

Company Profile

Longyu Robot is a leading manufacturer of unmanned heavy-duty transport vehicles, integrating R&D, design, and production. We provide intelligent logistics management systems powered by smart logistics technology, industrial IoT, and big data, solving the challenges of transporting overweight, oversized, and extra-long materials. Our solutions serve a wide range of industries including aerospace, defense, high-speed rail, construction machinery, wind power, shipbuilding, transformers, ports, metallurgy, hydropower equipment, heavy trucks, and molds. Our flagship products are unmanned heavy-duty transport vehicles with a design capacity of up to 1,000 tons. Our vehicles feature eight cutting-edge technologies: servo control system, wireless communication system, synchronized hydraulic system, power monitoring system, automatic leveling system, safety protection system, intelligent scheduling system, and fault self-diagnosis system. Our development strategy is built on three pillars - unmanned heavy-duty transport, smart parks, and smart ports and mining areas - woven together into a network that captures the future.



**AGV / AMR / Conveyors - Full Product Line
Integration**

Main Products & Solutions

Full-range Intelligent Handling Equipment · Six Categories, One-stop Integration



AGV Unmanned Transport Vehicles

Pallet Handling / Stacking / Reach



AMR Autonomous Mobile Robots

Lifting / Under-running / Bin



Unmanned Tractors & Logistics Vehicles

Cross-zone Transport within Facility



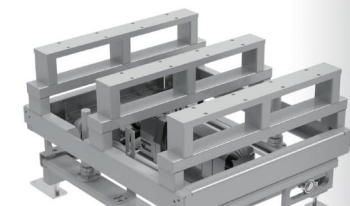
Outdoor Heavy-duty Transporters

Qilin / Jiaolong Series 5T-200T



Intelligent Conveying Lines

Roller / Chain / Belt



Transfer & Lifting Equipment

Lifting Transfer / Elevator / RGV

AGV · AMR Intelligent Handling Robots

Indoor Handling Workhorse · Multiple Navigation · Multi-carrier Compatible



Stacking AGV

Pallet Stacking, 1-1.5T Class



Pallet Handling AGV

Narrow Aisle Pallet Transport, Compact & Agile



Counterbalanced AGV

No-leg Counterweight Design, Fits All Pallet Types



Heavy-duty Stacking AGV

30-ton Class Heavy Handling

0.5T–30T Full Load Coverage · LiDAR SLAM Navigation, No Facility Modification · Customization & Volume Delivery Supported

Unmanned Tractors & Logistics Vehicles

Outdoor Cross-workshop Transport · 24/7 All-weather Operation



Unmanned Tractor

Automatic Coupling/Decoupling, One Tractor Multiple Trailers



Box-type Logistics Vehicle

Rain & Dust Proof, Campus Distribution



Flatbed Transporter

Pallet / Container Transport



Heavy-duty Lifting Platform

Self-propelled Lifting, Precision Heavy-duty Docking

5T–200T Load Coverage · BeiDou + LiDAR SLAM Dual Navigation · Omnidirectional Movement · Smart Scheduling Platform Integration

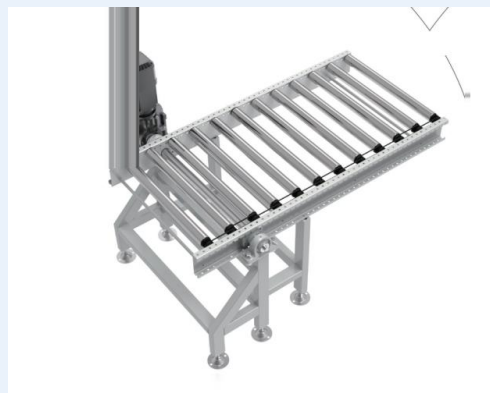
Intelligent Conveying System

Production Line — Warehouse — AS/RS Full-link Connection Equipment



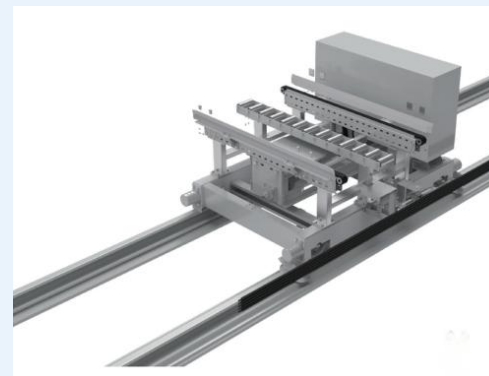
Belt Conveyor

Continuous Conveying, Low Noise, Long Distance



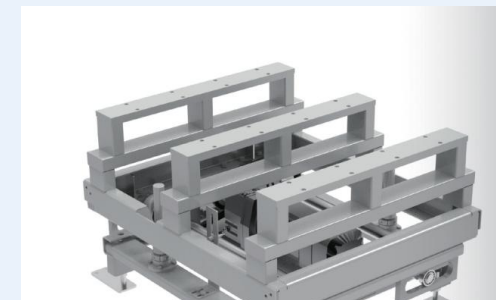
Roller Conveyor

Pallet / Bin Sorting & Transfer



Lifting Transfer Equipment

Rail Shuttle, Automatic Transfer



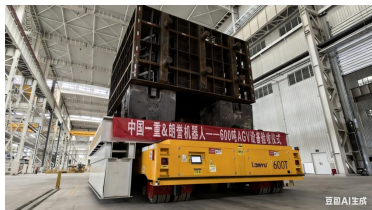
Lifting Table · Elevator

Cross-floor / Workstation Docking

Seamless Integration with AGV / AMR · Depalletizing/Palletizing & Merging/Diverting Optional · Unified Scheduling System Access

