Cobot Palletizer Workstation

SIMPLE | FLEXIBLE | POPULAR
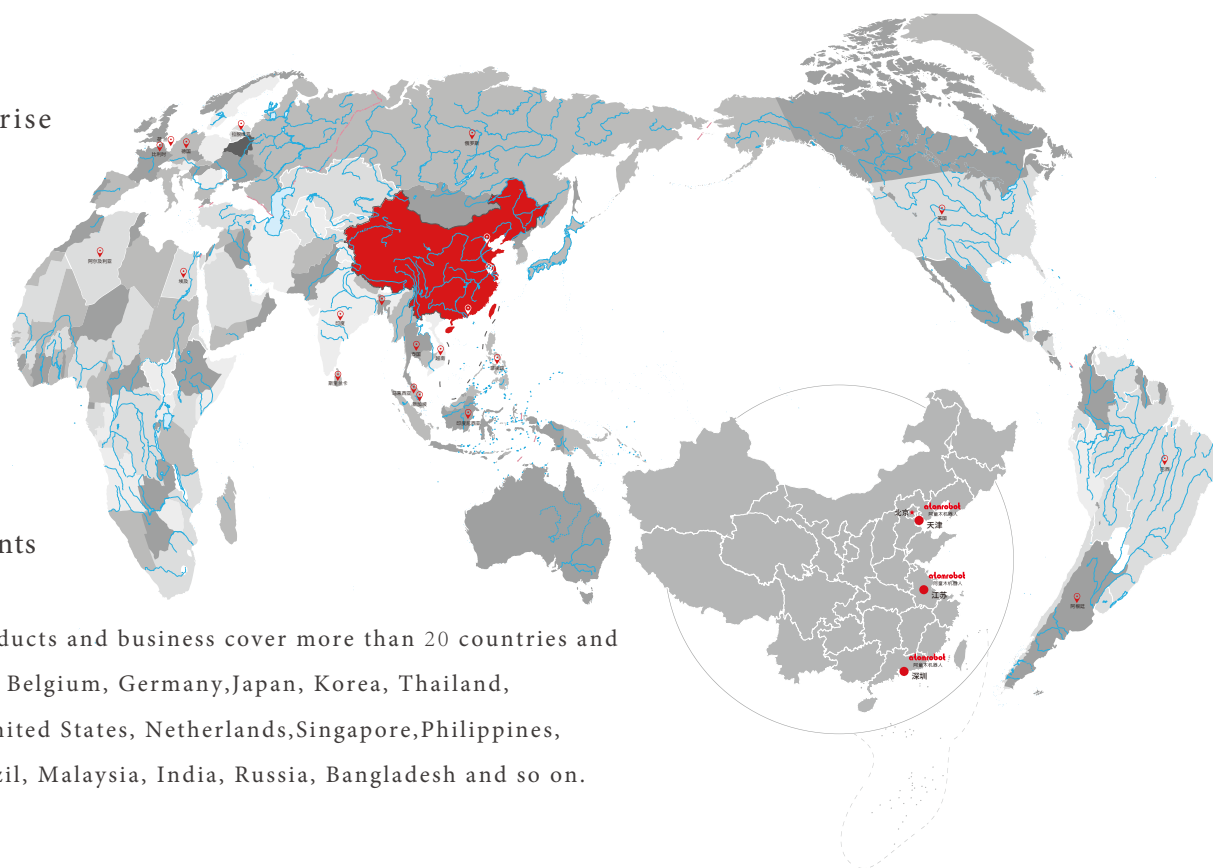
CONTENTS

Company profile

600+

scale enterprise clients

6000+

sets sold

20+

countries clients distribution

Atomrobot products and business cover more than 20 countries and regions such as Belgium, Germany,Japan, Korea, Thailand, Vietnam,the United States, Netherlands,Singapore,Philippines, Argentina, Brazil, Malaysia, India, Russia, Bangladesh and so on.

⚙ Mission

Free hands with technology

🌐 Vision

Become the most reliable industrial robot service provider in the world

🔄 Values

Rely on excellent products and services to stay in the market for a long time
Trust each other, take responsibility and move forward
Believe that talents are the source of power to create infinite possibilities
Change the world through continuous innovation

As the leading parallel robot specialist and intelligent manufacturing explorer in the industry, Atomrobot takes " Free hands with technology"as the mission to focus on the R&D and innovation of parallel Delta robot, high-speed SCARA robot and other intelligent manufacturing technologies. With many years of technical advantages, fully independently researched and developed high-performance general control system, AI+3D vision system and complete and rich core product matrix, the Company has been committing to providing robots,workstations and automation, intelligent system solutions, process solutions and technical services for integrators in the food, pharmaceutical,daily chemical, 3C, PCB, new energy and other sub-sectors, helping clients to achieve cost reduction and profit increase.

