

ROKAE

# Industrial Robot Series

Faster | More Reliable | More Precise



**ROKAE Robotics**

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The background image shows a large industrial facility with two white ROKAE robotic arms. One arm is on the left, positioned over a conveyor belt with yellow cylindrical parts. The other arm is on the right, positioned over a complex mechanical assembly. Both arms have 'ROKAE' written in red on their upper sections. The factory floor is blue, and the background is filled with various industrial structures, pipes, and safety railings.

## ROKAE

To be a world-leading robot expert

ROKAE industrial robots are faster, more reliable, and more precise.

Every second and every motion of industrial robots matter throughout manufacturing, and that explains why robot reliability and speed come first for us. After years of updating and improving, our products have become faster and more reliable, with more functions integrated into a compact size. That makes applications easier, production more stable, and intelligent manufacturing more efficient.





## Product Advantages



### Faster - Efficient Production

- Optimal hardware performance powered by self-developed control systems
- Remarkably adroit motion backed by modularized control architecture



### More Reliable - Stable Operation

- Rigorous design and continuous improvement bring you a reliable partner in industrial production
- IP67, CE, CR, KCs, and MTBF certifications



### More Precise - Flexible Integration

- Easier deployment thanks to the compact structure and hollow wrist
- Broader application due to various interfaces



### Easier to Use - Worry-free Operation

- Simple maintenance with timely, professional, and efficient service





## Product series

### NB220 series

Payload	Reach
150 kg	3,201 mm
170 kg	2,705 mm
220 kg	2,705 mm

### NB80 series

Payload	Reach
50 kg	2,598 mm
80 kg	2,200 mm

### NB25h series

Payload	Reach
12 kg	2,258 mm
25 kg	1,836 mm
35 kg	1,836 mm

### NB25 series

Payload	Reach
20 kg	2,013 mm
25 kg	1,813 mm
35 kg	1,813 mm
30 kg	1,617 mm

### NB12 series

Payload	Reach
10 kg	1,602 mm
12 kg	1,442 mm
16 kg	1,102 mm

### XB10 series

Payload	Reach
10 kg	1,206 mm

### XB7 series

Payload	Reach
7 kg	707 mm
7 kg	906 mm

### NB4 series

Payload	Reach
4 kg	475 mm
4 kg	580 mm



# NB4 series

- Add bottom outlet configuration, can also be installed near the wall
- IP67 rating
- More reliable for applications in tight spaces and harsh environments

Model		NB4-4/0.47	NB4h-4/0.58
DOF		6	6
Drive mode		AC servo	AC servo
Reach		475 mm	580 mm
Repeatability		±0.02 mm	±0.02 mm
Payload		4 kg	4 kg
Range of motion (maximum speed)	Axis 1	-170° to +170° (450°/s)	-170° to +170° (450°/s)
	Axis 2	-90° to +130° (360°/s)	-90° to +130° (318°/s)
	Axis 3	-200° to +55° (360°/s)	-200° to +55° (288°/s)
	Axis 4	-170° to +170° (550°/s)	-170° to +170° (550°/s)
	Axis 5	-120° to +120° (450°/s)	-120° to +120° (450°/s)
	Axis 6	-360° to +360° (860°/s)	-360° to +360° (612°/s)
Operating temperature		0°C to +40°C	0°C to +40°C
Storage temperature		-10°C to +55°C	-10°C to +55°C
IP rating		IP67	IP67
Mounting method		Floor, Ceiling	Floor, Ceiling
Noise level		≤70 dB(A)	≤75 dB(A)
Weight		About 21 kg	About 22 kg
AIR		4-Φ4, 5bar	4-Φ4, 5bar
Signal		8 channels (30V, 0.5A)	8 channels (30V, 0.5A)





# XB7 series

- Flexible reach choices: 707/906 mm
- Satisfactory quality and takt time thanks to the amazing stability and best-in-class motion control

