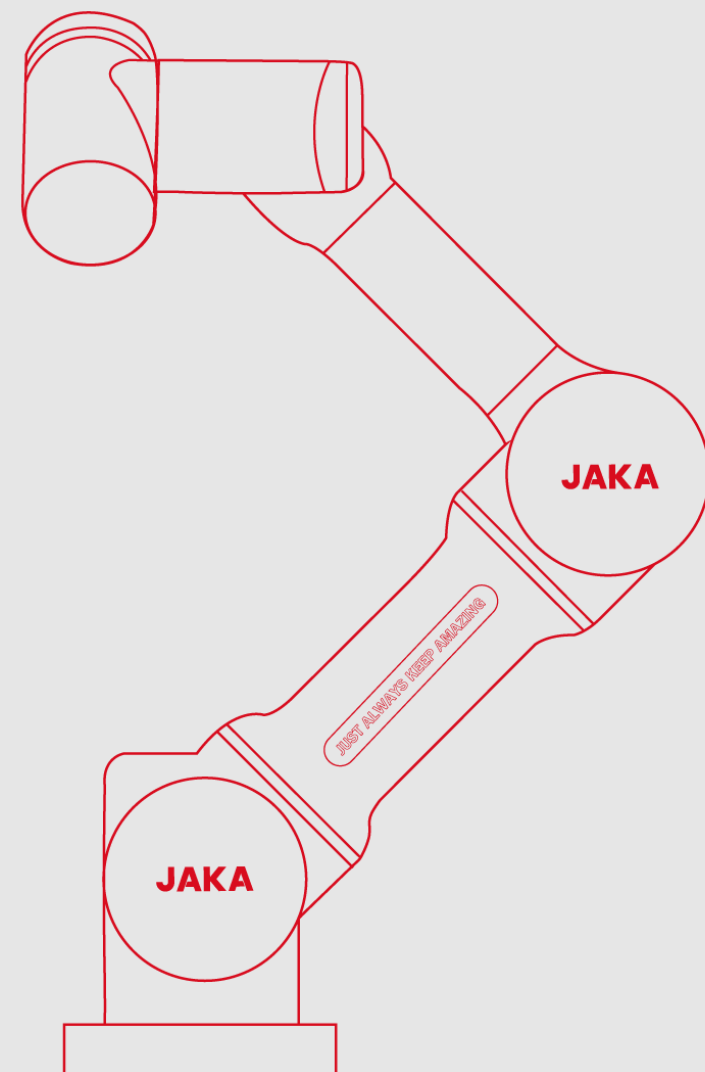


**JAKA® | 节卡**

Just Always Keep Amazing

# JAKA Zu Cobot Training Lesson





# CONTENTS

01

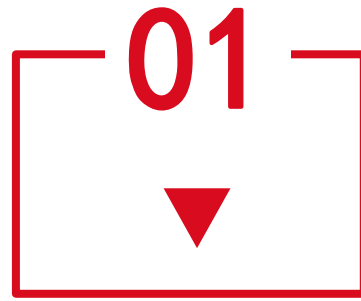
Robot features

02

Basic content training

03

Maintenance and service

A grayscale background image of a JAKA industrial robot arm in a factory setting. The robot arm is white with red accents and has the 'JAKA' logo on its upper section. It is surrounded by various mechanical components and cables. Large, faint quotation marks are visible on the left and right sides of the image.

