



### Who We Are

ARIA Technologies, a Giza Systems subsidiary, is leading in automation solutions for manufacturing industries. ARIA is a responsible and committed full service solutions provider and systems integrator delivering turnkey automation and energy optimization solutions to manufacturing companies across the MENA region. Partnering with world pioneers in robotics and automation, ARIA Technologies is a certified robot system integrator leading the digitalization of industrial technology.

### What We Do

We work with our customers to create genuine and responsible value through offering state-of-the-art technologies for sustainable, efficient and resilient industries to support growth, development and the environment. Our services include automation systems, industrial IoT and energy optimization.

Our products and system integration solutions enable our customers to **reduce costs** and **increase Productivity**, **Flexibility** and **Precision of day-to-day operations**. Our core competencies include design and implementation of solutions with programmable controllers, information systems, drives, motion control and different robotic systems integration.

Our industrial IoT platform provides our customers with a number of capabilities including predictive maintnance, performance monitoring and energy efficiency solutions. IIoT delivers countless benefits ranging from real-time monitoring of performance and quality control to equipment maintenance and safety.

In addition to our industrial IoT platform, we also offer energy optimization solutions. We adopt the latest in cutting-edge technologies to reduce energy consumption, costs, and carbon footprint. Our team of experts offers customized re-tuning energy optimization and renewable energy integration solutions to transform infrastructures and support resilient sustainable industries.

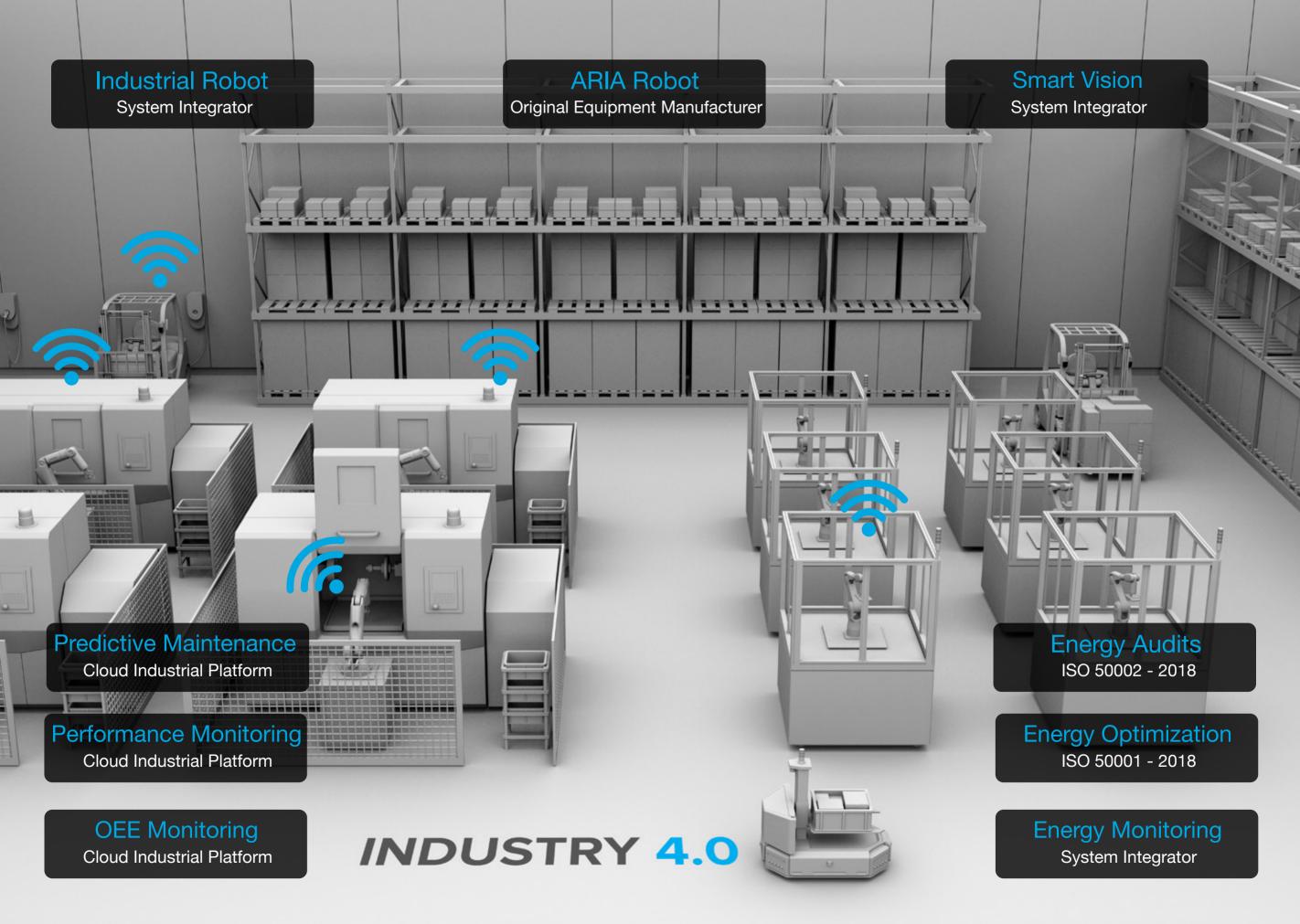
## Quality

ARIA Technologies strives to integrate quality in all its processes to ensure adherence to the best standards and practices. ARIA has received the ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018.









