

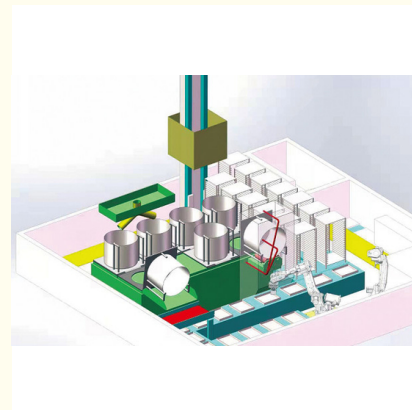


## Custom Automatic Machine with Integrated MES Software For Production Assembly

### Our Product Introduction

#### Basic Information

- Place of Origin: Shanghai
- Brand Name: Quanstar
- Certification: ISO
- Packaging Details: wooden box
- Delivery Time: 90 days
- Payment Terms: L/C,T/T



#### Product Specification

- Name: Custom Automatic Machine For Production Assembly
- Application: Industrial Automation
- Products: Automated Machinery
- Operation: Fully Automatic, Semi-automatic
- Control System: PLC, HMI
- Integrated Software: SCADA, MES
- Highlight: **Production assembly automatic machine, Custom Automation Assembly Line**

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## Product Description

### Custom automatic machine for production assembly

#### Assembly technology:

Technology for the automation transformation of machine tools (replacing human workers with robots).

The ability to conduct process analysis, machine tool selection, cutting tool analysis, cycle time analysis, fixture design, etc. for brand-new automated machining projects.

It includes the capabilities of automatic feeding, automatic loading, automatic milling, automatic turning, automatic cleaning, automatic size detection of spherical sweep, automatic marking, automatic offline processing, automatic fluid replenishment, automatic chip removal, automatic tool offset, data traceability system, etc.

It includes the integrated design capabilities of intelligent material racks, robots, overhead rails, machining centers, turning machining centers, robot fixtures, machining center fixtures, cleaning machines, spherical sweep inspection machines, laser marking machines, integrated chip removal, integrated fluid replenishment, tool offset systems, control systems, and traceability systems.

It has the function of automatically detecting broken tools to prevent workpieces from being scrapped due to tool breakage during the machining process.

It has the ability to write machining programs.

It has the ability to repair machine tools and modify machine tool PMA programs.

#### Key Parameters:

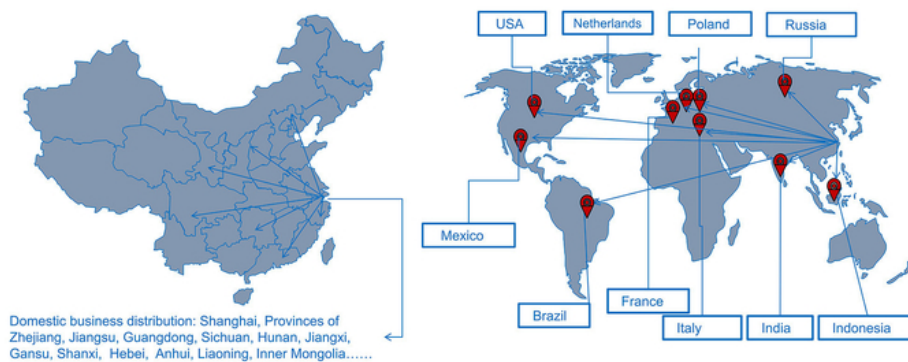
Category	Parameter	Description/Value
General Specifications	Line Length	10-50 meters (adjustable based on layout)
	Production Cycle Time	3-15 seconds/part (depends on complexity)
	Workstation Number	5-20 modular stations
	Power Supply	380-480V AC, 50/60Hz, 3-phase
	Compressed Air Requirement	0.5-0.7 MPa, ~100 L/min
Assembly Module	Assembly Accuracy	±0.05 mm
	Gripper Type	Pneumatic/Servo-electric (customizable)
	Torque Control Range	0.1-20 Nm (for screwdriving units)
	Part Size Range	5-500 mm (L/W/H)
	Max. Part Weight	10 kg/station
Inspection Module	Vision System Resolution	5-12 MP (with 10-50 µm/pixel)
	Defect Detection Sensitivity	≥0.02 mm (for dimensional defects)
	Camera Type	CCD/CMOS (2D/3D options)
	Lighting System	LED ring/backlight (adjustable intensity)
	OCR Verification	Font size ≥1.5 mm
Motion System	Conveyor Type	Belt/Chain/Pallet (motorized)
	Positioning Accuracy	±0.1 mm (with servo positioning)
	Linear Speed	0.1-2 m/s (variable)
Control System	PLC	Siemens/Brand (e.g., S7-1500, Allen-Bradley)
	HMI	10"-15" touchscreen (multi-language)
	Communication Protocol	PROFINET/EtherCAT/Modbus TCP
	Data Logging	SQL database (local/cloud)
Quality Metrics	False Rejection Rate	≤0.5%
	First-Pass Yield	≥99.2%
	MTBF (Mean Time Between Failures)	>2,000 hours
Environmental	Operating Temperature	5-40°C
	Humidity Range	20-80% RH (non-condensing)
	Noise Level	≤75 dB
Safety	Safety Standards	ISO 13849-1 (PLd), CE/UL certified
	Protective Measures	Light curtains, E-stop, safety interlocks

**Notes:**

**Customization:** Parameters can be adjusted based on part materials (metal/plastic) and complexity.

**Optional Add-ons:** AI-based defect classification, RFID tracking, robotic welding/gluing stations.

#### 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 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:

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