Model		XB7	XB7L
DOF		6	
Drive mode		AC servo	
Reach		707 mm	906 mm
Repeatability		±0.02 mm	±0.03 mm
Payload		7 kg	
Range of motion (maximum speed)	Axis 1	-170° to +170° (440°/s)	-170° to +170° (355°/s)
	Axis 2	-96° to +135° (355°/s)	-96° to +130° (355°/s)
	Axis 3	-195° to +65° (440°/s)	-195° to +65° (355°/s)
	Axis 4	-170° to +170° (480°/s)	
	Axis 5	-120° to +120° (450°/s)	
	Axis 6	-360° to +360° (705°/s)	
Operating temperature		0°C to +40°C	
Storage temperature		-10°C to +55°C	
IP rating		IP67	IP67
Mounting method		Floor, Ceiling	
Noise level		≤ 70 dB(A)	
Weight		About 50 kg	About 52 kg
AIR		4-Φ4, 5bar	
Signal		8 channels (30V, 0.5A)	

Applications



Loading and unloading



Deburring



Inspection



Gluing



Sorting



Assembly



Handling





# XB10 series

- All-cast aluminum body for the lightest weight and highest speed in its class
- Easy and compact deployment made possible by the fully enclosed arm with internal cables

Model		XB10 R1206
DOF		6
Drive mode		AC servo
Reach		1,206 mm
Repeatability		±0.05 mm
Payload		10 kg
Range of motion (maximum speed)	Axis 1	-170° to +170° (297°/s)
	Axis 2	-95° to +125° (223°/s)
	Axis 3	-195° to +65° (223°/s)
	Axis 4	-170° to +170° (480°/s)
	Axis 5	-120° to +120° (360°/s)
	Axis 6	-360° to +360° (705°/s)
Operating temperature		0°C to +40°C
Storage temperature		-10°C to +55°C
IP rating		IP54
Mounting method		Floor, Ceiling
Noise level		≤ 70 dB(A)
Weight		About 76 kg
AIR		4-Φ4, 5bar
Signal		8 channels (30V, 0.5A)

## Applications



Loading and unloading



Deburring



Inspection



Gluing



Sorting



Assembly



Handling



# NB12 series

- Full-cast aluminum alloy body for 20% weight reduction compared with products of the same class. Running speed that is 20% faster for efficient and precise operation.
- Compact design with built-in motor and cable for easier and more flexible deployment
- IP67 protection that endures harsh environments

Model		NB12-10/1.6	NB12-12/1.4	NB12-16/1.1
DOF		6		
Drive mode		AC servo		
Reach		1,602 mm	1,442 mm	1,102 mm
Repeatability		±0.03 mm		
Payload		10 kg	12 kg	16 kg
Range of motion (maximum speed)	Axis 1	-170° to +170° (245°/s)		
	Axis 2	-105° to +145° (245°/s)		
	Axis 3	-210° to +70° (290°/s)		
	Axis 4	-200° to +200° (435°/s)		
	Axis 5	-135° to +135° (450°/s)		
	Axis 6	-360° to +360° (705°/s)		
Operating temperature		0°C to +45°C		
Storage temperature		-10°C to +55°C		
IP rating		IP67		
Mounting method		Floor, Ceiling		
Noise level		≤75 dB(A)		
Weight		About 117 kg	About 115 kg	About 112 kg
AIR		1-Φ8+2-Φ6, 8bar		
Signal		24 channels (30V, 0.5A)		

## Applications



Loading and unloading



Deburring



Inspection



Handling



Sorting



Assembly





# NB25 series

- Longer reach than products of the same class helps easily address a wide range of automation requirements
- ROKAE self-developed control system maximizes production efficiency while ensuring the service life
- A 25% increase in payload over the previous model on average
- High inertia motion characteristics optimized for high inertia and fast beat applications
- IP67 high protection rating of wrists allows working in extreme environments thanks to the newly optimized sealing design

