



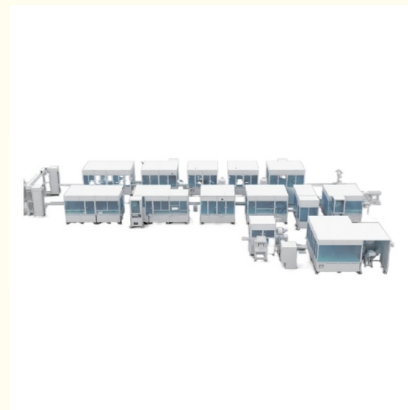
## Automation Automotive Industry Assembly Line For AC Expansion Valve

Our Product Introduction

for more products please visit us on [automation-assembly.com](http://automation-assembly.com)

### Basic Information

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



### Product Specification

- Name: Automatic Heat Pump Expansion Valve Assembly Line
- Application: Automotive (electric Vehicle) Automation
- Condition: New
- Type: Fully Automatic
- Control System: PLC
- Power Supply: 380V/220V
- Highlight: **AC Valve Automotive Industry Assembly Line,  
AC Expansion Valve Automotive Assembly Line  
,  
AC Expansion Valve Automation Assembly Line**



## Product Description

### Air conditioning (A/C) expansion valve assembly line equipment automotive automation solution

This highly automated air conditioning expansion valve assembly and inspection production line is designed for electric vehicle OEM to meet the market demand.

Feeding system: Vibration trays and customized material channels are used to transport expansion valve parts of various specifications to the assembly area in an orderly manner. Sensor detection is used to ensure the accurate supply of parts.

Assembly system: Multi-joint manipulators cooperate with special fixtures to accurately grab components such as valve bodies and valve cores for assembly. Force sensors and displacement sensors are set up at key assembly stations to monitor the pressure and position during the assembly process in real time to ensure assembly accuracy. For example, during the process of installing the valve core into the valve body, the insertion depth and force are strictly controlled to ensure sealing.

Inspection system: Equipped with high-precision pressure sensors and flow sensors, the assembled expansion valve is inspected for sealing performance and flow control performance. At the same time, a visual inspection system is used to check for appearance defects. If unqualified products are detected, they will be automatically diverted to the repair area.

Control system: Adopting a PLC control system, operation and monitoring are carried out through the touch screen human-machine interface. It can display information such as the running status, production progress, and quality data of the production line in real time. And program adjustments and parameter settings can be made according to different models of expansion valves.

|                |  |
|----------------|--|
| Function       | automatic feeding, assembly, testing & packaging |
| Production     | expansion valve for EV heat pump                 |
| Cycle time     | 12 s/pc  |
| Defective rate | below 0.5%                                       |
| Processes      | laser welding                                    |
|                | automatic tightening                             |
|                | automatic press-fit                              |
|                | visual detection                                 |
|                | laser marking                                    |
|                | O-ring automatic assembly                        |
|                | automatic feeding                                |
| Features       | Fully automatic production w/o any worker        |
|                | Real-time monitoring                             |
|                | A level traceability throughout whole line       |

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

### 新能源汽车电子膨胀阀 (EXV) 自动化装配、测试、包装生产线

New Energy Vehicle Electronic Expansion Valve (EXV) Automatic Line Integrated With Assembly, Testing, Packaging Etc

#### EQUIPMENT DISPLAY

设备展示



#### PROCESSES

主要工艺

- 激光焊接
- 自动拧紧
- 自动压装
- 视觉检测
- 激光打标
- O型圈装配
- 自动上料
- Laser welding
- Auto tightening
- Auto press-fit
- Visual detection
- Laser marking
- O-Ring auto assembly
- Auto feeding

#### PARAMETER

性能参数

- 生产节拍: 12秒/件
- 不良率:  $\leq 0.5\%$
- Production cycle: 12 s/pcs
- Defective rate:  $\leq 0.5\%$

#### FEATURES

核心优势

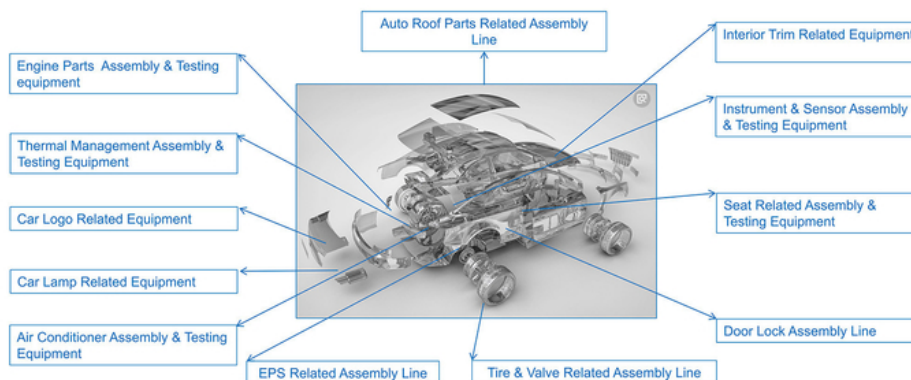
- 全自动无人化生产
- 实时监控
- 整线A级追溯
- Fully automatic production w/o operator
- Real-time monitoring
- A level traceability throughout whole line

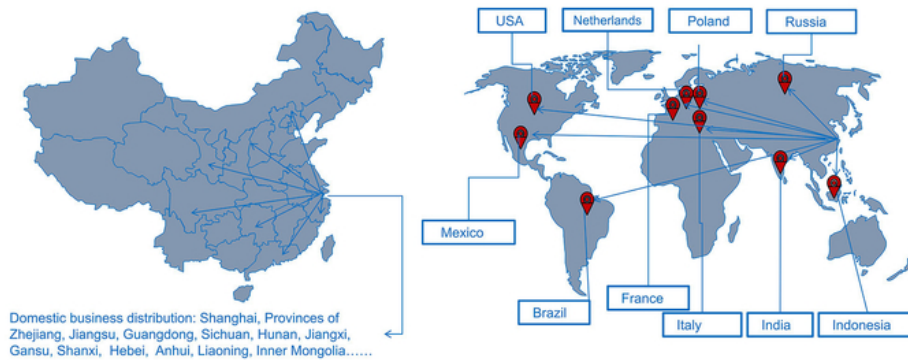
#### PRODUCT

主要产品



#### Automotive Industry & Related Auto Parts





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 assembly 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:

□