The Company is headquartered in Tianjin, with subsidiaries in Suzhou, Kunshan, Nanjing,Chengdu and Shenzhen .

Honors

★ **National specialized, unique and new small giant enterprise**

★ **National High-tech Enterprise**

75
invention patents

69
utility model patents

24
software copyrights
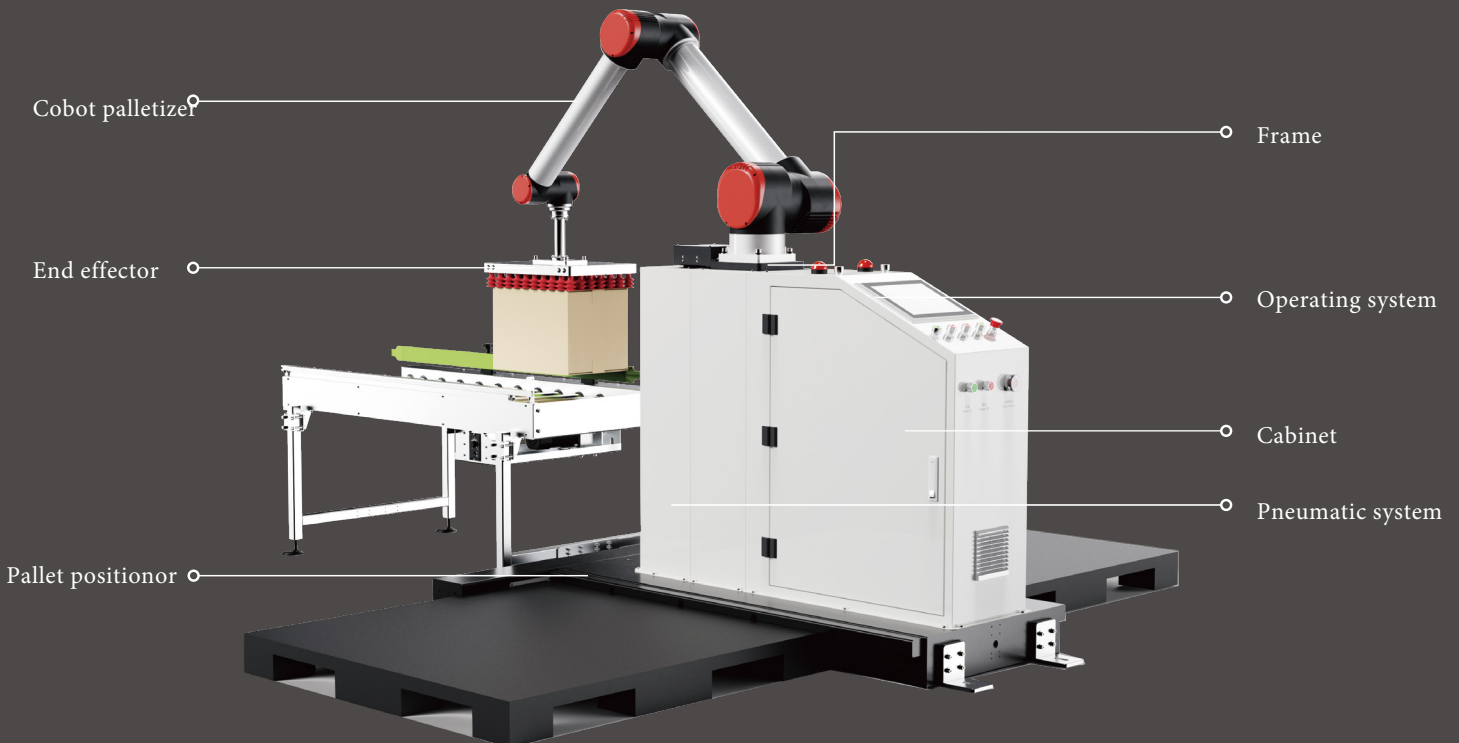
9
design patents

TIANJIN GAZELLE ENTERPRISE

With ISO9001 Quality Management Certification, CE Certification and CR Certification

Overview

Cobot palletizer redefines **ease of use**

- Installation and commissioning within 2hours
- New Pattern set within 5minutes
- 8-10cases/min
- 800+ palletizing trajectories

- Max pallet: 1200mmX1200mm
- Two products palletizing simultaneously
- Capable of identifying label direction
- Switching single and double picks freely

Cobot palletizer

End effector

Pallet positionor

Frame

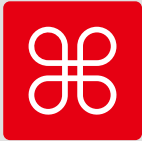Operating system

Cabinet

Pneumatic system

Highlights

Easy programming

Easy to master the programming in 30 minutes. The visual programming has a simple and efficient operation interface. Ordinary workers can operate independently after 0.5 days' training.

Flexible production

Multiple functional scenarios switched quickly, human-machine collaboration, dual-machine collaboration, and multi-machine collaboration are available too

Wide range of applications

Widely used in food, pharmaceutical, 3C, daily chemicals, grinding, handling, welding, assembly, spraying, stacking ...

Safe and stable

10-level collision detection to avoid accidental injuries to workers. When a single fault occurs in the damaged equipment, the safety function will not be lost and the box will not fall when the power is off.

Flexible deployment

Integrated design, light and flexible, small footprint; easy to move, installation in a short time

Economical and practical

ROI: 6-12months

ATM-MD20

Cobot palletizer expanded configuration options

Further improve the safety of palletizing, more reliable, convenient and unified solution selection

LiDAR Sensor

· Non-contact, flexible
  detection distance setting
· Immediate shutdown upon
  entering the red zone

Safety fence+Light curtain

· Physical protection, safe and
  reliable
· Stable performance, strong anti-
  interference ability
· High induction sensitivity
· Long service life

Inclined roller conveyor

· The box automatically
  moves to the side
· Large height adjustment
  range
· Various materials available
· Long service life

Modular grippers

· Accommodate complex
  application scenarios
· Lightweight, compact space
· Support customization
· Top brand box drop detection
· High stability

Parameters

Model	ATM-MD20G	ATM-MD20S
Payload	20kg	20kg
Working space radius	1600mm	1600mm
Horizontal distance (pallet size)		
Palletizing height	Standard H1=1600mm	Lifting type H2=2100mm
Speed	≤9pcs/min	≤9pcs/min
Repeatability accuracy	±0.04mm	±0.04mm
Air consumption	220-320L/min	220-320L/min
Communication	EtherCAT、IO	EtherCAT、IO
IP	IP54	IP54
Temperature	0-50℃	0-50℃
Max power	2.5kw	3.3kw
Power supply	1PH220v/50Hz	1PH 220v/50Hz
Weight	≈370kg	≈430kg
Footprint	1972mm*1488mm	1972mm*1488mm

ATM-MD20

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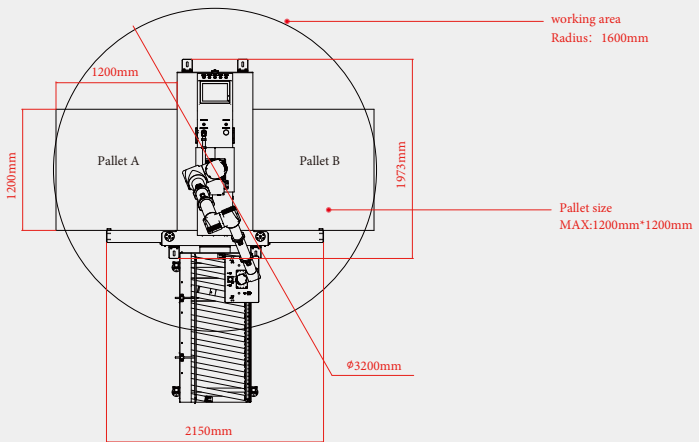· Long service life

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Modular grippers

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| Parameters

Model	ATM-MD20SS
Payload	20kg
Working space radius	1600mm
Horizontal distance (pallet size)	
Palletizing height	Lifting type H_3=2300mm
Speed	≤9pcs/min
Repeatability accuracy	±0.06mm
Air consumption	220-320L/min
Communication	EtherCAT、IO
IP	IP54
Temperature	0-50℃
Max power	3.3kw
Power supply	1PH220v/50Hz
Weight	≈390kg
Footprint	1973mm*2150mm

ATM-MD30

Cobot palletizer expanded configuration options

Further improve the safety of palletizing, more reliable, convenient and unified solution selection