Model		NB25-20/2.0	NB25-25/1.8	NB25-30/1.6	NB25-35/1.8
DOF		6			
Drive mode		AC servo			
Reach		2,013 mm	1,813 mm	1,617 mm	1,813 mm
Repeatability		±0.05 mm			
Payload		20 kg	25 kg	30 kg	35 kg
Range of motion (maximum speed)	Axis 1	-180° to +180° (204°/s)			-180° to +180° (204°/s)
	Axis 2	-99° to +156° (186°/s)			-99° to +156° (186°/s)
	Axis 3	-200° to +75° (182°/s)			-200° to +75° (182°/s)
	Axis 4	-180° to +180° (492°/s)			-180° to +180° (310°/s)
	Axis 5	-135° to +135° (450°/s)			-135° to +135° (360°/s)
	Axis 6	-360° to +360° (705°/s)			-360° to +360° (444°/s)
Operating temperature		0°C to +40°C			
Storage temperature		-10°C to +55°C			
IP rating		IP65 (Wrist IP67)			
Mounting method		Floor, Ceiling			
Noise level		≤75 dB(A)			
Weight		About 264 kg	About 256 kg	About 252 kg	About 256 kg
AIR		2-Φ8, 8bar			
Signal		24 channels (30V, 0.5A)			

## Applications



Loading and unloading



Deburring



Inspection



Photovoltaic typesetting



Sorting



Assembly





# NB25h series

- Quasi-hypoid-gear for higher joint rigidity, ideal for high-rigidity operational scenarios.
- 57mm large hollow diameter for easier cabling and more convenient deployment.
- Smooth quasi-hypoid gear meshing ensures better precision retention, longer lifespan, and lower maintenance costs.
- IP67-wrist and IP65-body are designed to handle harsh environments with ease.

Model		NB25h-12/2.2	NB25h-25/1.8	NB25h-35/1.8
DOF		6		
Drive mode		AC servo		
Reach		2,258 mm	1,836 mm	1,836 mm
Repeatability		±0.04 mm	±0.03 mm	±0.04 mm
Payload		12 kg	25 kg	35 kg
Range of motion (maximum speed)	Axis 1	-180° to +180° (200°/s)	-180° to +180° (200°/s)	-180° to +180° (180°/s)
	Axis 2	-99° to +156° (185°/s)	-99° to +156° (185°/s)	-99° to +156° (180°/s)
	Axis 3	-200° to +75° (180°/s)	-200° to +75° (180°/s)	-200° to +75° (180°/s)
	Axis 4	-215° to +215° (430°/s)	-215° to +215° (430°/s)	-215° to +215° (420°/s)
	Axis 5	-225° to +225° (460°/s)	-225° to +225° (430°/s)	-225° to +225° (360°/s)
	Axis 6	-450° to +450° (730°/s)	-450° to +450° (730°/s)	-450° to +450° (450°/s)
Operating temperature		0°C to +40°C	0°C to +40°C	0°C to +40°C
Storage temperature		-10°C to +55°C	-10°C to +55°C	-10°C to +55°C
IP rating		IP65 (Wrist IP67)	IP65 (Wrist IP67)	IP65 (Wrist IP67)
Mounting method		Floor, Ceiling	Floor, Ceiling	Floor, Ceiling
Noise level		≤75 dB(A)	≤75 dB(A)	≤75 dB(A)
Weight		About 276 kg	About 272 kg	About 273 kg
AIR		2-Φ12, 8bar	2-Φ12, 8bar	2-Φ12, 8bar
Signal		2-12 channels (30V, 0.5A)	2-12 channels (30V, 0.5A)	2-12 channels (30V, 0.5A)

Applications



Grinding




Welding



Solar panel layout




Handling/  
loading and unloading



Sorting




Gluing



Deburring



Assembly



Inspection





# NB80 series

- Highest payload and longest reach among products of the same class helps easily address a wide range of automation needs
- High inertia motion characteristics optimized for high inertia applications
- Higher protection level against even the most demanding environments

