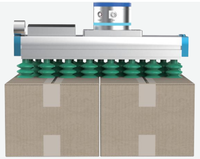
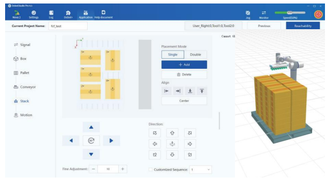


Efficient Dual-suction Mode

It supports free configure to pick one or two boxes at a time, which boosts palletizing efficiency and adapts to faster scenarios.
It has a dual-suction mode that can pick two boxes at a time, increasing palletizing efficiency by up to 62.5% and enabling easy and efficient palletizing.

Quick Palletizing & Depalletizing

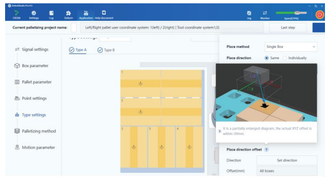
Not only palletizing function, but also available to configure the depalletizing function, making it flexibly switch palletizing and depalletizing.



One Workstation, Multiple Product Line

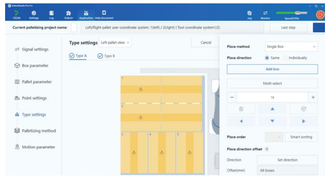
Achieve the effect of alternately stacking pallets on two conveyor belts (production lines) corresponding to a single pallet stacking workstation. The two conveyor belts also support the configuration of different size containers to meet the needs of two different product lines.

Supports: 1 Conveyor 1 Pallet (Left Pallet), 1 Conveyor 1 Pallet (Right Pallet), 1 Conveyor 2 Pallets, 2 Conveyors 2 Pallets.



One Click to Configure Box Transition Point & Target Point

It allows you to set the palletizing position and the box transition point without programming required, which minimizes the effect of box size and pallet height differences with fingertips, eliminates extra space between boxes, and compacts them. You can also set the palletizing position and the box transition point independently, which makes debugging easier.



Flexible yet Easy Stack Configuration

The system allows for the customization of box palletizing order and entry directions for 8 different types of boxes. The algorithm automatically generates multiple pallet stacking patterns based on the configured pallet and container sizes. The user can then select a pattern and make further adjustments, greatly improving the efficiency of pallet stacking pattern editing.

Product Specifications

Product Name	CR20A Columnar Palletizing Workstation	CR20A Lifting Palletizing Workstation	CR10A Lifting Palletizing Workstation
Max Payload *1	20 kg	20 kg	10 kg
Max Palletizing Pace *2	Single suction and single release: 9 pieces/minute	Single suction and single release: 9 pieces/minute	Single suction and single release: 9 pieces/minute
	Double suction and single/double release: 13 pieces/minute	Double suction and single/double release: 13 pieces/minute	Double suction and single/double release: 13 pieces/minute
Max Palletizing Height *3	1740 mm	2100 mm	1800 mm
Working Radius	1700 mm	1700 mm	1300 mm
Occupied Area	1350 mm * 2220 mm	1350 mm * 2220 mm	1350 mm * 2220 mm
Complete Machine Weight*4	300 kg		
Rated Voltage	AC 100-240V 50/60Hz	AC 110 /AC 230V 50/60Hz	AC 110 /AC 230V 50/60Hz
Max Current	16A	16A	10A
Typical Power	3000W		2000W
Temperature Range	10 ℃-50 ℃		
Protection Level	Robot body: IP54; Palletizing workstation: IP20		
Certificate	EU: CE		
	US: FCC		
	CAN: ICES-003		

*1. Does not include the weight of the end-effector vacuum gripper
*2. The actual palletizing speed depends on the weight, size, and layout of boxes
*3. The size and layout of boxes may affect the actual palletizing height
*4. Does not include the weight of the mechanical arm and the end-effector

Configuration List

Product Name	CR20A Columnar Palletizing Workstation	CR20A Lifting Palletizing Workstation	CR10A Lifting Palletizing Workstation
CR10A Robot	-	-	✓
CR20A Robot	✓	✓	-
Robot Control Cabinet	✓	✓	✓
Palletizing Workstation Base	✓	✓	✓
Lifting Column	-	✓	✓
Column	✓	-	-
Palletizing Process Package	✓	✓	✓
Tablet	Optional		
Teaching Device	Optional		
End-effector Vacuum Gripper	Optional		