Longyu Heavy-duty Transporter Full Series

World's Only Manufacturer with Full 3t–1000t Heavy-duty Transporter R&D and Mass Production Capability · 5 Series



Xuanwu Series

Equipment Production Heavy-duty Vehicle

Standard Load 3T–600T, R&D up to 1000T, Multi-vehicle Coordination for Kiloton-level Operations, Wind Power / Energy Storage / Shipbuilding Full Process



Kunpeng Series

Ultra-thin Heavy-duty Vehicle

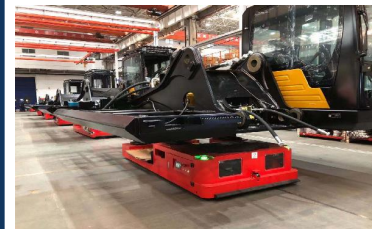
Load 20T–600T, As Thin as 350mm, World's Thinnest, Dual-vehicle Coordination, Suitable for Low-headroom Spaces



Shuangyibird Series

Dual-vehicle Coordinated Transport

Hundred-meter Extra-long Workpiece Coordinated Transport, mm-level Coordination Error at 10m Level, Wind Blades / Rail Locomotives



Hundun Series

Flexible Production Line Customization

Modular Chassis + Profiling Tooling, Full-stack Mechatronics & Software In-house Development, Mixed-line Production with Flexible Layout



Chuangyu Series

Port IGW

65T Container Transporter, Four-axle Steering with Small Radius, Suitable for Sea Ports / River Ports / Railway Yards

Wind Power · Energy Storage · Shipbuilding · Power Transformers · Rail Locomotives · Aerospace · Construction Machinery · Smart Ports - Full Scenario Coverage

Longyu Core Technology · Global Strength

Full-stack In-house R&D for Mechanical, Electrical, Software and Systems · Heavy-duty Vehicle Market Share #1 Worldwide for 5 Consecutive Years

1

24 Servo Synchronous Drive

Synchronization Error $\leq 0.5\%$, Ultra-smooth and Precise Heavy-load Operation

2

AI Fleet Scheduling System

Multi-vehicle Collaborative Dynamic Task & Path Allocation, Maximizing Operational Efficiency

3

Multi-mode Composite Navigation

LiDAR + Satellite + Vision + Inertial Navigation, Stable Operation in All Indoor/Outdoor Scenarios

4

Comprehensive Safety Protection

E-stop / Obstacle Avoidance / Collision Prevention Redundancy, Compliant with CE/UL Safety Standards

5

High-efficiency Smart Battery Management

BMS Real-time Monitoring & Charging/Discharging Optimization, Ensuring Long-lasting Battery Life

6

All-weather Heavy-duty Travel Mechanism

Industrial-grade High-strength Chassis, Wide Temperature Range $-40^{\circ}\text{C} \sim 50^{\circ}\text{C}$ Operation

Global Leadership

Global Market Share #1

Heavy-duty Vehicle Global #1 for 5 Consecutive Years

Heavy-duty Cases 1500+

Number of Heavy-duty Scenario Delivery Cases

600-ton World Record

Global Record Holder for Single Vehicle Load Capacity

Cumulative Shipments 10,000+ Units

Cumulative Heavy-duty Vehicle Shipments

Exported to 22 Countries

Europe, Americas, Japan, Korea, Southeast Asia, etc.

IP54 / IP55 / IP65 Optional · $-45 \sim 65^{\circ}\text{C}$ Wide
Temperature Range
International Certifications CE / UL / EAC

Application Scenarios & Industries Served

Demand-oriented, Scenario-based Equipment Combination

Six Major Application Scenarios

- Automatic Material Transport on Factory Production Lines
- Unmanned Workshop Distribution
- Smart Warehouse Inbound/Outbound Handling
- AS/RS Supporting Handling
- Cross-zone Material Conveying within Facility
- Logistics Sorting Automation Upgrade

Industries Served

Machinery
Manufacturing

Electronics
Manufacturing

New Energy

Auto Parts

Warehousing &
Logistics

Food &
Pharmaceutical

Light Industry
Processing

More Industry Scenarios Support Custom Survey and Trial Operation
Verification

Our Core Advantages

Resources · Solutions · Implementation · Service - Four-in-one

01 Technical Advantage

Compared with competitors, Tianjin Langyu products feature higher system maturity, modular design and production, with unique technical advantages, lower error rates and failure rates. The system not only automatically collects and analyzes equipment data in real time, but also provides predictive fault analysis to prevent issues before they occur.

02 Solution Advantage

Demand-oriented, no unnecessary equipment stacking. We optimize handling processes, reduce labor costs, and improve overall automation efficiency.

03 Implementation Advantage

Deep understanding of industrial site conditions, production processes, and implementation. We handle both piecemeal retrofits and comprehensive intelligent upgrade projects.

04 Service Advantage

Dedicated one-on-one support throughout: free pre-sales survey and solution design, full delivery tracking during project execution, and rapid after-sales maintenance response.

Service Process

Requirement Communication → Long-term Maintenance & Upgrade, 10-step Full-process Closed Loop



Free Pre-sales Survey & Solution · Full Delivery Tracking During Project · Rapid After-sales Maintenance Response