Coolant Valve Automation Assembly Line For EV Thermal Management

Basic Information

- Place of Origin: Shanghai
- Brand Name: Quanstar
- Certification: ISO
- Packaging Details: wooden box
- Payment Terms: L/C,T/T

Product Specification

- Name: Assembly Line For Electronic Water Valve
- Application: Thermal Management Of The Electric Vehicle
- Condition: New
- Catogery: Automation
- Control System: PLC
- Power Supply: 380V/220V
- Highlight: **Coolant Valve Automation Assembly Line**, **EV Thermal Management Automation Assembly Line**, **EV Coolant Valve Auto Assembly Line**

Product Description

Coolant valve for thermal management of the electric vehicle automation solution

The design of the assembly line for electric vehicle electronic water valve focuses on flexibility and high efficiency.
Feeding: Set up sensors and visual recognition systems at the feeding position to quickly identify and classify parts to ensure the accuracy of parts by identifying the QR code or specific mark of parts, automatically distribute valve bodies, valve cores and other parts of different specifications to the corresponding assembly stations.
Assembly system: Multiple high-precision manipulators work together to complete the assembly task of electronic water valves. The manipulator is equipped with special fixtures and can accurately grab and install various parts. At key assembly stations, such as the assembly place of the valve core and the valve body, force sensors and displacement sensors are set up to monitor the pressure and position during the assembly process in real time to ensure assembly accuracy. At the same time, advanced processes such as laser welding are adopted to ensure that the connections between parts are firm and reliable. For example, during the welding process of the valve core and the valve body, the welding parameters are precisely controlled to ensure the weld quality and sealing performance.
Detection system: Equipped with a variety of detection equipment to conduct comprehensive performance detection on electronic water valves. Including pressure testing equipment to simulate the performance of electronic water valves under different working pressures; flow testing equipment to detect the flow control accuracy of water valves; sealing testing equipment to ensure that the water valve has no leakage under different pressures. In addition, an electrical performance detection station is also set up to detect whether the control circuit of the electronic water valve is working normally. The detection data is automatically uploaded to the production management system for quality tracing and analysis.
Control system: PLC control system. Operators can monitor the running status of the production line, adjust parameters and handle alarm information in real time through the touch screen human-machine interface. The control system also has an intelligent fault diagnosis function, which can quickly locate and eliminate faults and improve the reliability and stability of the production line.

Function	automatic feeding, assembly & testing line
Production	electronic water valve
Cycle time	25 s/pc
Defective rate	below 0.5%
Processes	O-ring automatic assembly
	laser marking
	visual detection
	automatic tightening
	automatic press-fit
	EOL test
	automatic feeding
Features	compatible with multiple styles
	top level traceability throughout whole line
	connect with customers MES system

Automotive (electric vehicle) automation solution
● Power system assembly automation solution
● Chassis system assembly automation solution
● Automotive electronics assembly automation solution
● Body and interior assembly solution

新能源汽车子零部件生产设备
New Energy Vehicle Sub-parts Production Equipment

新能源汽车电子水阀自动化装配、检测生产线
New Energy Vehicle Electronic Water Valve Automatic Assembly, Testing Production Line

EQUIPMENT DISPLAY
设备展示

PROCESSES
主要工艺

- O型圈装配 · O-Ring auto assembly
- 激光打标 · Laser marking
- 视觉检测 · Visual detection
- 自动拧紧 · Auto tightening
- 自动压装 · Auto press-fit
- EOL测试 · EOL test
- 自动上料 · Automatic feeding

FEATURES
核心优势

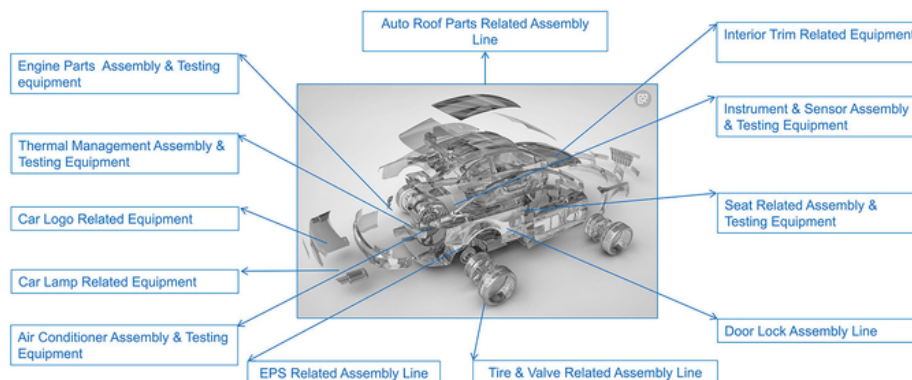- 兼容多种产品
- 整线A级追溯
- 连接客户MES系统，实时上传数据
- Compatible with multiple products
- Whole line A level traceability
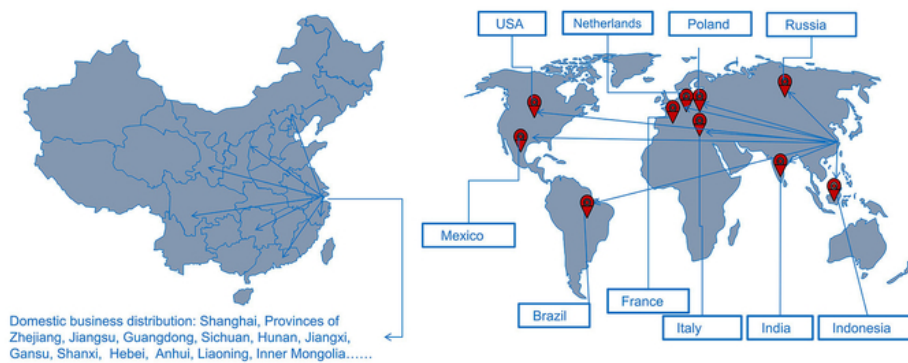- Connect customer MES system, Real-time data upload

PARAMETER
性能参数

- 生产节拍:25秒/件

- Production cycle: 25 s/pcs

PRODUCT
主要产品

Automotive Industry & Related Auto Parts

Auto Roof Parts Related Assembly Line

Interior Trim Related Equipment

Engine Parts Assembly & Testing equipment

Instrument & Sensor Assembly & Testing Equipment

Thermal Management Assembly & Testing Equipment

Car Logo Related Equipment

Seat Related Assembly & Testing Equipment

Car Lamp Related Equipment

Air Conditioner Assembly & Testing Equipment

Door Lock Assembly Line

EPS Related Assembly Line

Tire & Valve Related Assembly Line

Business Global Service

Domestic business distribution: Shanghai, Provinces of Zhejiang, Jiangsu, Guangdong, Sichuan, Hunan, Jiangxi, Gansu, Shanxi, Hebei, Anhui, Liaoning, Inner Mongolia……

USA | Netherlands | Poland | Russia
Mexico
Brazil
France
Italy | India | Indonesia

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: