



Fully Automated Custom Assembly Equipment For Electric Vehicle Manufacturing

Basic Information

Place of Origin: Shanghai
Brand Name: Quanstar
Certification: ISO
Packaging Details: wooden box

Packaging Details: wooden bPayment Terms: L/C,T/T



Product Specification

Name: Custom Assembly Equipment

• Field Of Application: Electric Vehile

• Assembled Products: Thermal Expansion Valve (EXV)

Operation: Fully Automated

Control System: PLCCycle Time: 8S/PC

• Highlight: Custom assembly equipment,

Fully Automated Custom Assembly Equipment,

Custom Assembly Line

Product Description

Custom assembly equipment

Automotive Thermal ManagementAutomation Solution

Quanstar Intelligent Controls (Shanghai) Co.,Ltd has delveloped deep into the automotive thermal management industry, forming a technical system centered around advanced detection technology, automation control technology, and robot integration technology, to provide manufacturers with the best system solutions for the automotive parts industry. The processes involved in the assembly and inspection production line of thermal management system products include automatic assembly, automatic gluing, automatic screw tightening, Servopressing, robotic loading and unloading, leakage detection, vehicle vibration detection, visual automatic detection, tooling caching, information tracing, etc. The overall solution involves components such as HVAC, cooling modules, PTC and etc.

Category	Parameter	Description
General Specifications	Valve Type	Thermal Expansion Valve (TXV) or Electronic Expansion Valve (EXV)
	Application	Residential, commercial, automotive, or industrial air conditioning systems
	Refrigerant Compatibility	R22, R410A, R134a, R32, or other common refrigerants
	Material	Brass, stainless steel, or other corrosion-resistant materials
Performance Parameters	Flow Capacity	0.5 to 10 tons of refrigeration (depending on model)
	Operating Pressure Range	50 to 500 psi (depending on refrigerant type)
	Temperature Range	-40°C to 120°C (-40°F to 248°F)
	Superheat Adjustment Range	Typically 2°C to 10°C (3.6°F to 18°F)
Design Features	Connection Type	Flare, solder, or threaded connections
	Orifice Size	Adjustable or fixed orifice (e.g., 0.5mm to 2.5mm)
	Sensing Bulb Type	Liquid-charged or gas-charged for TXV; electronic for EXV
Electrical Specifications (for EXV)	Voltage Requirement	12V, 24V, or 220V (depending on model)
	Control Signal	PWM (Pulse Width Modulation) or analog signal
Installation & Maintenance	Mounting Orientation	Horizontal or vertical (depending on model)
	Maintenance Requirements	Periodic inspection and cleaning of orifice and sensing bulb
Safety & Compliance	Certifications	CE, UL, or other industry standards
	Leak Protection	Designed to minimize refrigerant leakage
Environmental Considerations	Refrigerant Type	Compatible with eco-friendly refrigerants (e.g., R32, R290)
	Energy Efficiency	Optimized for high-efficiency air conditioning systems



新能源汽车热管理相关生产设备

New Energy Vehicle Thermal Management Related Production Equipment

新能源汽车空调膨胀阀自动化装配、检测类生产线

New Energy Vehicle Air Conditioning Expansion Valve Automatic **Assembly, Testing Production Line**

EQUIPMENT DISPLAY



PROCESSES

主要工艺

- 零度测试
- · MOP测试
- 自动上料
- 视觉检测
- 自动拧紧
- 自动压装
- Auto feeding Visual detection Auto tightening

· Zero degree test

MOP test

Auto press-fit

FEATURES 核心优势

- 兼容8种产品,支持便捷换型
- 整线A级追溯
- · Compatible with 8 kinds of products, support
- for easy type change

 Whole line A level traceability

PARAMETER

性能参数

- 生产节拍:8秒/件
- 不良率:≤0.5%
- Production cycle: 8 s/pcs
- Defective rate: ≤0.5%

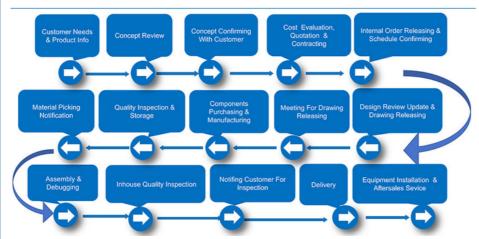
PRODUCT 主要产品



Business Global Service



We are committed to providing customers with high-quality, competitive products and services. A project cooperation process usually includes the following key steps.



FAQ

1.Q: Are you trading company or manufacturer?

A: We are a manufacturer with over 10 years of production and development experience.

2.Q: What are your major products?

A: We are an assembly automation solution provider specialized in customized automatic machinery for production. For example, we provide customized asembly line, testing and packaging solutions to several electric vehicle (EV) manufacturers, such as component-level lines for battery packs, thermal management systems, steerings and so on.

3. Q: How long is your delivery time?

A: Usually 3 months is a production cycle, the specific delivery date should be arranged according to the product's complexity and real-time production schedule. Please contact us for the latest delivery date.

4.Q: How about your price?

A: Show us your parts and we will be glad to find solutions and provide a suitable scheme, and offer the most competitive price to you.

5.Q: What is your terms of payment?

A: 40% deposit and 60% balance payment before delivery.

6.Q: What is the package for you machine?

A: We have standard wooden case package.

7.Q: How long is the warranty?

A: Our aftersale service is one year free warranty, and life-time maintenance guaranteed.

8.Q:What partners do you work with?

A: We can both work with customer's designated partners and propose other components partners at customer's request. Some of our technical partners as below:

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