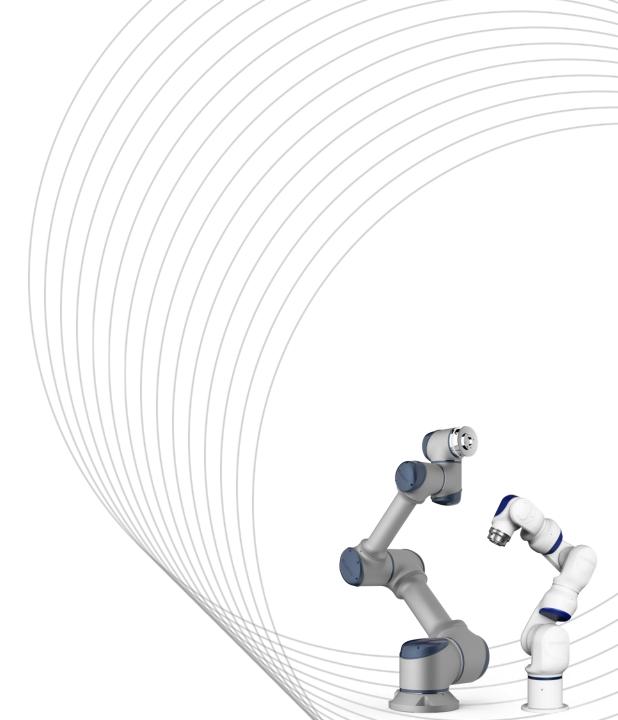
## SI/ISUN 新松

# Collaborative Robot

Create for More

Collaborate for Better

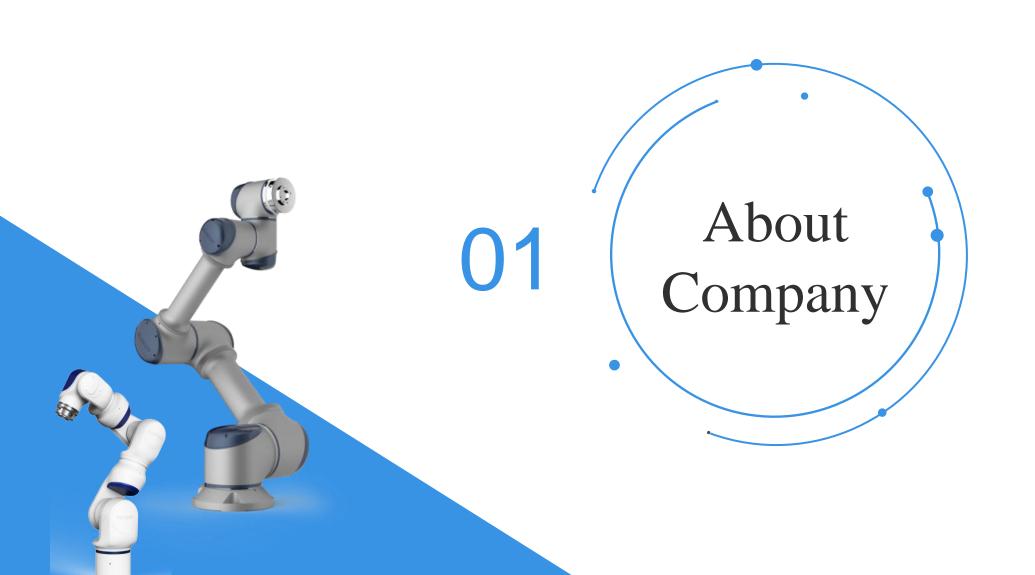




- 01 ABOUT COMPANY
- O2 COLLABORATIVE ROBOT
- 03 APPLICATION

  & SERVICE





# Since 1980

A scientist



#### **Mr. Jiang Xinsong** (1931-1997)

Academician of Chinese Academy of Sciences;

Served as the chairman of Shenyang Institute of Automation, Chinese Academy of Sciences from 1980;

Founded China's first robotics engineering R&D center;

The chief scientist in automation area of the National High Technology Research and Develop Program ("863"Program) of China.

#### **The Founder of Chinese Robot**





## **SIASUN Milestones**









2000 2009

2014

2017

2007

**Exported worldwide** 



2012

Chairman of China Robot Industry Alliance



2015

1st Generation Cobot Launched



2018

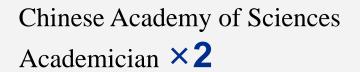
20kg Cobot













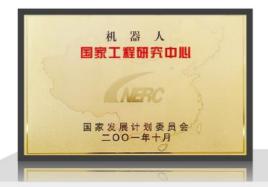
**70%** + Professional technician



60% + Master or higher degree in technology or management



## **Company Honor**









**National Robot Engineering Research Center** 

**China Well-Known Trademark** 

**National Qualified Enterprise Technology Center** 

**Intelligent Robot Industrial Base** of "863" program









**QMS Qualification** 

**Construction Enterprise Qualification** 

**Information System Integration Qualification** 

**Environment Management System Qualification** 



# **National Leaders Visit SIASUN**



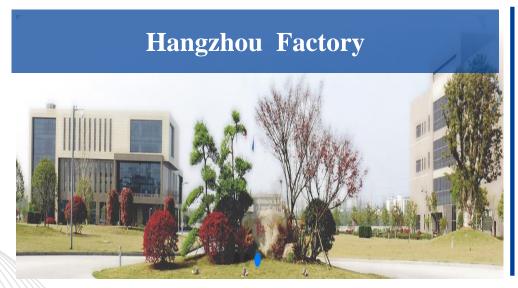




## **SIASUN Factories**













# **Typical Clients**











































































































#### **Business Overview**

SIASUN Co., Ltd

**Intelligent Robot** 

Collaborate Robot, Special Robot, etc.

