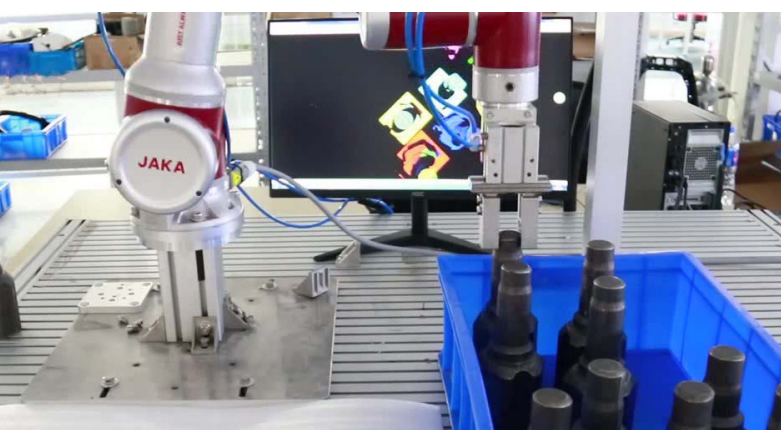




READYCOBOT



Are You Ready?

Collaborative Robotics Applications



Overcome Labor Shortages



Improve Quality and Lead Time



Gain Flexibility



Reduce Costs

Your Part. Your Process.

We're Ready!



"We can easily complete a 20,000 product run in 24-hours - three time faster than if it were done manually while reducing scrap by 1-2%. With a constant stream of jobs, we are expected to achieve ROI in six months."

- Injection Molder of Caps with Seal Insert

"The main challenge was the variety of work-pieces, as it placed enormous requirements on the gripping range and flexibility of the gripper. Thanks to automation, our processes are now much more efficient, and we are able to reduce the workload of our employees. We expect the investment to be paid off within a few months"

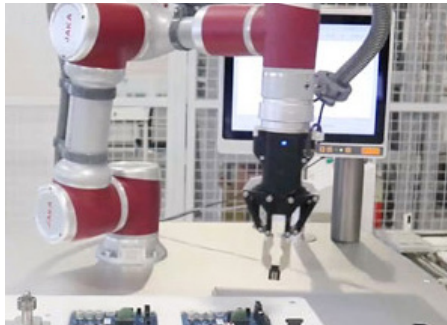
- CNC Machining Company, Machine Tending



"Replacing manual loading and unloading of stampings with a collaborative robot allowed us to reduce cost by 35% while focusing our people on higher value duties. It's easy to set up and it operates alongside workers without the need for special fencing."

- Metal Stamping, Automotive Supplier

Other Applications



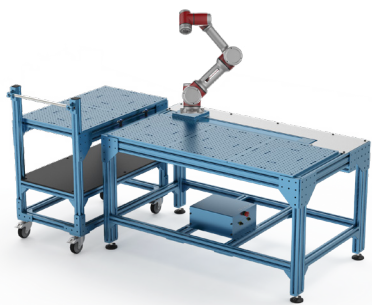
Assembly



Bin Picking



Palletizing



Inspection



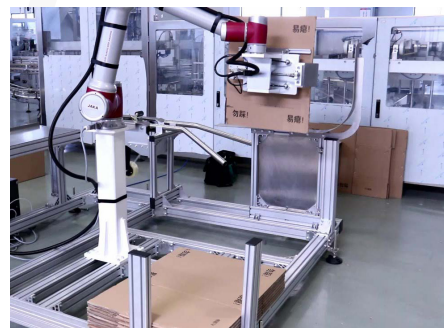
Machine Tending



Loading and Unloading

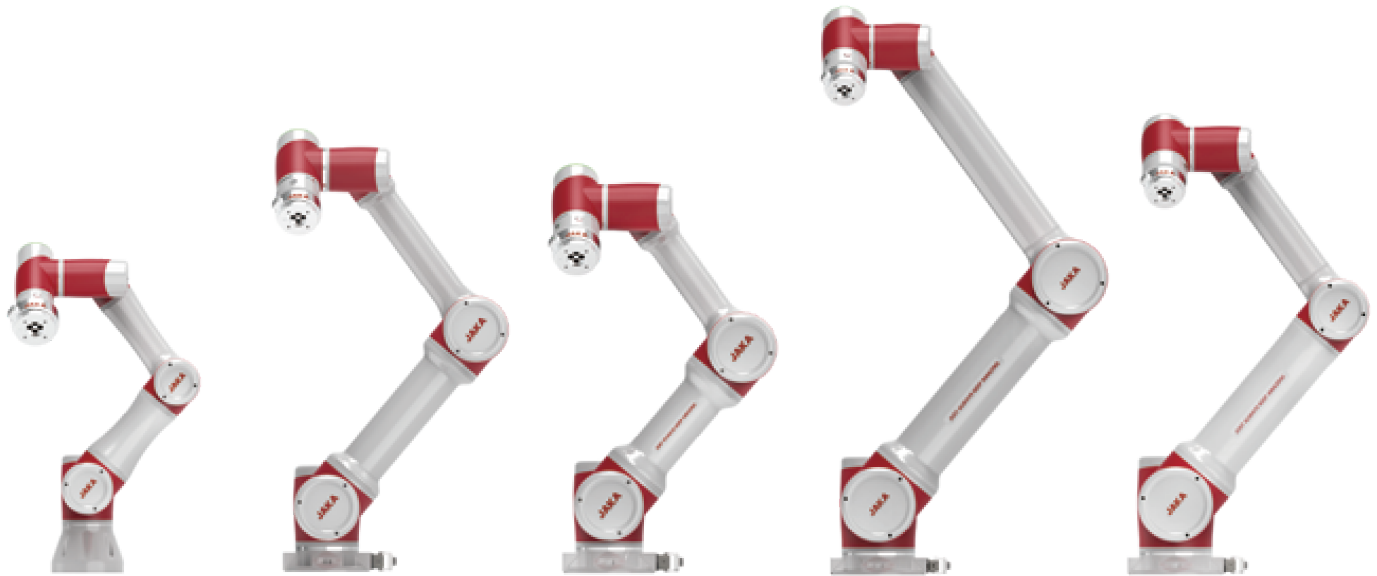


Drilling, Milling,
Sanding or Screw
Driving



Packaging

JAKA® Cobot S³ - Smart, Simple, Small



JAKA Zu ° 3s

JAKA Zu ° 5s

JAKA Zu ° 7s

JAKA Zu ° 12s

JAKA Zu ° 18s

- Easy-to-Program, Affordable, Reliable Collaborative Robot Series
- Industry Leading Specifications for Payload, Reach and Speed
- Configurable Low-Voltage Inputs and Outputs for Easy System Integration
- S-Series Force Control Combines with Optional Camera for Self-Learning and Natural Human-Cobot Cooperation
- 6-Axis, Graphical Programming, Free-Drive w/ MT (PAD/Mobile) APP, Collaborative Operation in Accordance with GB 11291.1-2011

Safe Cooperation, Collision Protection

Built-in torque feedback module, when the collision reaches the set upper torque, JAKA cobots will stop in time to avoid personnel injury or equipment damage and achieve human-machine safety cooperation at last.

Wireless Interconnection, No Teach Pendant

JAKA Cobots adopt mobile terminal APP control mode, freeing cobots from traditional bulky teaching demonstrator and redundant control lines, which is convenient for the limited space teaching.

Drag and Graphic Programming

Manually drag the robot terminal to the corresponding point, the robot arm learns and remembers autonomously to complete programming. Even the zero-based users can easily demonstration and teaching that facilitates human-robot cooperation more humanized. New program can be timely tuned to meet different requirements and the whole process takes only a few minutes to achieve rapid task conversion.

Remote Interaction, Real-time Monitoring

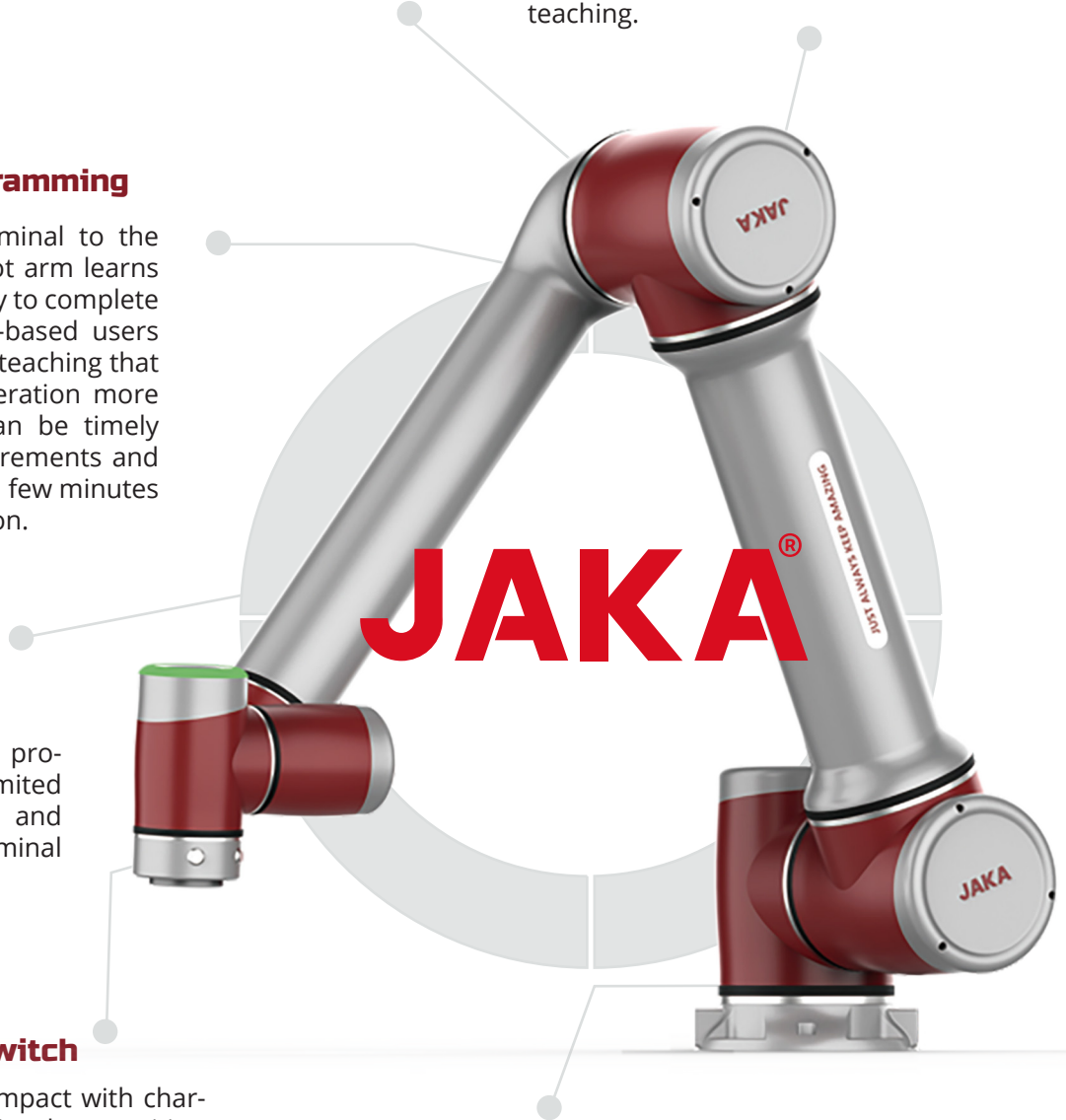
JAKA Cobots support remote programming thus no longer limited to geographical boundaries and also realize one mobile terminal controls multiple robots.

Plug and Play, Quick Switch

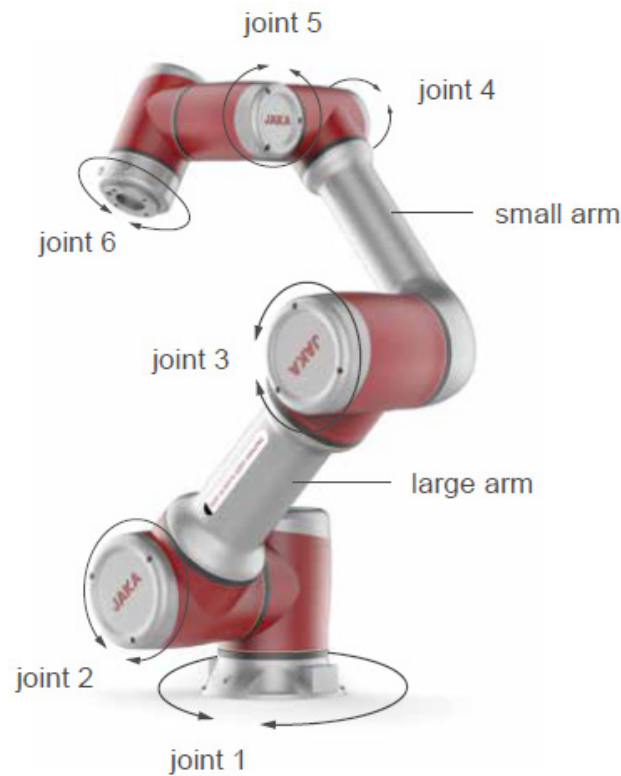
JAKA Cobots are light and compact with characters of easy installation, visual recognition and excellent equipment compatibility. Good versatility and flexibility make JAKA Cobot in any production environment can truly achieve plug and play, rapid deployment. For small batch, multi-batch, customization, short cycle, and other production needs perform excellent application.


Open Software and Hardware Ecosystem

JAKA Cobots are based on the Linux system platform with high compatibility. Users can remotely interact with robots through Ethernet protocol (TCP/IP) and Modbus from multi-platform systems such as Android, iOS and Windows. With universal control interface JAKA Cobots can quickly match the automation equipment in supply chain.



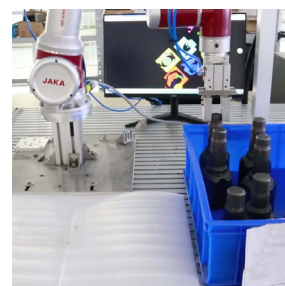
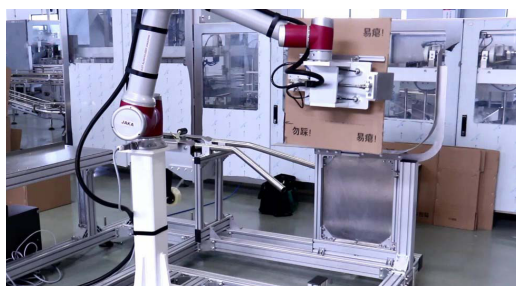
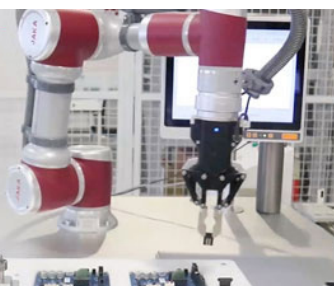
JAKA Zu[®] Structure and Control Cabinet



 <p>Control Cabinet</p>	IP Specification	IP44
	I/O Power	16 Digital input/16 Digital output /2 Analog input or output
	Tool I/O	24V
	Communication	TCP/IP, Modbus TCP, Modbus RTU
	Power	100-240VAC, 50-60Hz
	Size	16.1x12.1x9.3 (in) ((410×307×235 (mm)) (W×H×D)
	Weight	26.5lb (12kg) (Zu 3,Zu 5, Zu 7) / 35.3 lb (16kg) (Zu 12, Zu 18)
	Material	Aluminum

Cobot Specs

	3s		5s		7s		12s		18s	
Payload	6.6 lbs (3kg)		11 lbs (5kg)		15.4 lbs (7kg)		26.5 lbs (12kg)		39.7 lbs (18kg)	
Weight	26.5 lbs (12kg)		50.7 lbs (23kg)		48.5 lbs (22kg)		90.4 lbs (42kg)		77.2 lbs (35kg)	
Working Radius	24.7" (626mm)		37.6" (954mm)		32.2" (819mm)		52.2" (1327mm)		42.2" (1073mm)	
Repeatability	+/- 0.02mm						+/- .03mm			
	Degree	Speed	Degree	Speed	Degree	Speed	Degree	Speed	Degree	Speed
Joint 1	+/-360°	180°/s	+/-360°	180°/s	+/-360°	180°/s	+/-360°	120°/s	+/-360°	120°/s
Joint 2	-85°, +265°	180°/s	-85°, +265°	180°/s	-85°, +265°	180°/s	-85°, +265°	120°/s	-85°, +265°	120°/s
Joint 3	+/-175°	180°/s	+/-175°	180°/s	+/-175°	180°/s	+/-175°	120°/s	+/-175°	120°/s
Joint 4	-85°, +265°	220°/s	-85°, +265°	180°/s	-85°, +265°	180°/s	-85°, +265°	180°/s	-85°, +265°	180°/s
Joint 5	+/-360°	220°/s	+/-360°	180°/s	+/-360°	180°/s	+/-360°	180°/s	+/-360°	180°/s
Joint 6	+/-360°	220°/s	+/-360°	180°/s	+/-360°	180°/s	+/-360°	180°/s	+/-360°	180°/s
Max Speed	4.92 ft/s (1.5m/s)		9.84 ft/s (3m/s)		8.20 ft/s (2.5m/s)		9.84 ft/s (3m/s)		11.48 ft/s (3.5m/s)	
Rated Power	150W		350W				500W		600W	
Temp Range	0-122°F (0-50°C)									
IP Spec.	IP54									
Tool I/O	2-Digital Inputs 2-Digital Outputs 1-Analog Input									
Tool I/O Power	24V									
Tool I/O Size	M8									
Materials	Aluminum, PP									
Base Dia.	5.1" (129mm)		6.2" (158mm)				7.4" (188mm)			
Cable Length	19.7 ft (6m)									