LiDAR Sensor

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  detection distance setting
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  entering the red zone

Safety fence+Light curtain

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· Stable performance, strong
  anti-interference ability
· High induction sensitivity
· Long service life

Inclined roller conveyor

· The box automatically
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· Large height adjustment
  range
· Various materials available
· Long service life

Modular grippers

· Accommodate complex
  application scenarios
· Lightweight, compact space
· Support customization
· Top brand box drop
  detection
· High stability

▌Parameters

Model	ATM-MD30G	ATM-MD30S
Payload	30kg	30kg
Working space radius	1460mm	1460mm
Horizontal distance (pallet size)		
Palletizing height	Standard H_1=1600mm	Lifting type H_2=2100mm
Speed	≤7pcs/min	≤7pcs/min
Repeatability accuracy	±0.04mm	±0.04mm
Air consumption	320-360L/min	320-360L/min
Communication	EtherCAT、IO	EtherCAT、IO
IP	IP54	IP54
Temperature	0-50℃	0-50℃
Max power	3.3kw	4.2kw
Power supply	1PH220v/50Hz	1PH220v/50Hz
Weight	≈380kg	≈440kg
Footprint	1972mm*1488mm	1972mm*1488mm

ATM-MD30

Cobot palletizer expanded configuration options

Further improve the safety of palletizing, more reliable, convenient and unified solution selection

LiDAR Sensor

· Non-contact, flexible
  detection distance setting
· Immediate shutdown
  upon entering the red
  zone

Safety fence+Light curtain

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  reliable
· Stable performance, strong
  anti-interference ability
· High induction sensitivity
· Long service life

Inclined roller conveyor

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Modular grippers

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Parameters

Model	ATM-MD30SS
Payload	30kg
Working space radius	1460mm
Horizontal distance (pallet size)	
Palletizing height	Lifting type H_3=2300mm
Speed	≤7pcs/min
Repeatability accuracy	±0.06mm
Air consumption	320-360L/min
Communication	EtherCAT、IO
IP	IP54
Temperature	0-50℃
Max power	4.2kw
Power supply	1PH220v/50Hz
Weight	≈400kg
Footprint	1973mm*2150mm

ATM-MD40

Cobot palletizer expanded configuration options

Further improve the safety of palletizing, more reliable, convenient and unified solution selection

LiDAR Sensor

·Non-contact, flexible
 detection distance setting
·Immediate shutdown
 upon entering the red
 zone

Safety fence+Light curtain

·Physical protection, safe and
 reliable
·Stable performance, strong
 anti-interference ability
·High induction sensitivity
·Long service life

Inclined roller conveyor

·The box automatically
 moves to the side
·Large height adjustment
 range
·Various materials available
·Long service life

Modular grippers

·Accommodate complex
 application scenarios
·Lightweight, compact space
·Support customization
·Top brand box drop detection
·High stability

Parameters

Model	ATM-MD40G	ATM-MD40S
Payload	40kg	40kg
Working space radius	1600mm	1600mm
Horizontal distance (pallet size)		
Palletizing height	Standard H_1=1600mm	Lifting type H_2=2100mm
Speed	≤8pcs/min	≤8pcs/min
Repeatability accuracy	±0.04mm	±0.04mm
Air consumption	360-460L/min	360-460L/min
Communication	EtherCAT、IO	EtherCAT、IO
IP	IP54	IP54
Temperature	0-50℃	0-50℃
Max power	4kw	4.8kw
Power supply	1PH 220v/50Hz	1PH 220v/50Hz
Weight	≈380kg	≈440kg
Footprint	1972mm*1488mm	1972mm*1488mm

ATM-MD40

Cobot palletizer expanded configuration options

Further improve the safety of palletizing, more reliable, convenient and unified solution selection

LiDAR Sensor

· Non-contact, flexible detection distance setting
· Immediate shutdown upon entering the red zone

Safety fence+Lightcurtain

· Physical protection, safe and reliable
· Stable performance, strong anti-interference ability
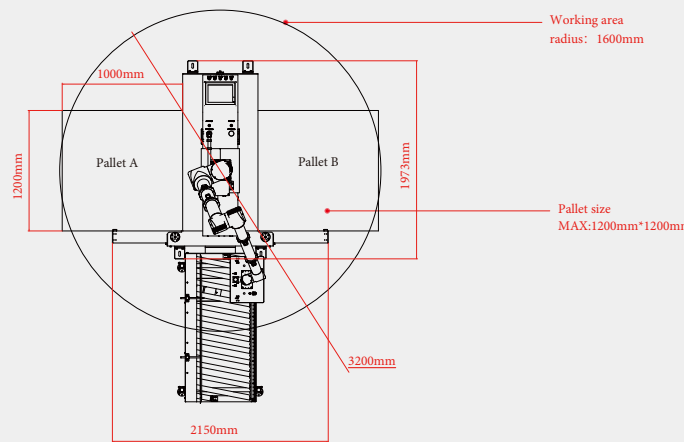· High induction sensitivity
· Long service life