Robotics and AI Institute Intelligent Manufacturing

**Industry 4.0 system solutions** 

Industry 4.0
Comprehensive Research
Institute

**Creative & Investment** 

Robot creator space; International Creatineer Competition

**Creatineer®** 



# 1.Intelligent Robot-Collaborative robot





## 1.Intelligent Robot





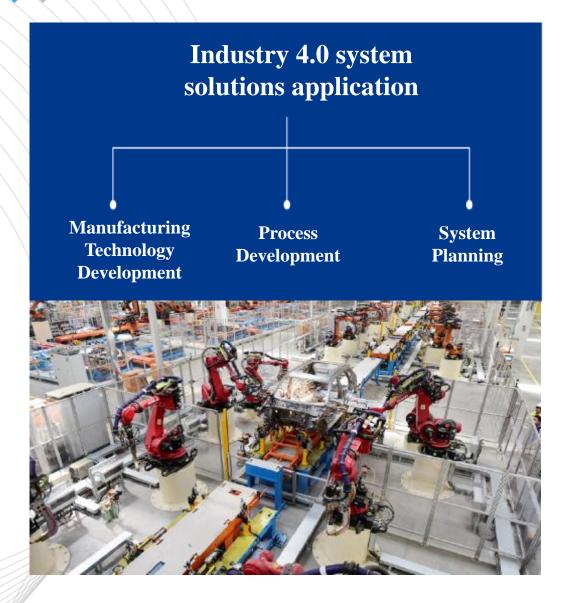


Solar Panel Cleaning Robot

Ping-Pong Robot Pongbot

Wall-climbing Robot







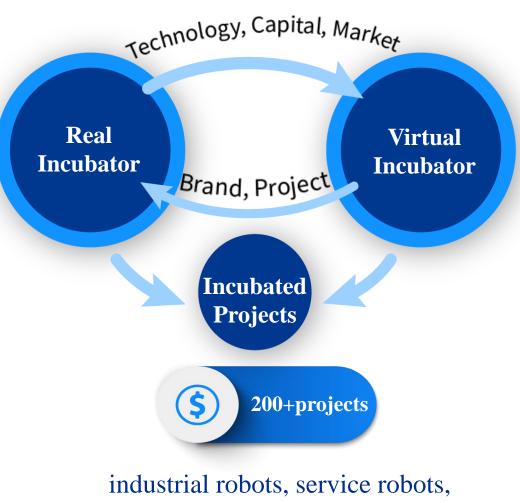


#### 3. Creative & Investment

Creatineer®Maker Space







industrial robots, service robots, robot parts, intelligent household, wearable devices, AI, VR, AR

# Creatineer®Competition 2015-2018

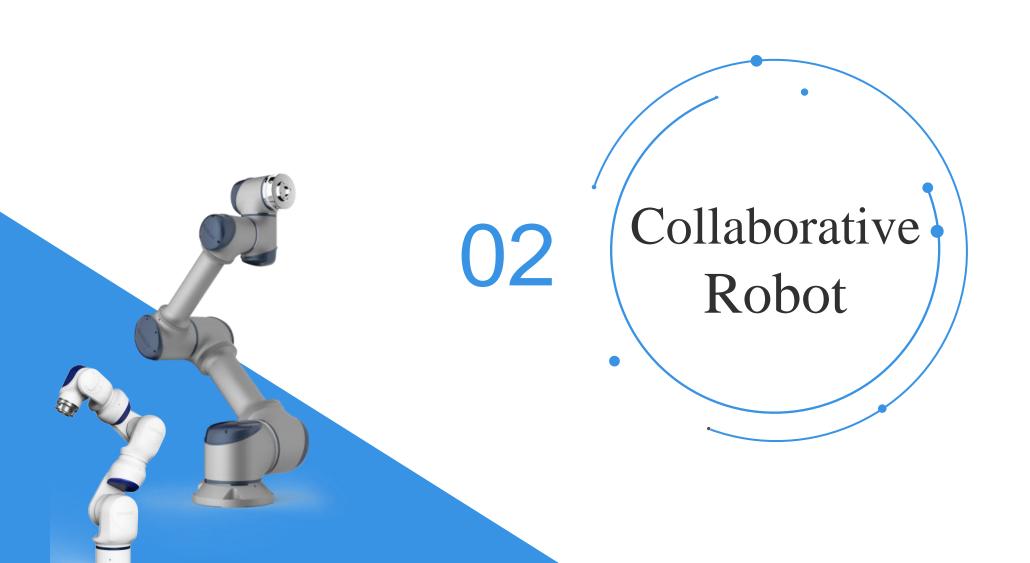


CORPORATE **VISION** 

To Create an International, Innovative and platform-based

# Leading Robot Kingdom







### **Coexist & Collaborate**





Massive Production

Various-type, customized production

# **COBOT**

(Collaborative Robot)

Robot designed for direct interaction with

a human within a defined collaborative workspace.

