

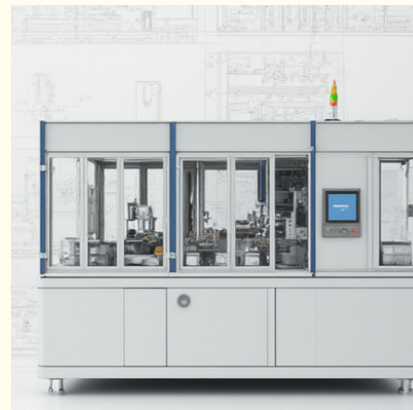


ISO 9001 Automated Assembly Line Automotive Parts Manufacturing Assembly Line

Our Product Introduction

Basic Information

- Place of Origin: Shanghai
- Brand Name: Quanstar
- Certification: ISO 9001
- Minimum Order Quantity: 1
- Delivery Time: 90
- Payment Terms: T/T



Product Specification

- Name: Assembly Machine For Automotive Parts
- Material: Iron, Metal
- Automation: Semi Automated Or Fully Automated
- Controller: Siemens PLC
- Inspection: EOL
- Origin: Shanghai
- Highlight: **ISO 9001 Automated Assembly Line,
Automotive Parts Manufacturing Assembly Line**

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Product Description

ISO 9001 Automated Assembly Line Automotive Parts Manufacturing Assembly Line

Name	Assembly Machine For Automotive Parts
Material	Iron, metal
Automation	Semi automated or fully automated
Controller	Siemens PLC
Inspection	EOL
Origin	Shanghai

Key Technical Features

1. High-Precision Assembly

- ± 0.02mm repeatability for critical components (e.g., engine blocks, transmission systems)
- Servo-electric tightening systems with torque accuracy of ± 1%
- Vision-guided robotics for part alignment (up to 0.01mm precision)

2. Flexible Automation

- Modular design supports 5-20 workstations, adaptable for different vehicle models
- Quick-change tooling (<5 min for product switchover)
- Hybrid operation (manual + automated modes for mixed production)

3. Smart Manufacturing Integration

- IoT-enabled real-time monitoring (OEE, downtime tracking)
- AI-driven predictive maintenance to reduce unplanned stops
- Digital twin compatibility for virtual line optimization

4. Robust Construction

- Heavy-duty steel frame with vibration damping (handles up to 2-ton loads)
- IP67-rated components for harsh factory environments
- Energy-efficient (30% lower power consumption vs. hydraulic systems)

5. Quality Assurance

- In-line laser scanning for dimensional checks (±0.05mm tolerance)
- Leak/pressure testing (up to 50 bar for fuel/brake systems)
- RFID-based traceability (full component history logging)

Industry Applications

1. Powertrain Assembly

- Engine subassemblies: Piston-rod insertion, camshaft timing

- **Transmission systems:** Gear stacking with **0.05° angular precision**
- **E-motor production:** Stator winding, rotor balancing

2. Body-in-White (BIW)

- **Laser welding** of roof/doors (**0.1mm seam accuracy**)
- **Adhesive dispensing** for structural bonding ($\pm 2\%$ volume control)
- **Hemming** of aluminum/steel panels

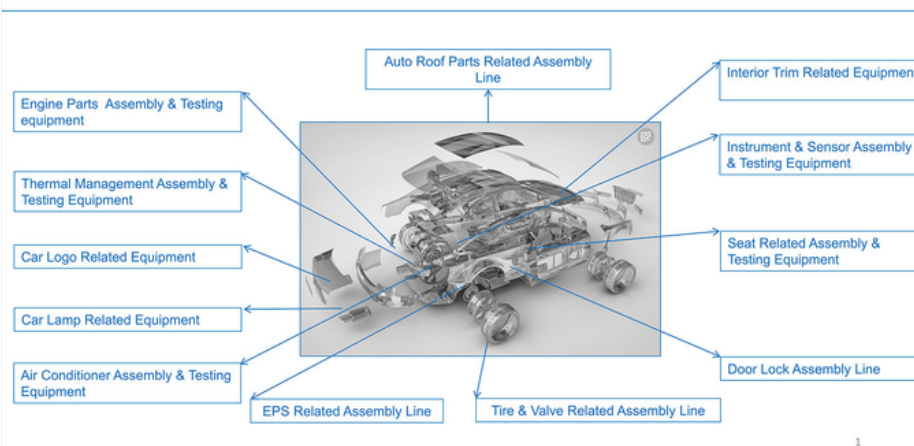
3. Electrical & Electronics

- **Wire harness routing** with bend-radius protection
- **ECU assembly** (connector mating force: **25N \pm 0.5N**)
- **Sensor calibration** (LiDAR/radar alignment)