Inclined roller conveyor

· The box automatically moves to the side
· Large height adjustment range
· Various materials available
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Modular grippers

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· Lightweight, compact space
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· High stability

Parameters

Model	ATM-MD40SS
Payload	40kg
Working space radius	1600mm
Horizontal distance (pallet size)	
Palletizing height	Lifting type H_3=2300mm
Speed	≤8pcs/min
Repeatability accuracy	±0.06mm
Air consumption	360-460L/min
Communication	EtherCAT、IO
IP	IP54
Temperature	0-50℃
Max power	4.5kw
Power supply	1PH 220v/50HZ
Weight	≈400kg
Footprint	1973mm*2150mm

Hardware industry

Palletizing&depalletizing solution

Raw production mode

1.The products are palletized after produced on the production line;

2.The full pallet of products is manually unstacked and entered into the user's inventory system;

3.The boxes are stacked on another empty pallet after scanning the code;

4.Box weight 20kg, 5 boxes/minute, and unstacked manually.

Solution

1.Configure the program for depalletizing with cobot;

2. Pick boxes with suction cups equipped with no return valves;

3. The robot controls the rhythm when placing and conveying, and the code can be scanned during the process;

Optimization effect

1. The robot can easily handle the rapid creation and switching of different box types and patterns with a graphical interface;

2. Equipped with collision detection safety function, it greatly improves safety and reduces accidents;

3. The robot's suction cup strongly absorbs the box and is not easy to damage the carton;

4. Complete the depalletizing and palletizing process quickly and efficiently;

5. Reasonable layout and program, easy to operate;

6. Small footprint, no need fences, easy maintenance.

Pharmaceutical industry

High palletizing solution

Raw production mode

1. Palletizing after placing wooden pallets manually;
2. Product weight is 5-12kg, and palletizing is performed manually in shifts;
3. Wooden pallets are transported to the warehouse by truck, forklift or manual labor;
4. 6 boxes/minute, 10 hours/shift, and three fixed-post workers.

Solution

1. The high palletizing height 2100mm with cobot palletizer;
2. Equipped with an automatic pallet distribution;
3. The high pallets are automatically transported to the warehouse ;
4. The system identifies the product supply rhythm automatically, speed 10 boxes/minute;
5. Turning on the automatic pallet supply and palletizing process can save 2 fixed workers, and 1 person can be changed to a mobile post.

Optimization effect

1. The height of the pallet is increased, max palletizing height is 2100mm with lifting column;
2. Robotic adaptive palletizing with adjustable speed;
3. Equipped with data management information output to achieve closed-loop management;
4. High adaptability, applicable to multi-line fully automatic operation;
5. Small footprint, saving working space and convenient layout.

Food industry

Double boxes palletizing solution

Raw production mode

1. Multiple products and multiple lines are produced on demand, and all personnel are mobile positions;

2. Product weight 4-10kg, production efficiency 8-14 boxes/minute;

3. Short-term caching and storage of products after production;

4. Irregular shifts from 8 to 24 hours, workers are assigned on demand, resulting in an unstable staff structure.

Solution

1. Use mobile collaborative robots for palletizing;

2. Equipped with a universal suction cup, robot can be used for both small and large boxes within the range;

3. Easily handle the rapid creation and switching of different box types and patterns with a graphical interface;

4. Double-box palletizing can be achieved, max speed 16 boxes/minute;

5. Double palletizing positions, one person can complete the palletizing and transferring.

Optimization effect

1. The robot can select single-grip, double-grip, or triple-grip modes according to the size and weight of the box to meet customers' mixed needs of light&fast and heavy&low;