ISO 10218

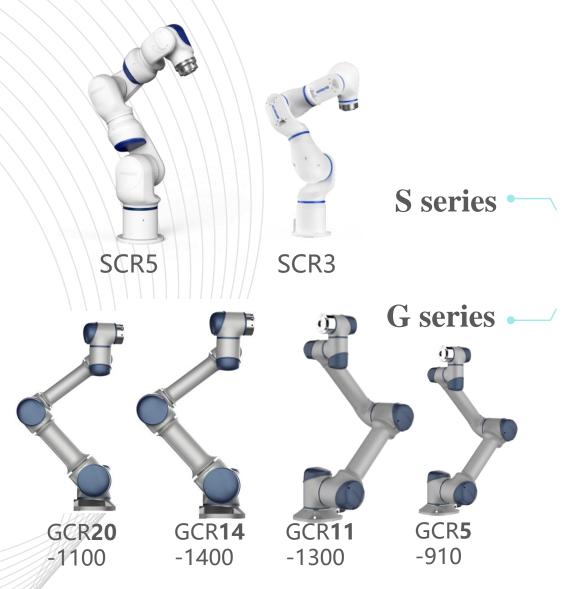
#### **SIASUN Cobot**

first lunched in 2015



The first domestic Collaborative Robot exhibited at China International Industry Exhibition 2015

## **SIASUN Cobot Family**



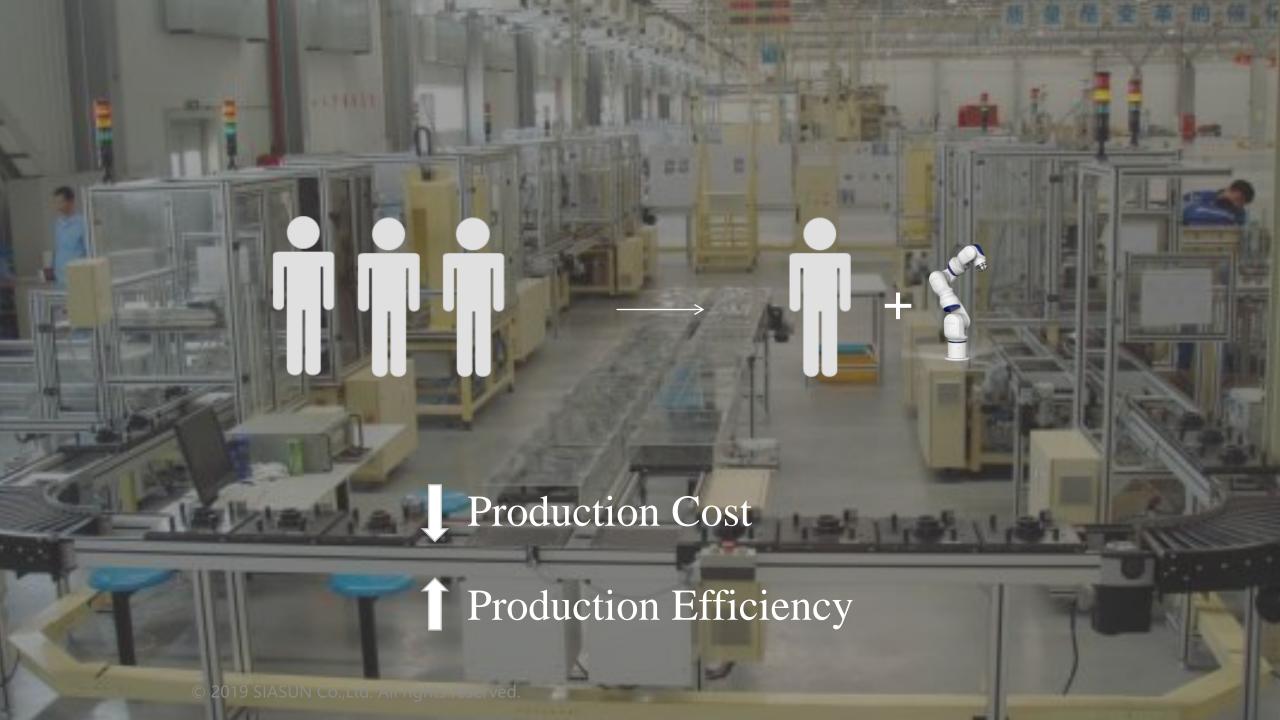






DSCR3





# Easy-to-use

- **✓** Traction Demonstration, Easy Programming
- ✓ TCP/IP, Modbus communication protocol support communication protocol expansion such as Profinet, CC-Link, etc.
- ✓ Friendly User Interface
- **✓** Multi-interfaces with error-proof



# Safe

- **✓** Collision Detection
- **✓** Safety Gradation Design
- ✓ Conform with **ISO10218-1,ISO15066** standard, PLD cat3







# **Economic Efficient**

✓ **Space-saving**,

fewer changes to production layout

✓ Set-up within 3 min







✓ Low Energy consumption (200W-600W)

1/4 ~ 1/6 of industrial robot's consumption

**✓** Cost-effective

# Powerful Functions

- ✓ 3-20kg Payload, Weight/Payload Rate 2.5:1
- ✓ Modular accessories, Easier to Change
- ✓ Applicable in multi-industry for various scenarios

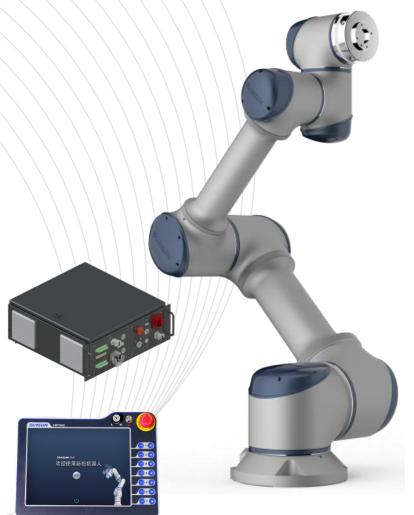




Туре	SCR5
Payload	5kg
Repeatability	±0.02mm
Reach	800mm
Weight	33.8kg
TCP Max Speed	1m/s
IP Class	IP54
Power Consumption	400W



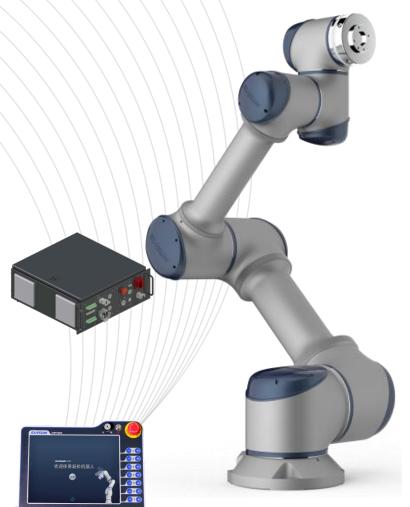
# GCR20-1100 Cobot (High Payload)



	////_/			
Payload	20kg			
Axis	6			
TCP Max Speed	1 m/s			
Weight	50kg			
Reach	1100mm			
Repeatability	±0.05mm (GB/T 12642-2013 eqv ISO 9283)			
Tool Interface	GB/T 14468.1-50-4-M6 (eqv ISO 9409-1)			
I/O	Control Box: 14 Dig I/O, 24V, 0.5A End Joint: 2 Dig I/O, 24V, 1A			
<b>Communication Protocol</b>	TCP/IP, MODBUS/TCP, etc.			
<b>Power Consumption</b>	600W			
Base Radius	126mm			
<b>Ambient Temperature Range</b>	0°C - 45°C			
IP Class	IP54			



# GCR14-1400 Cobot(Long Reach)



Payload	14kg			
Axis	6			
TCP Max Speed	1 m/s			
Weight	53kg			
Reach	1400mm			
Repeatability	±0.05mm (GB/T 12642-2013 eqv ISO 9283)			
Tool Interface	GB/T 14468.1-50-4-M6 (eqv ISO 9409-1)			
I/O	Control Box: 14 Dig I/O, 24V, 0.5A End Joint: 2 Dig I/O, 24V, 1A			
<b>Communication Protocol</b>	TCP/IP, MODBUS/TCP, etc.			
<b>Power Consumption</b>	600W			
Base Radius	126mm			
<b>Ambient Temperature Range</b>	0°C - 45°C			
IP Class	IP54			

The First one in the industry to make

"Hybrid Cobot"





	Vehicle Size		1280x600x700mm	Operating Accuracy	±0.05mm
	<b>Gross Weight</b>		550kg	Parking Accuracy	±10mm
	Speed	Cobot TCP Speed	0~1m/s	<b>Moving Direction</b>	Forward/Reverse/ Turning
		Moving Speed	0~1m/s	Navigation	Natural/Laser/ Multi-Type Navigation
	Payload	Cobot Payload	20kg	Battery	Lithium Battery, 48V DC
41.80		Vehicle Payload	100kg	Full Load Duration	≥5 Hours
	Safety Device		Emergency Button/ Laser Collision Detection /Cobot Collision Detection/ Other Sensors	Charging	Manual/ Auto Battery Change, Auto-Charge



**High Accuracy Visual Solution** 

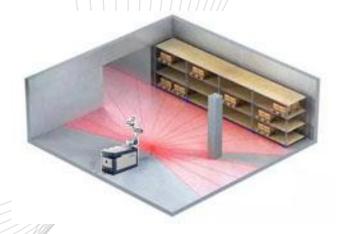
**Emergency Stop Protection** 

**Air Compressor Integrated** 

**Antic-static ESD** 

Safety Interlock between Cobot&Vehicle

**Natural Navigation** 





360° Obstacle

Avoidance







#### **Application**

Auto manufactory
Storage sorting

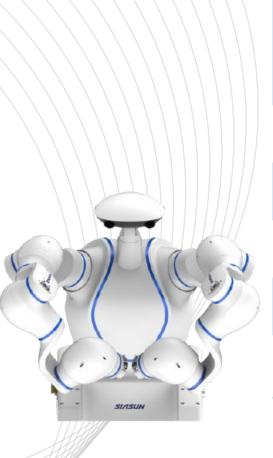
#### **Features**

- 1. High safety
- 2. Convenient maintenance
- 3. Various navigation settings
  - ✓ Laser guide
  - ✓ Magnetic trace
- 4. Various accessories
  - ✓ Electric drive/ pneumatic gripper
  - ✓ Visual





# **DSCR Series**



DSCR3	Туре	DSCR5
Each arm 7 x 2 Head is optional	Axis	Each arm 7 x 2 Head is optional
6kg (3kg*2)	Payload	10kg (5kg*2)
± 0.02mm	Repeatability	±0.02mm
600mm	Reach	800mm
IP30	IP Class	IP30
35000h	TCP Max Speed	35000h





### **Hot Spots**



Dual-arm Cobot showed in the first domestic AI science program on CCTV-1



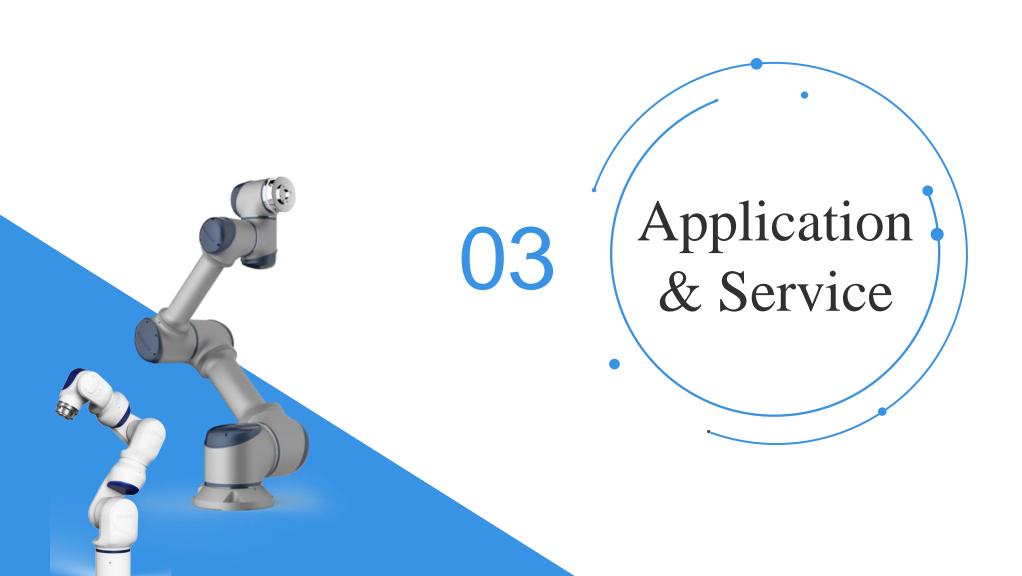
SIASUN Cobot showed in CCTV documentary "Super Engineering Season III"



# **Cobot+ Exploration**



SIASUN Cobot with AR exhibited at the 2017 World Robot Conference

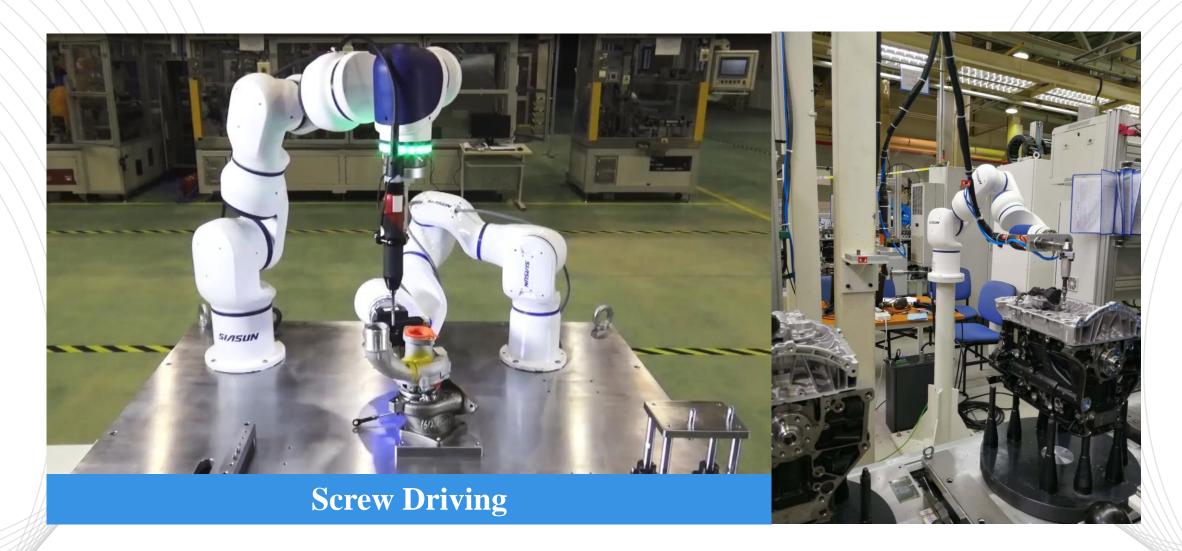




# Typical Applications



# **Screw Driving**





# **Precision Assembly**



**Planet Gear Assembly** 





# **Curved Surface Polishing**





**Quality Inspection** 



Visual inspection for motors



Automobile chair visual inspection



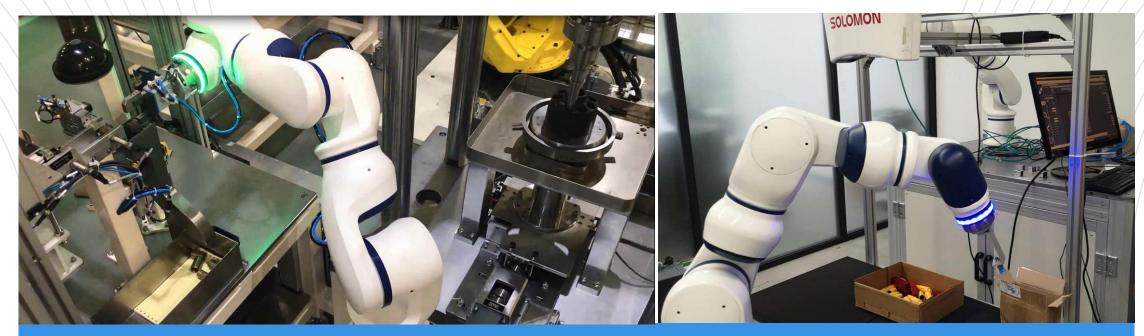
PCB board pin inspection



**Code scan for TV** 



# **Intelligent Sorting & Loading**



2D/3D Vision System Loading & Sorting



# **Intelligent Sorting & Loading**





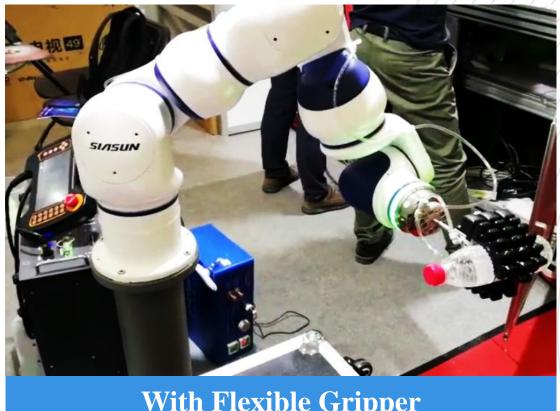
GCR20-1100 2D Vision System+Loading



### Pick and Place & Pallatizing



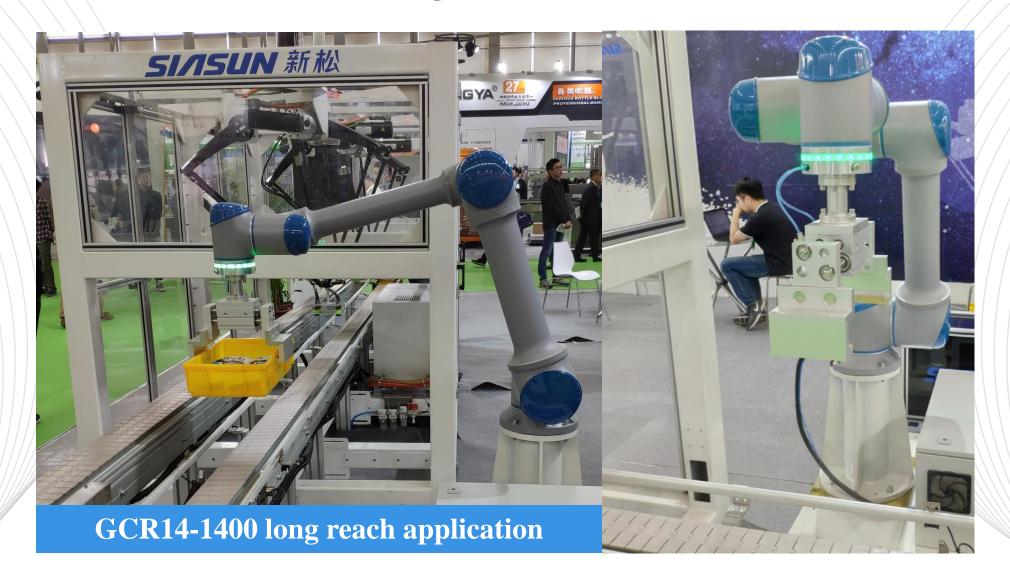
Picking&Placing in narrow space