Model		NB80-80/2.2	NB80-50/2.6
DOF		6	
Drive mode		AC servo	
Reach		2200 mm	2598 mm
Repeatability		±0.06 mm	±0.08 mm
Payload		80 kg	50 kg
Range of motion (maximum speed)	Axis 1	-185°~+185°(170°/s)	-185°~+185°(170°/s)
	Axis 2	-90°~+155°(145°/s)	-90°~+155°(180°/s)
	Axis 3	-210°~+80°(170°/s)	-210°~+80°(180°/s)
	Axis 4	-200°~+200°(285°/s)	-200°~+200°(285°/s)
	Axis 5	-130°~+130°(285°/s)	-130°~+130°(285°/s)
	Axis 6	-360°~+360°(285°/s)	-360°~+360°(360°/s)
Operating temperature		0°C to +45°C	
Storage temperature		-10°C to +55°C	
IP rating		IP65 (Wrist IP67)	
Mounting method		Floor, Ceiling	
Weight		About 635 kg	About 645 kg
AIR		2-Φ12, 8bar	
Signal		24 channels (30V, 0.5A)	

## Applications



Loading and unloading



Soldering



Deburring



Handling



Gluing





# NB220 series

- Payload of 220 kg, with greater operating capacity under the same working conditions
- Reach of 3200 mm, cope with more application needs easily
- The whole machine IP65, wrist IP67 protection, deal with harsh environment freely

Model		NB220-220/2.7	NB220-170/2.7	NB220-150/3.2
DOF		6		
Drive mode		AC servo		
Reach		2705 mm	2705 mm	3201 mm
Repeatability		±0.07 mm	±0.07 mm	±0.08 mm
Payload		220 kg	170 kg	150 kg
Range of motion (maximum speed)	Axis 1	-185°~+185°(120°/s)	-185°~+185°(130°/s)	-185°~+185°(130°/s)
	Axis 2	-65°~+85°(110°/s)	-65°~+85°(115°/s)	-65°~+85°(115°/s)
	Axis 3	-185°~+80°(110°/s)	-185°~+80°(120°/s)	-185°~+80°(120°/s)
	Axis 4	-200°~+200°(150°/s)	-200°~+200°(180°/s)	-200°~+200°(180°/s)
	Axis 5	-130°~+130°(150°/s)	-130°~+130°(180°/s)	-130°~+130°(180°/s)
	Axis 6	-360°~+360°(220°/s)	-360°~+360°(260°/s)	-360°~+360°(260°/s)
Operating temperature		0°C to +45°C		
Storage temperature		-10°C to +55°C		
IP rating		IP65 (Wrist IP67)		
Mounting method		Floor		
Weight		About 1138 kg	About 1138 kg	About 1165 kg
AIR		2-Φ12, 8bar		
Signal		24 channels (30V, 0.5A)		

## Applications



Loading and unloading



Soldering



Deburring



Handling



Gluing



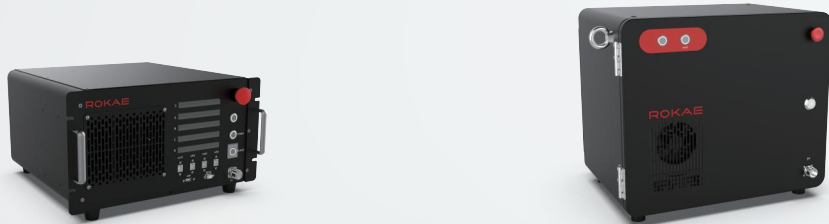


XBC5M

- Compact design and small footprint
- Flexible deployment through vertical/horizontal installation

XBC5

- More convenient deployment with a size only 50% that of the previous generation
- Suitable for wet, acidic, and alkaline gas environment thanks to internal and external dual cycle cooling system and IP54 protection



Controller	XBC5M	XBC5
Dimensions (W×D×H)	448 mm x 446 mm x 268 mm	522 mm x 408 mm x 425 mm
Weight	28 kg	35 kg
Standard I/O	Input: 16; Output: 16	Input: 16; Output: 16
IP rating	IP40	IP54
Power supply	230VAC, voltage fluctuation within -15% to +10%, frequency variation within ±2%	230VAC or 3 x 380VAC(3L+N+PE)*1, voltage fluctuation within -15% to +10%, frequency variation within ±2%
Typical scenario Average power consumption	0.22kW (NB4 series) 0.52kW (XB7 series) 0.27kW (XB10 R1206)	0.22kW (NB4 series) 、0.52kW (XB7 series) 0.27kW (XB10 R1206) 、0.63kW (NB12 series) 1.5kW (NB25 series)
Operating temperature	0°C to +45°C	0°C to +45°C
Storage temperature	-10°C~+55°C	-10°C~+55°C
Maximum humidity for operation/storage	≤ 80% (non-condensing)	≤ 95% (non-condensing)

\*1: 3x380VAC power supply for NB12 Series, NB25 Series,and 230VAC power supply for the rest.