# Robot Features

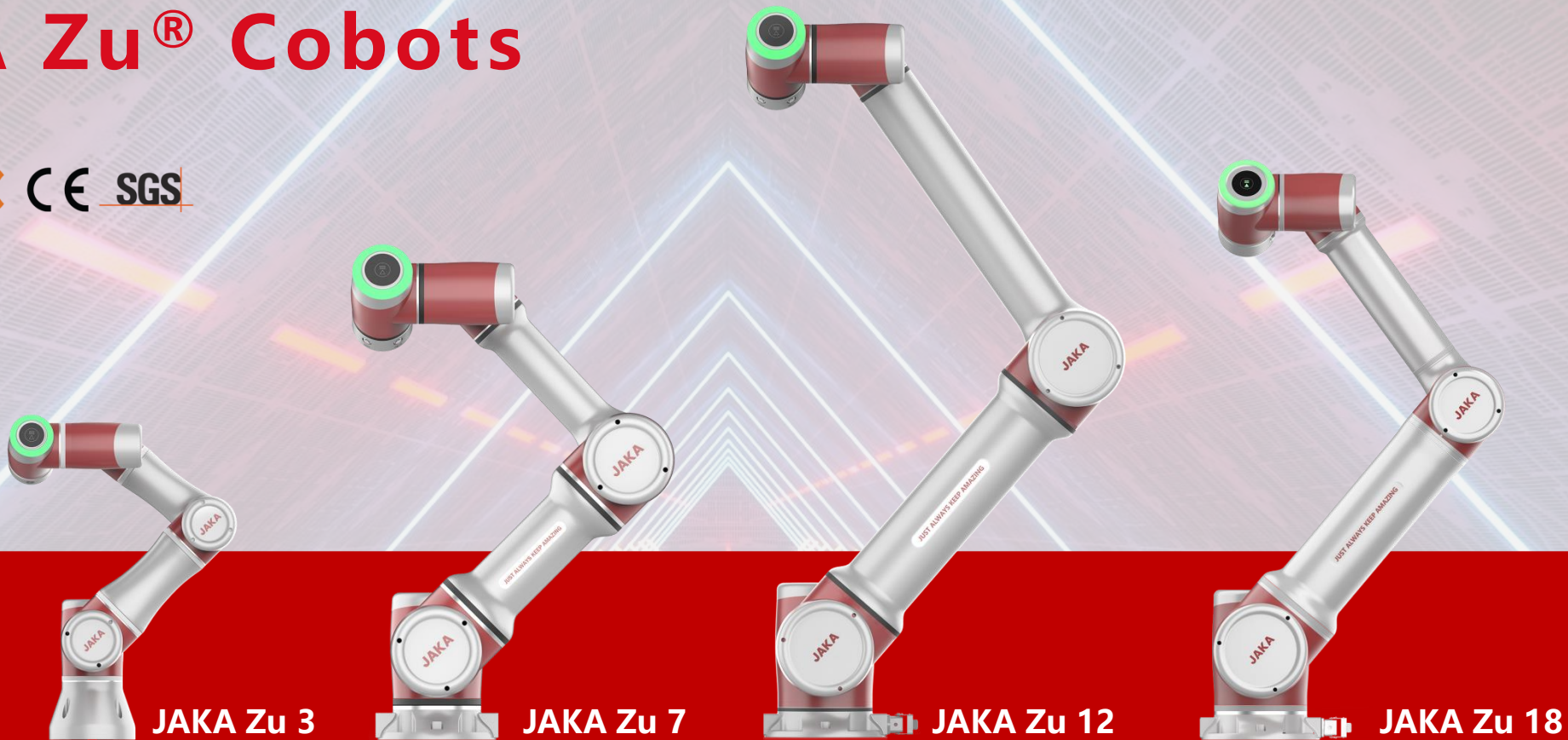
## Robot Features

---

**01****Easy to use****02****Free-drive mode****03****Graphical drag-and- drop****04****Flexible deployment****05****Safe and reliable****06****Recommended Market**



# JAKA Zu<sup>®</sup> Cobots



**Weight** 12.2kg  
**Payload** 3kg  
**Radius** 587mm

**Weight** 22kg  
**Payload** 7kg  
**Radius** 814mm

**Weight** 41kg  
**Payload** 12kg  
**Radius** 1327mm

**Weight** 34.8kg  
**Payload** 18 kg  
**Radius** 1073 mm

## Robot Features

---

### JAKA Zu® Series Cobots



The functions of the JAKA Zu Family (Zu 3/Zu 7/Zu 12/Zu 18) are the same, the differences are only in appearance, reach, weight, payload, speed, power and pedestal size.

Customers can choose the proper model of the JAKA Zu family according to different application scenarios to meet the needs of different production scenarios.

## Robot Features

---



Wireless connection,  
Safe and reliable



APP software visual programming,  
convenient and fast



CN/EN/JPN interface,  
Drag-and-drop & play



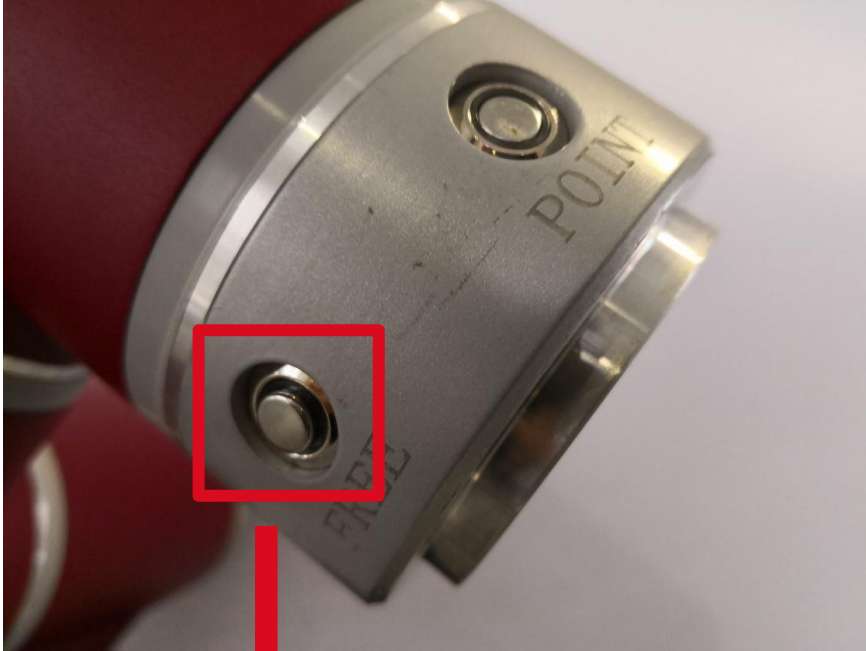
Drag and drop programming,  
flexible



Mobile terminal online,  
simple and easy

## Free-drive mode

---



### **FREE Button:**

press and hold it until the breathing lamp turns yellow, then drag-and-drop to teach the robot.

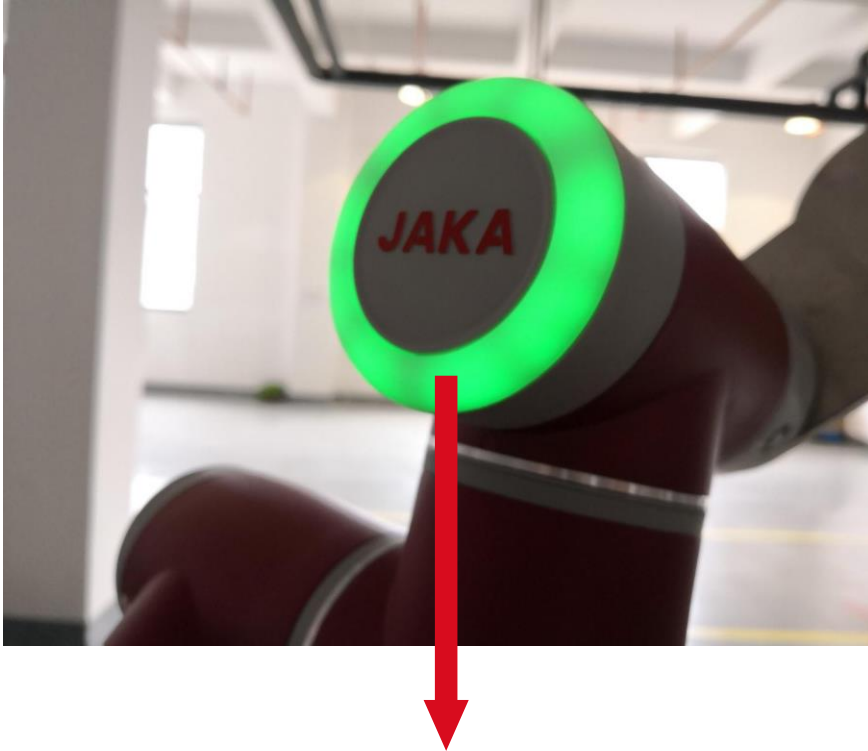
## Breathing lamp status

- Blue: Powered on
- Green: Enabled
- Red: Fault
- Yellow: Free-drive mode



## Free-drive mode

---



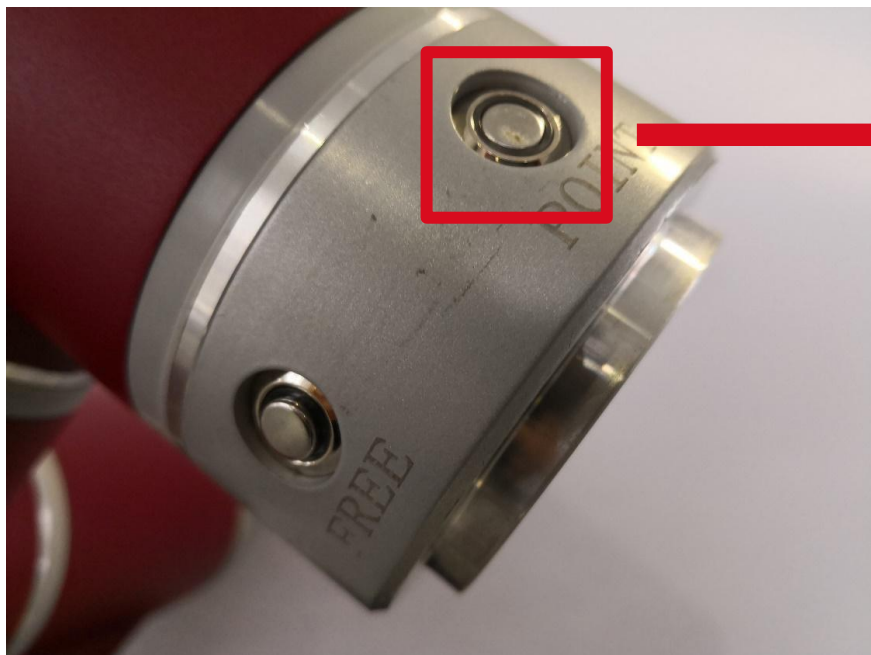
**Zu Breathing Lamp**

### Breathing lamp status

- Blue: Powered on
- Green: Enabled
- Red: Fault
- Yellow: Free-drive mode

## Free-drive mode

---



**POINT button:**

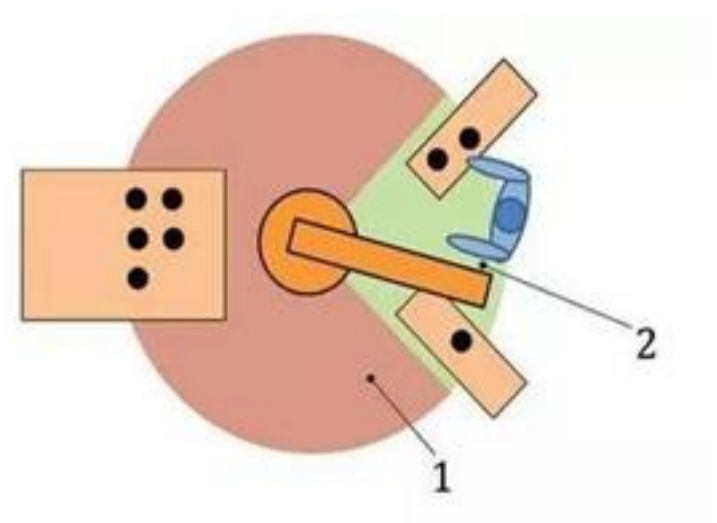
Used for recording point locations

## Safe and reliable

---

Collaborative Robot, also called “cobot” or “co-robot”, was created in 2014.

It is a kind of robot that can interact closely with human beings in a common working space and help people to work.



### Key

- 1 Operating space
- 2 Collaborative workspace

## Safe and reliable

---

### Safety cooperation, collision protection

- Built in torque feedback module
- When the collision causes the joint to reach the preset torque limit, the robot will stop immediately
- No safety fence required, human-robot safety cooperation



## Safe and reliable

---

**JAKA Zu has force control technology, achieved by detecting real-time motor current**

**The force control sensitive level can be adjusted according to user needs**

- Based on the result of risk assessment, the setting of safety parameters (Joint limit, TCP related setting, force protection, etc.) can be adjusted.
- It can operate without safety fences and share working space with employees
- ISO 10218-1:2011, ISO 13849-1:2008, ISO/TS 15066



# Safe and reliable

Complied with international standards

Collaborative robot systems involve the following international standards:

Standard	Description	Person in charge
ISO 10218-2	Safety related parts of control system	Manufacturers
ISO TS 15066	Safety requirements for industrial robots	
ISO 10218-2	Safety requirements for integration of robots	Integrators
ISO TS 15066	Collaborative robots technical specifications	
ISO 12100	Guidance for performing risk assessment	