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Palletizing Solution

Configuration can be completed in 30 min; maximum payload: 20 kg; pace: 9-13 pcs/min

Discover the Benefits of Dobot Cobot Palletizing Solution

Large payload and high pace

The workstation can carry up to 20kg and stack up to 2,100mm high, meeting the palletizing demands of food, beverage, and pharmaceutical industries.

When using the latest CR10A~20A cobots, palletizing speeds can reach 9~13 pieces per minute, which is the highest industry-leading speed.

The Ewellix 900 mm large lifting payload column is designed to handle a maximum payload capacity of 1500 N. This column offers stability, reliability, and operates with minimal noise.

Exceptionally secure

With the inclusion of the virtual wall feature, this product provides the flexibility to set operating boundaries as needed, guaranteeing production safety. The robot can be seamlessly connected to external safety lasers, safety grating, and other safety equipment, effortlessly achieving multi-layer safeguards. Having obtained certifications including ISO12100, EN60204-1, ISO10218-2, and ISO13849-1, this product has established its credibility and dependability in terms of safety.

Go into operation in 30 Min

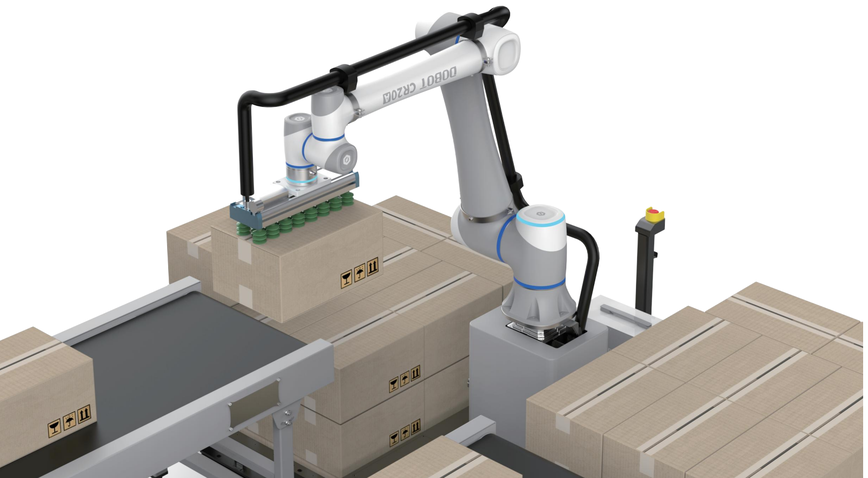
Dobot's self-developed palletizing process package is integrated, enabling effortless initiation of production through a simple 5-step setup procedure, eliminating the need for programming.

Flexible deployment

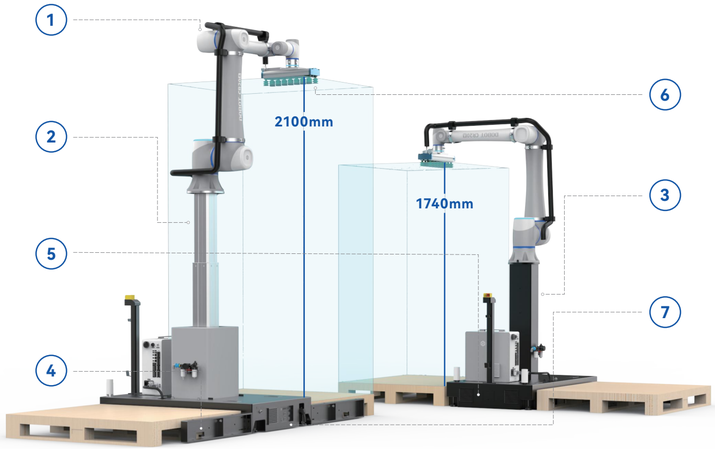
The workstation incorporates a modular layout, facilitating plug and play functionality, and enabling swift installation. It efficiently manages the production of various products, eliminating the need for line changes and streamlining operations.

