，降低了产品设计成本。
- 环境模拟和热工性能测试确保产品的性能，机械强度和化学成份分析保证产品的可靠性。

Thermal performance design results

热工性能设计结果



We cooperate with one of the best refrigeration labs in china--Shanghai Jiaotong University lab for parts of the test, Such as the real refrigeration capacity test and vibration test etc.
部分测试如性能测试以及震动测试与中国上海交通大学实验室合作。



PRODUCTION
EQUIPMENT
生产设备



HELIUM LEAK INSPECTION MACHINE
氮检仪

Each of coil need helium inspection to ensure there is without any leak when customers get the goods.
每台产品发货前100%氮检，确保客户收到无泄漏产品。



NOCOLOK BRAZING FURNACE
NOCOLOK 钎焊炉

Max. products dimension for 6000*1600mm for single coil. High precision and high automation can ensure the quality of products and the timely delivery of orders.
最大的产品尺寸6000mm*1600mm。高精度，高自动化，能保证产品的品质和订单交货及时率。



FAST FIN FORMING MACHINE AND COIL AUTOMATIC ASSEMBLE TABLE
翅片快速成型机和自动组装机

Fast fin forming and automatic assembling speed, with the good quality and high assembly consistency.
翅片成型和自动组装速度快，装配质量和一致性高。