With Flexible Gripper

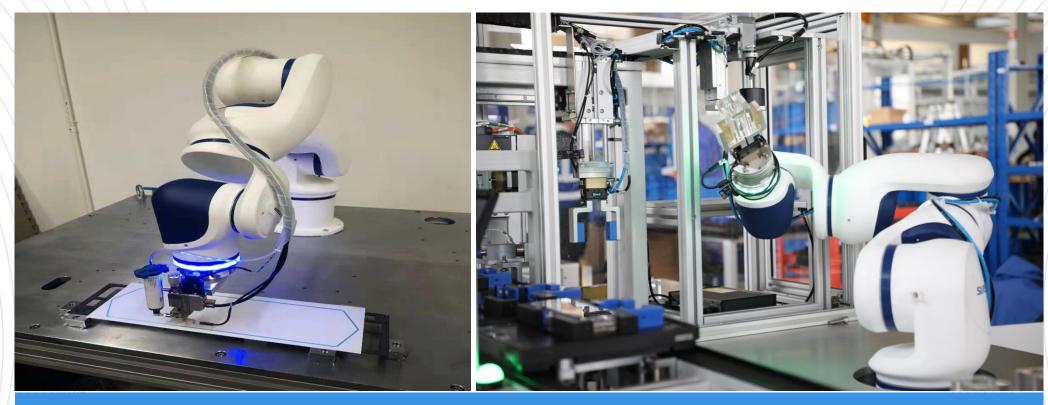


# Pick and Place & Pallatizing





# Gelatinizing&Greasing



**Gelatinizing & Greasing** 



# Gelatinizing&Greasing

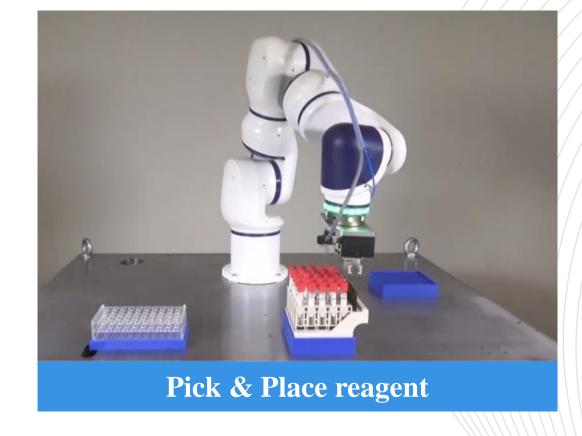


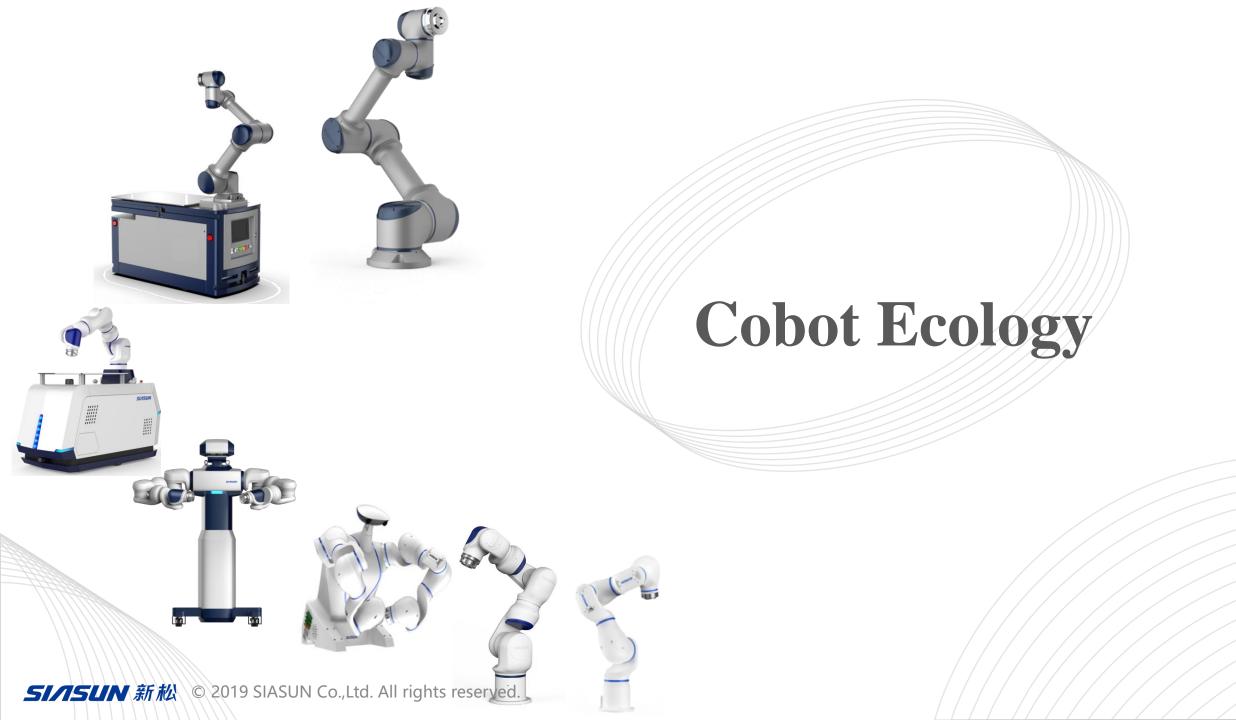
**DSCR5** Gelatinizing



# **Medical Industry**

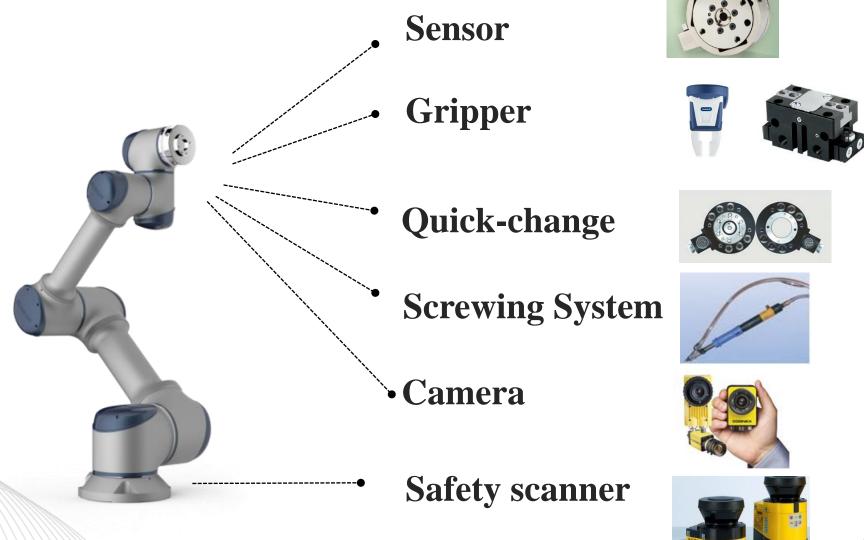








# **Cobot Ecology**













### **Cobot Ecology Partners**









































### **Cobot Ecology Partners**







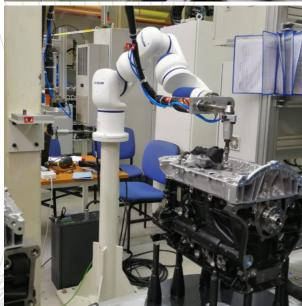












**Screwing System** 











#### **Cobot Ecology Partners**



**Force Sensor** 



**Safety Scanner** 



KEYENCE 基恩士

**Communication Expansion** 

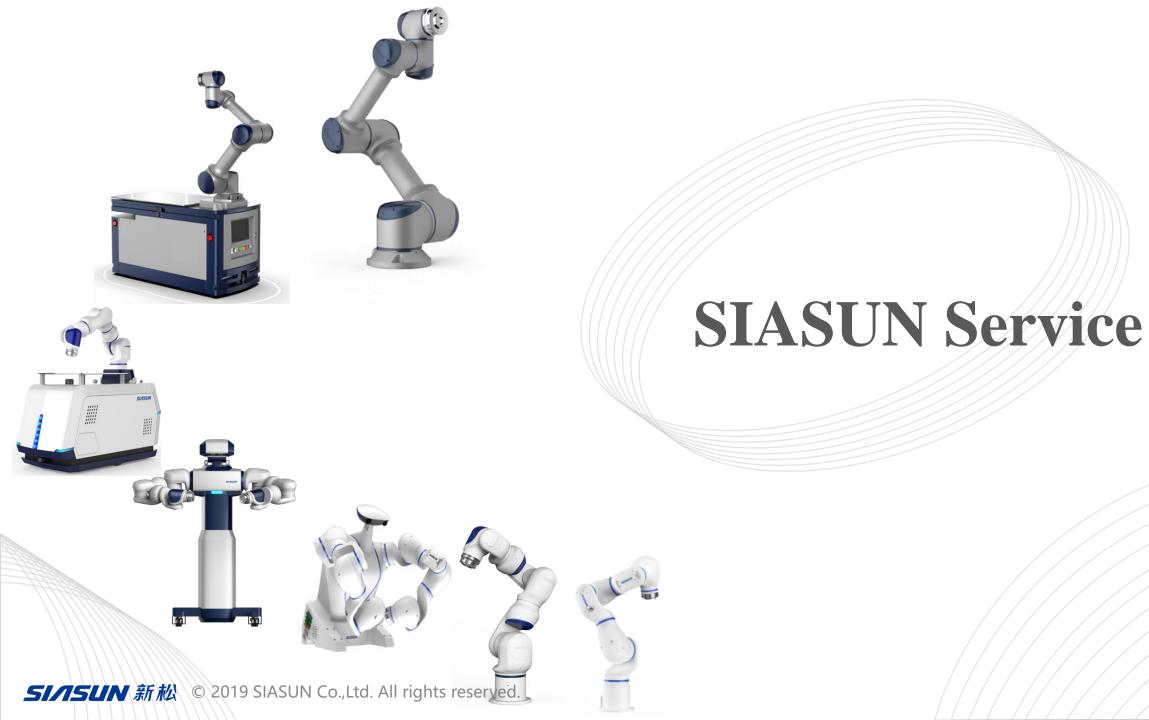