Quick return

The utilization of Dobot's palletizing workstation offers a solution to liberate workers from monotonous and physically demanding palletizing tasks, resulting in substantial cost savings for menial jobs. This user-friendly workstation enables regular workers to swiftly adapt, thereby minimizing the expenses associated with ongoing maintenance. Typically, the investment in this workstation can be recouped within a span of 8-10 months once it is implemented for production purposes.



Product Snapshot



1 Dobot CR20A Cobot:

This device boasts an impressive maximum payload capacity of 20 kg, a working range of up to 1,700 mm, and a wider coverage area, making it highly capable of effectively managing palletizing tasks.

2 Lifting Axis:

The height of the column has the potential to increase by up to 900 mm, while the maximum height for palletizing can reach 2,100 mm.

3 Fixed Column:

The square tube used for welding is 8 mm thick and possesses a stable structure. It is designed with a fixed height of 1,150 mm and can reach a maximum palletizing height of 1,740 mm.

4 Pallet Detection and Positioning Device:

The pallet detection and positioning device serves the function of identifying the existence of a pallet at the workstation and verifying that it has been appropriately positioned at the specified location. Its primary role is to detect whether a pallet has been installed and to ensure its precise deployment.

5 Standard Palletizing Base:

The palletizing base is equipped with a comprehensive electrical control and communication system, ensuring seamless integration. Its modular hardware design simplifies the construction process, allowing for greater ease and efficiency. Additionally, the inclusion of a reserved forklift hole position enhances convenience during production line changes.

6 End-effector Vacuum Suction Tools:

Optional as needed

Configuration 1: Schmalz offers vacuum suction tools that can handle payloads of up to 20 kg and cover a large surface area.

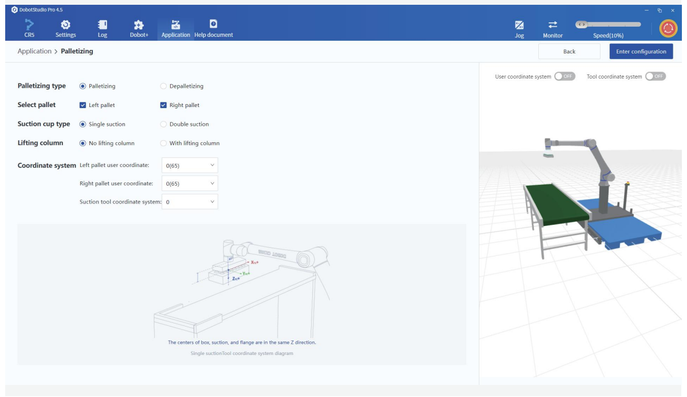
Configuration 2: The product allows for unique customization options and features a dual-suction end-effector.

7 External Terminal Panel:

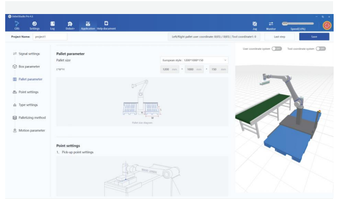
With the inclusion of terminal fast-on functionality, the panel offers a convenient and rapid means of connecting to the client control signal. Moreover, the presence of reserved I/O signal interfaces simplifies the process of integrating external devices or systems, allowing for seamless expansion and enhanced versatility.

Dobot Palletizing Software Process Package

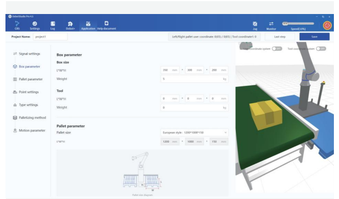
Signal Configuration



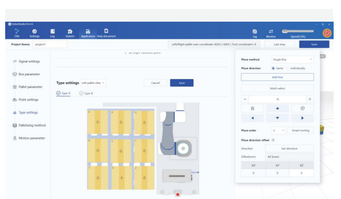
Pallet Parameter Setting



Box Parameter Setting



Stack Configuration



Motion Parameter Configuration