XBC5E

- Compact design and easy installation
- IP54 protection level against metal dust
- Rich interface, support multiple communication methods



Controller	XBC5E	XBC6M
Dimensions (W×D×H)	690 mm× 514 mm× 835 mm	420 mm × 317 mm × 120 mm
Weight	102 kg	10 kg
Standard I/O	Input: 16; Output: 16	Input: 16; Output: 16
IP rating	IP54	IP40
Power supply	3x380VAC(3L+PE); voltage fluctuation within -10%-10%, frequency variation within ±2%	230VAC, voltage fluctuation within -15% to +10%, frequency variation within ±2%
Rated power	2.1kW (NB80 series) 2.6kW (NB220 series)	0.22kW (NB4 series) 0.52kW (XB7 series) 0.27kW (XB10 R1206)
Operating temperature	0°C ~ +45°C	0°C ~ +50°C
Storage temperature	-10°C~ +55°C	-10°C~ +55°C
Maximum humidity for operation/storage	≤95% (non-condensing)	≤80% (non-condensing)

xPad2

- Modern ergonomic design
- Large multi-touch HD Screen,easier human-machine interaction
- Plug & play connection and shareable between robots
- Intuitive UI layout allowing quick start within 10 minutes



FlexPendant

Dimensions	290 mm × 190 mm × 80 mm
Weight	840 g
Connection	Wired
Display	10.1-in LCD with a resolution of 1,920×1,200
IP rating	IP54

xPad2



# Applications

ROKAE has built high-quality industrial robot platforms on modular technology. By satisfying the market needs with multi-function products that are more efficient, reliable, and compact, ROKAE empowers efficient intelligent manufacturing and drives innovations in different industries.





# Electronics

Outperforming competitors in speed, reliability, and size, ROKAE industrial robots have found wide applications in consumer electronics, glass cover, PCB, and other segments.



**Loading & Unloading for Mobile Phone Inspection**



Loading and unloading for inspection equipment of mobile phones and other electronic products

**Notebook Package Labeling**



Labeling on the outer package of notebooks

**Loading & Unloading for Mobile Phone Screen Processing**



Loading and unloading for CNC engraving machine to process the glass cover of electronic products

**Mobile Phone Backboard Polishing**



Grinding and polishing of the metal backboards of mobile phones and other electronic products

**Relay Gluing**



Encapsulating and gluing of relays and other electronic components

**PCB Board Handling**



Handling of large inertia PCB boards in the PCB industry

# Auto Parts

ROKAE serves Tier 1 auto part suppliers and their factories across the globe. Thanks to superior trajectory accuracy and stiffness, ROKAE robots ensure consistent trajectory in automated applications such as part grinding and gluing.



**Rail Grinding**



Chamfering and deburring of different end surfaces of auto linear guides

**Piston Grinding & Deburring**



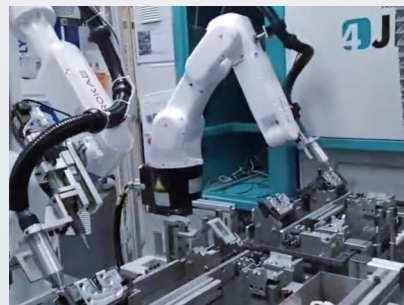
Fine grinding and deburring of piston products (including valves, oil holes, inner pin holes, and other complex parts)

**Plastic Part Grinding**



Grinding and polishing of interior and exterior plastic trims, such as door handles and three-spoke steering wheels

**Lock Gluing**



Plasma cleaning and sealant application for car locks

**Casting Grinding**



Grinding and deburring of cast iron parts, aluminum and magnesium alloy die-cast parts, and steel machined parts

**Front-End Module Inspection**



Flexible automatic inspection of different types of automotive front-end modules

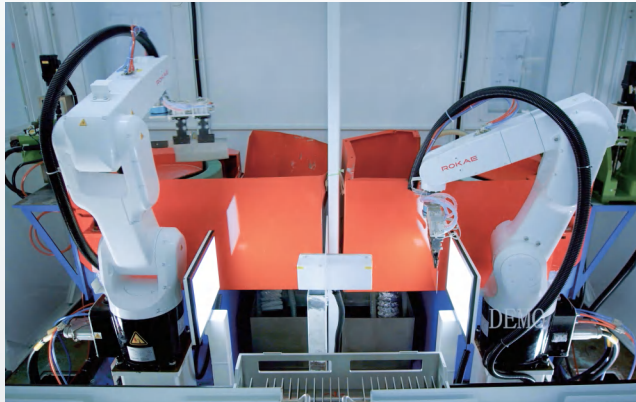


# Metals

Equipped with proprietary control systems, constant force control software process kit, and intelligent vision planning system, the IP67 protected ROKAE robots automate most of the tool production processes with improved productivity and quality. ROKAE has now grown into one of the best robot brands for manufacturing hardware including knife and shear.



Automatic Loading & Unloading for Wet Sanding



Automatic Blade Cutting



Automatic Chamfering

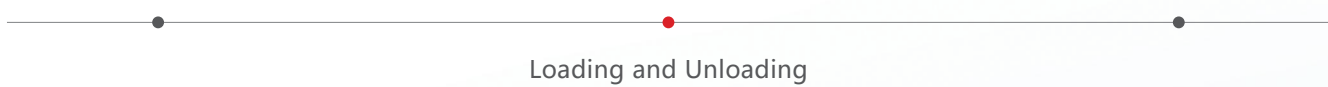


Automatic Deburring

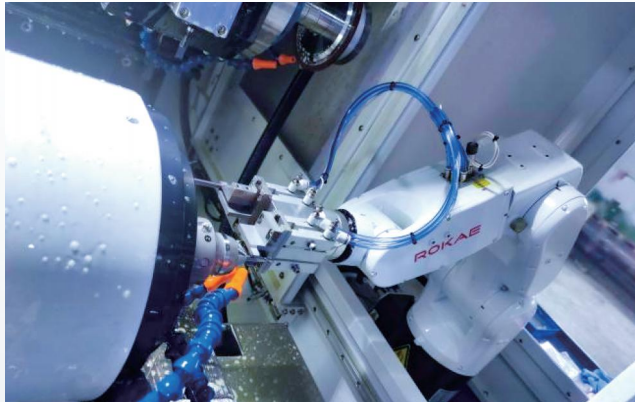


# Machine Tending

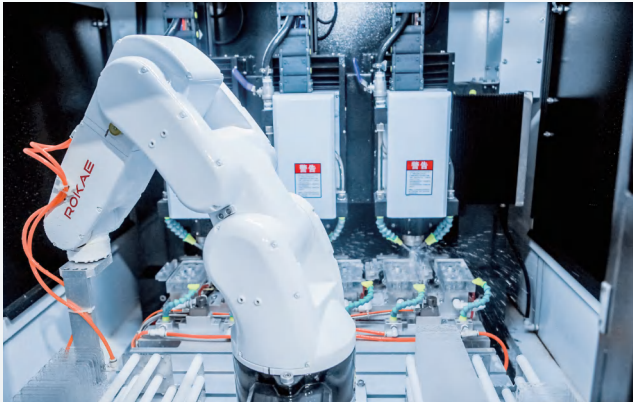
Powered by high-performance motion control and other platform-based technologies, the IP67 protected ROKAE robots have become the ideal choice for the machine tool industry due to their high protection level, compact design, and outstanding precision. Equipped with the hollow wrist, they allow for long-term stable loading and unloading inside and outside machine tools. That wins it the reputation of the No. 1 domestic brand in the segment.



Loading and Unloading for Tool Grinding Machine



Loading and Unloading for CNC Engraving Machine



Loading and Unloading for Injection Moulding Machine



Loading and Unloading for Water Truck