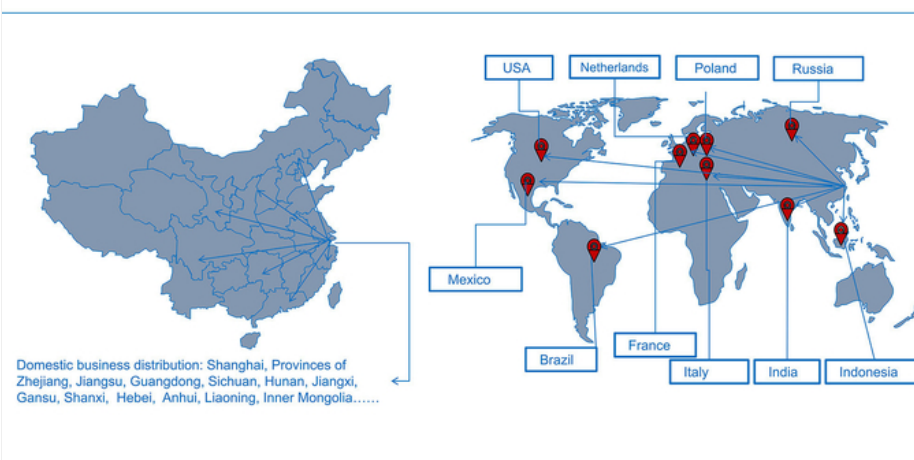
4. Interior & Exterior

- **Dashboard assembly** (haptic feedback testing)
- **Seat track adjustment** (cycle tested for **50,000+ movements**)
- **LED headlight alignment** (lumen output verification)

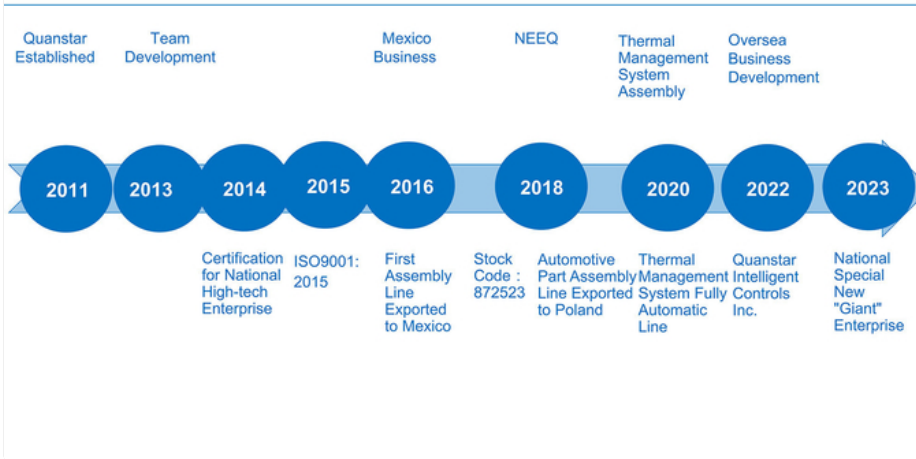
Automotive Industry & Related Auto Parts



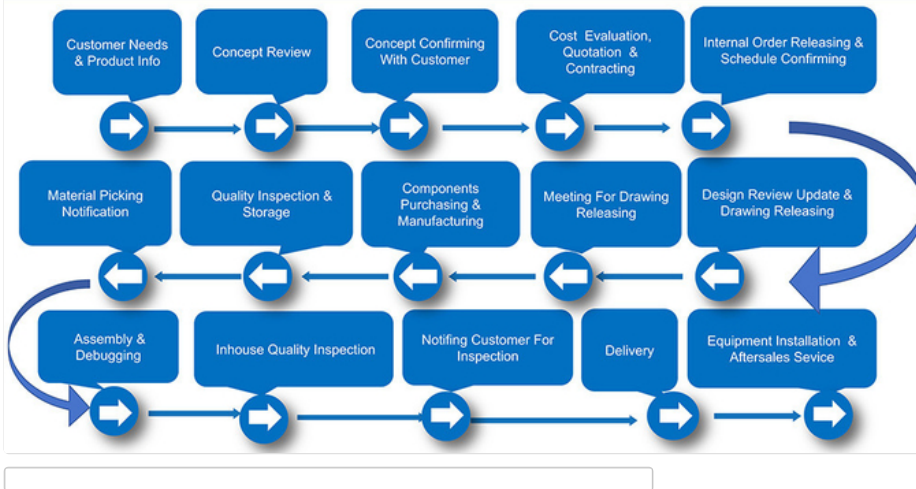
Business Global Service



Development History



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



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