## Low cost

---

Overall cost is low, investment return period is short

### **Learning and operating costs**

For traditional robots, it takes up to several weeks to learn. For JAKA Zu, it only takes several hours, and there is no need for specialized robot engineers and additional human resources input

### **Installation and configuration cost**

Save safety fences hardware and installation time cost

Flexible installation, no additional installation space cost

### **Relocation cost**

Only 1/4 to 1/5 of the time of the traditional robot, saving the shut down cost

### **Robot power consumption**

The annual electricity saving is about RMB 6,000 yuan per set, which can save RMB 50,000 yuan in maintenance cost if calculated by 8 years' service time

### **Maintenance cost**

The whole life cycle is maintenance-free, saving the major maintenance and routine maintenance cost of at least 50,000 yuan

# Recommended Market

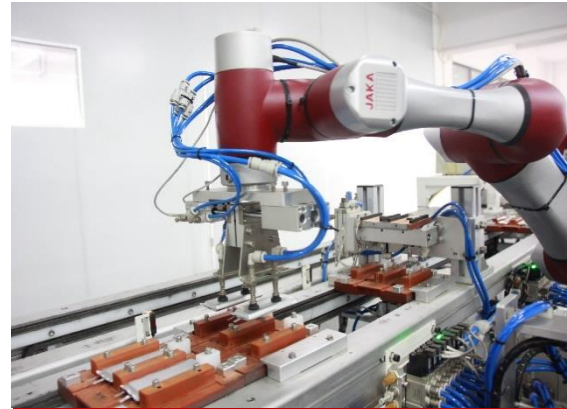
## 3C

### Industry status

- High mix low volume (HMLV)
- Quick update of products
- Difficulties in automatic assembly
- Labor intensive

### Our benefits

- Flexible and accurate
- Quick redeployment
- Replacing human workers



Substrate and SMT process  
Take and put, identify, transfer



Integrated circuit detection  
Take and put, identify, transfer



Electronic equipment  
assembly station  
Detection, Assembly

## Recommended Market

### Food industry

#### Industry status

- Highly automated
- High diversity of products
- Difficult to redeploy
- Labor intensive

#### Our benifits

- Flexible and customized
- Human-robot safe cooperation
- Quick redeployment
- Replacing human workers



乳制品装箱

Packing

取放、包装

Pick & Place, Packing



乳制品装箱

Packing

取放、包装

Pick & Place, Packing



盒装牛奶大箱装箱

Milk in cartons

取放、包装

Pick & Place, Packing

## Recommended Market

---

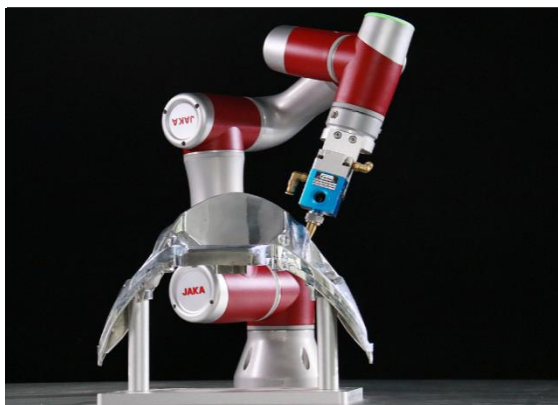
### Automobiles & Parts

#### Our benefits

- Human-Machine Collaboration and 100% safe
- Quick deployment
- Easy to use
- High compatibility
- High ROI



BCM detection  
Visual recognition,  
Data feedback



Car light gluing  
Glue dispensing and force control



Screw tightening  
Assembly and detection



# Recommended Market

---

## Precise manufacturing

### Industry status

- High mix low volume (HMLV)
- Space limitation
- Cost control

### Our benefits

- More flexible manufacturing
- Quick deployment, 100% safe
- Lower cost and higher efficiency



ScrewDriving  
Visual recognition,  
force control press



Injection Molding  
Recognition \pick and place



Machining Tending  
Recognition\pick and place

**JAKA® | 节卡**

**THANKS**



**400-006-2665**

[www.jaka.com](http://www.jaka.com)  
[marketing@jaka.com](mailto:marketing@jaka.com)

Shanghai: Building No.33-35, No.610 Jianchuan Road, Shanghai

Changzhou: Building 10, No.377 South Wuyi Road, Changzhou, Jiangsu

Shenzhen: No.1710, No.99 Xinhua Rd, Bao An District, Shenzhen