Type: ABX\_ETNM\_2P(PROFINET)



Type: MGgate5111(PROFIBUS)

More...



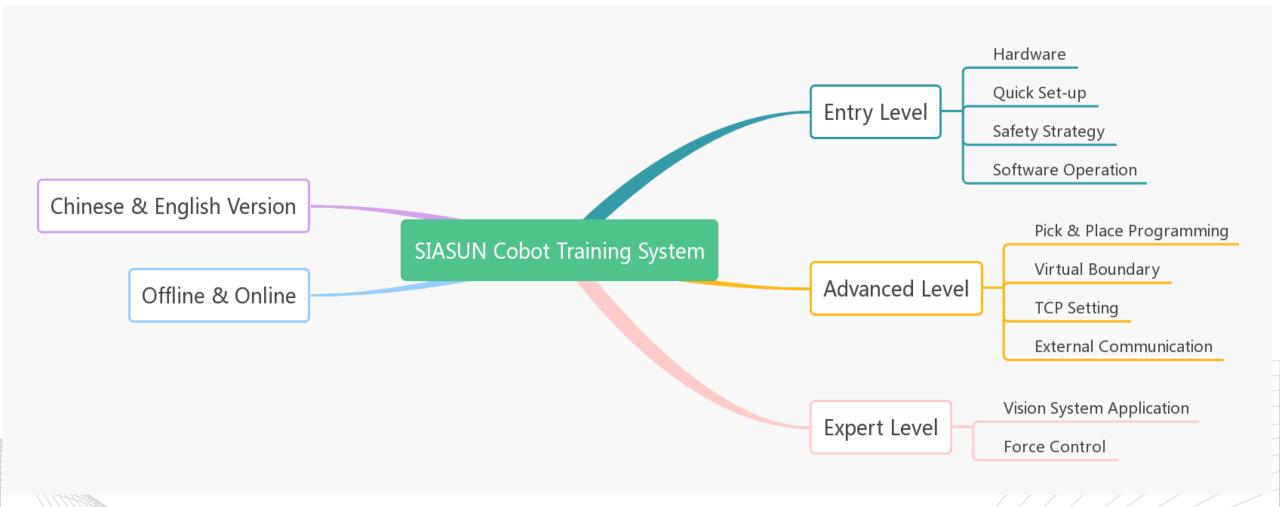


#### How we serve clients

Pre-sales After sale On-purchase **Systematic Training New products launch Date of delivery coordination** according to client needs **Technique support Systematic Training Application evaluation Process validation Spare parts & components Accessories recommendation Entry level training** 

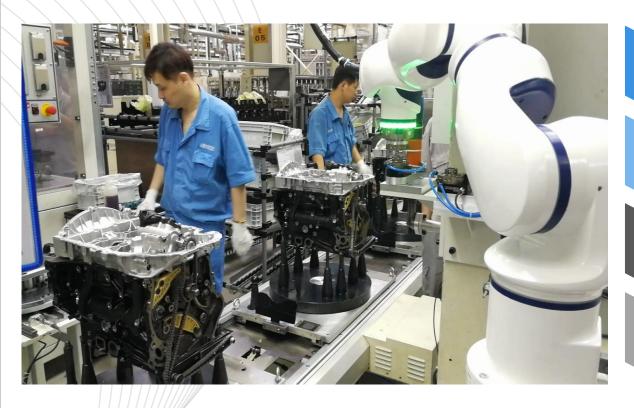


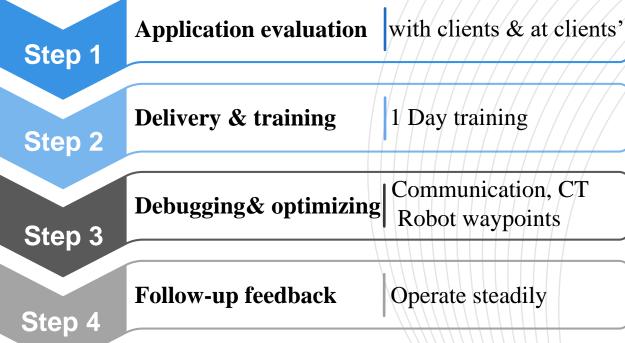
# **Complete Training System**





#### **Typical Project Introduction**





Successfully implemented in 2 weeks

# Create for More Collaborate for Better



#### SI/ISUN 新松

**SIASUN Co., Ltd.** Intelligent Robot BG

Add: Robot Hub, No.257 Jinzang Rd, Pudong, Shanghai

