One-Stop Palletizing Workstation

Han's Robot

SERVE HUMANITY WITH ROBOT TECHNOLOGY

One-Stop Palletizing Workstation

With the gradual disappearance of the demographic dividend, the promotion of modern and automated equipment into the production line to replace manual labor in high-intensity, high-repetition work is conducive to enterprise cost reduction and efficiency and industrial transformation and upgrading. In the food and beverage, logistics and warehousing, pharmaceutical and chemical industries, there is a large number of palletizing needs. Han's Robot introduces one-stop palletizing workstations, which have the advantages of quick deployment, easy use, high efficiency and low cost, and are the preferred and wise choice to meet various palletizing application scenarios.

1 Supports multiple types of suction cups, realizing faster speeds

Palletizing cycle reaches 8-13 cycles per minute.
Single-suction palletizing rate achieves 13 boxes (items) per minute, while dual-suction achieves up to 24 boxes (items) per minute.Support 24 hours a day continuous operation.
Compared to similar products, it can reduce time for the same task by 38%.

2 Meet all kinds of stacking types,up to 2.2 meters

The palletizing solution can be generated directly by entering the box size in the operator interface and can meet the requirements of 1.7-2.2m palletizing.

3 Costs can be controlled, payback within 6 to 10 months

The core components are self-researched and self-supplied and there is no need to add additional sensor equipment, etc. The overall solution cost can be controlled and the return on investment is about 6-10 months.

4 Zero programming, visual operation

Palletizing solutions can be generated by inputting the dimensions of the box, pallet and other materials according to the guidance which is done by using a physical isometric model interface, what you see is what you get. No programming required for the whole process.

5 Smooth and safe operation

Based on advanced vibration suppression algorithms, it runs smoothly at full load and speed, with reduced jitter and higher precision. It also incorporates 10 advanced safety configurations for enhanced operational safety.

6 Highly integrated and easy to deploy

The palletizing platform that integrates collaborative robots, power supply, pneumatics and lifting columns, which can be deployed and put into use within 3 hours.

7 Adaptable to all types of production environments

Made of magnesium-aluminum alloy material, it adapts to corrosive and oxidizing complex production environments. The compact design occupies less than 1 square meter of single-machine deployment space, does not require safety guards, and can be efficiently applied to different production lines.

8 Flexible expansion, optional peripherals

Users can choose to connect peripherals such as grippers, pneumatic tools, and the seventh axis as needed, which are convenient to disassemble and replace.

9 Wide range of applications

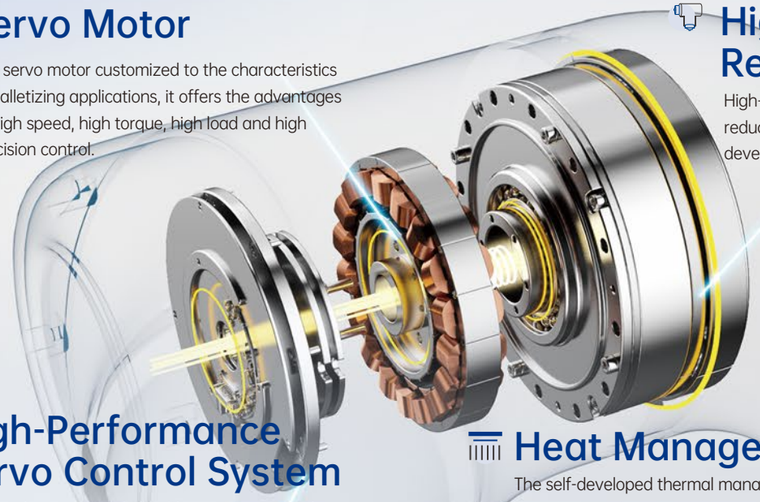
It can be widely used in logistics, daily chemicals, pharmaceuticals and other fields, and plays an important role in industrial production and improving efficiency.

Servo Motor

The servo motor customized to the characteristics of palletizing applications, it offers the advantages of high speed, high torque, high load and high precision control.

High-Precision Reducer

High-torque, high ratio, high-rigidity reducer specially customized and developed for palletizing applications.



High-Performance Servo Control System

Optimized servo control algorithm ensures smooth operation of the robotic arm during high-speed, heavy-load work, without abnormal shaking.

Heat Management System

The self-developed thermal management system ensures that the robot arm is at the right temperature under high intensity, high tempo and high load conditions, improving the overall machine performance.

Core Parameters

Configuration Parameters

Name	Model Specifications	Quantity (sets/pieces)	Manufacturer and Country of Origin	Configuration
Heavy Payload Robots	S20	1	hansrobot	Standard Configuration
	S30	1	hansrobot	
	S35	1	hansrobot	
Integrated Chassis	HRW23002-STO(without lifting column)	1	hansrobot	Standard Configuration
	HRW23002-ST(with lifting column)	1	hansrobot	
End Gripper	-	1	Subject to actual conditions	Additional Accessories
Powered Positioning Roller Line	-	1	Subject to actual conditions	Additional Accessories

Workstation Parameters

Workstation Model	RP-ST-S20	RP-ST-S30	RP-ST-S30
Robot Arm Payload	20kg	30kg	35kg
Working Radius	1700mm	1800mm	1650mm
Palletizing Height (without lifting column)	1600mm	1650mm	1600mm
Palletizing Height (with lifting column)	2200mm	2200mm	2100mm
Maximum Pallet Size	1200*1200mm	1200*1200mm	1200*1200mm
Palletizing Cycle (cycles per minute)	8~10 cycles/min	8~13 cycles/min	8~10 cycles/min
Total Power Consumption	2000W	3750W	3750W
Palletizing Accuracy	±0.1mm	±0.1mm	±0.1mm
Communication Support	TCP/IP and Modbus		
Workstation Weight(±10kg)	510kg+68kg	510kg+110kg	510kg+90kg
Temperature Range	0~55℃		
Footprint Area (entire station, excluding pallet)	1200*1100mm		
Ceiling Height Requirement	Pallet height+800mm		
Rated Voltage	110~220V		
Compatible Size (standard suction cup)	130~1200*80~1200*100*1200mm		
Compatible Surfaces	Regular cardboard surfaces, smooth surfaces, metal surfaces		

Main Configuration

1. Robot (S20 S30 S35)
2. Operator Station
3. Gripper
4. Lifting Column
5. Control Box
6. Teach Pendant (handheld)
7. Mobile Base