Pro Series Specs

	JAKA Pro 5		JAKA Pro 12		JAKA Pro 16	
Payload	11 lbs (5kg)		26.5 lbs (12kg)		35 lbs (16kg)	
Weight (W cable)	50.7 lbs (23kg)		90.4 lbs (42kg)		163 lbs (73.9kg)	
Work Radius	37.6" (954mm)		52.2" (1327mm)		67.4" (1713mm)	
Repeatability	+/- 0.02mm					
Axis	6					
Programming	Graphical programming, free-drive					
Teach Pendant	MT (PAD/Mobile) APP					
Collaborative Operation	Accordance with GB 11291.1-2011					
	Degree	Speed	Degree	Speed	Degree	Speed
Joint 1	+/-360°	180°/s	+/-360°	120°/s	+/-360°	120°/s
Joint 2	-50°, +230°	180°/s	-50°, +230°	120°/s	-50°, +230°	120°/s
Joint 3	+/-155°	180°/s	+/-155°	120°/s	+/-155°	120°/s
Joint 4	-85°, +265°	180°/s	-85°, +265°	180°/s	-85°, +265°	180°/s
Joint 5	+/-270°	180°/s	+/-270°	180°/s	+/-270°	180°/s
Joint 6	+/-270°	180°/s	+/-270°	180°/s	+/-270°	180°/s
Max Speed	9.84 ft/s (3m/s)		9.84 ft/s (3m/s)		11.48 ft/s (3.5m/s)	
Rated Power	350W		500W		750W	
Temp Range	14-122°F (-10-50°C)					
IP Spec.	IP68					
Installation	Installation at any angle					
Tool I/O	2-Digital Inputs 2-Digital Outputs 1-Analog Input					
Tool I/O Power	24V					
Tool I/O Size	M8					
Materials	Aluminum Alloy, PC					
Base Diameter	6.2" (158mm)		7.4" (188mm)		9.7" (246mm)	
Cable Length	19.7 ft (6m)					

Integrated Systems

With JAKA Cobot+OnRobot+Vention =

Precise, Repeatable and Reliable Automated Systems

OnRobot

Easy-To-Use, Award-Winning
Gecko Gripping Technology

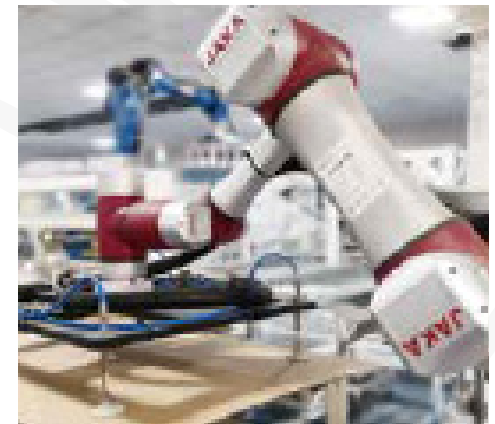
Electric and Vacuum Grippers,
Force/Torque Sensors, 2.5D Vision
System, Screwdriver, Sander Kits
and Tool Changers



Vention

Modular Pedestals, Rails and
Range Extenders

Motion Controlled Gantry
Plates, Turntables and
Indexers



Other Integrated Solutions

Bowl Feeders

Conveyors

Vision Systems

About READYCOBOT



ReadyCobot is a Division of Tube Form Solutions in Elkhart, IN. Our group has over 30 years of automation systems integration experience in the tube bending and fabrication industry. We're advancing Cobot integrations into many industries throughout the country including machining, plastics processors, various consumer products and other advanced manufacturing applications.

- Jaka Licensed USA Master Distributor
- Vention Certified System Integrator
- OnRobot Partner
- "Yaskawa Motoman Certified Integrator"

Are You Ready?

- Get an application proof of concept video in our Elkhart, IN lab.
- We'll provide a quotation for a turn-key solution Including installation, initial programming and training
- Need help with ROI calculations? We have you covered.
- We offer ongoing support and training for new system configurations that can be set up in just a few hours in many cases.
- Start Now - Visit ReadyCobot.com/Get-Ready