2. The robot can run smoothly without being fixed;

3. The robot base is equipped with a shipping slot, which can be transferred by forklifts;

4. Small footprint, saving working space and convenient layout;

5. No need for fixed-post workers, automatic warning of palletizing progress and status.

Food industry

Big box lifting and palletizing solution
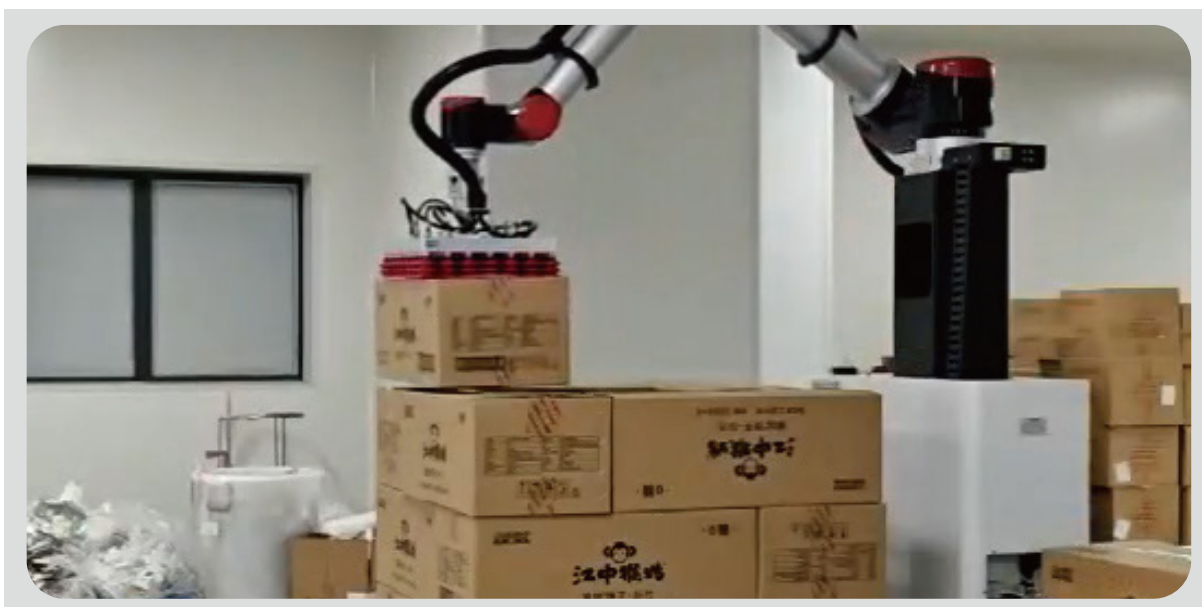
Raw production mode

1. Big box: Length 400-600mm, width 300-500mm, height 250-400mm;

2. Box weight 12-20kg, Speed 6-8 boxes/minute;

3. The palletizing high boxes should be within 5 layers, and 4-7 layers for low boxes;

4. High risk of falling and accident during manual handling and palletizing, 2 people are needed at least.

Solution

1. Max palletizing height 2100mm with cobot palletizer;

2. The large suction cup design improves the stability of big boxes and is compatible with small boxes;

3. The rated load of the robot arm is 30kg, covering the weight of all products;

4. The suction cup is equipped with warning of insufficient air pressure to prevent box falling due to insufficient energy supply;

5. Equipped with radar protection, the machine will be warned to shut down when people enter the radar range,

Optimization effect

1. Flexibly pick big boxes for palletizing;

2. Air pressure adsorption safety warning to prevent box drop;

3. Safety radar protection, further improving safety protection;

4. Heavy load capacity, compatible with multiple specifications;

5. The palletizing program can be freely called and changed, which makes it more adaptable.

PARTNERS

SERVICE

Client First

Service First

Service pursuit

Response within **2** hours

Arrive within **24** hours

Solve within **72** hours

For a long time, we have providing "Extreme Service" to clients as the core value of Atomrobot. To meet all-round needs of clients is the promise of Atomrobot to make efforts to practice. We insist all the time the after-sales service to response within 2 hours, arrive within 24 hours and solve your problem within 72 hours.

We are committed to providing clients with perfect service network, to maintain close communication with clients at all times, to ensure that each set of robot system sold can run stably for long time.

The Call Center provides clients with 24-hour all-round services. We will communicate attentively and answer your questions timely. We continuously improve operation rate of equipment through the best after-sales services, escorting the production of users.

We have sufficient spare parts inventory, advanced warehouse management system, and timely and fast distribution system, to eliminate clients' after-sales worries.

atomrobot

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Shenzhen Xiaobai Automation Technology Co.,Ltd

Jiangsu Xiaoye Intelligent Equipment Co.,Ltd