# Linear Robots Partner to BECKHOFF Germany

Our in-house developed line of linear robots allows us to offer our customers full systems integration, full design and full manufacturing capabilities.

We custom make your linear robot based on the specific application needed for your manufacturing operation.



The three-axis linear robot has Cartesian axes which are operated via the robot controller. Our different robotic solutions cater to the digitalization of the manufacturing process, providing our customers with the ability to increase productivity, Lower manufacturing costs, enhance flexibility and repurposing, Improve precision and accuracy, ensure highest quality standards and consistency, and increase work safety.

A 4th & 5th axles can be integrated to ARIA linear robot by adding the optional accessories.

### **Main Applications:**

- Packaging & Palletizing
- Simple pick & place
- Sorting & stacking applications
- Multiple parts orientation in space
- Handling automation
- Loading & unloading applications





#### **Technical Specifications**

	Model	ARIA 200	ARIA 220	ARIA 340							
Number of Axes		3 (4&5 Optional)									
Repeatability	mm		±0.05								
Main Horizontal Arm											
Stroke	mm	2,000	2,200	3,400							
Speed	m/s	2	2	2							
Ejector Stroke											
Stroke	mm	700	850	1,200							
Speed	m/s	1.5	1.5	1.5							
Vertical Arm		Single / Double									
Stroke	mm	1,200	1,500	1,800							
(Telescopic) Speed	m/s	2.0	2.0	2.0							
Maximum load (Part + EOAT)	Kg	10	40	60							
Automation Control Unit		BECKHOFF Germany / MITSUBISHI Japan									
Servo Motors		MITSUBISHI Japan / BECKHOFF Germany / HIWIN Taiwan									
Pneumatic System		FESTO Germany									
Rated Voltage	Volt	380									
Rated Power	kw	5.5	5.5 13 15								
Frequency	Hz	50 / 60									
All Driven		Servomotors									
Floor-standing control cabinet		-	$\sqrt{}$	$\sqrt{}$							
Weight	Kg	300 400 500									
Environment	°C		5 °C ~ 45 °C								
Standard Regulations		ISO 10218-1	/ ISO 13849-1 /	IEC 60204-1							
OPTIONS											
Steel Mounting Base			$\sqrt{}$								
Vacuum and/or pressure circuit		$\sqrt{}$	$\sqrt{}$	$\sqrt{}$							
Pneumatic vertical tilting (0-90°)		$\sqrt{}$	$\sqrt{}$	$\sqrt{}$							
Automatic Lubrication Sys.		$\sqrt{}$	$\sqrt{}$	$\sqrt{}$							
Wireless Industrial tablet		$\sqrt{}$	$\sqrt{}$	$\sqrt{}$							



### ARIA P60 Robot Arm

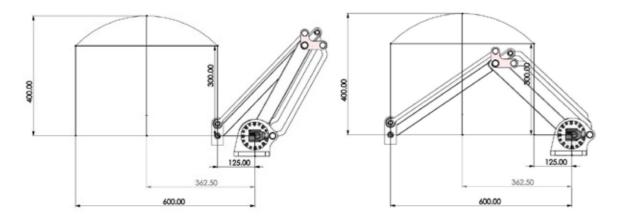
#### **Our ARIA P60 Pick & Place Robot Arm**

- Cost Efficient
- Precision
- Controller simplicity
- Enhance Flexibility & re-purposing



#### **Technical Specifications**

90						
BECKHOFF Germany						



## **Packaging Solutions**

Powered by FESTO, BECKHOFF and YASKAWA,

ARIA's newly compact design will solve all your packaging needs.

With high-speed-picker and efficient handling axes with gripper technology, including control cabinet, friendly interface display programming, standard components, and safety functions operating units.

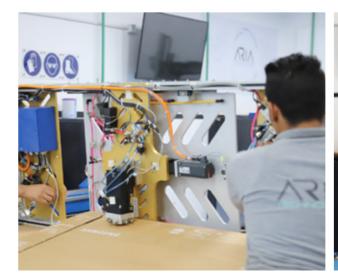
The most dynamic and energy-efficient technologies with a single-belt kinematic system that greatly reduces dead weight:

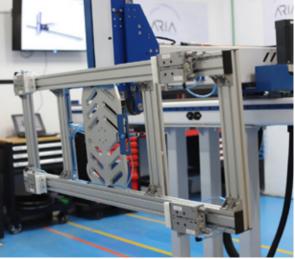
Perfectly matched drive and controller package for guick commissioning



#### **Design and Build Service**

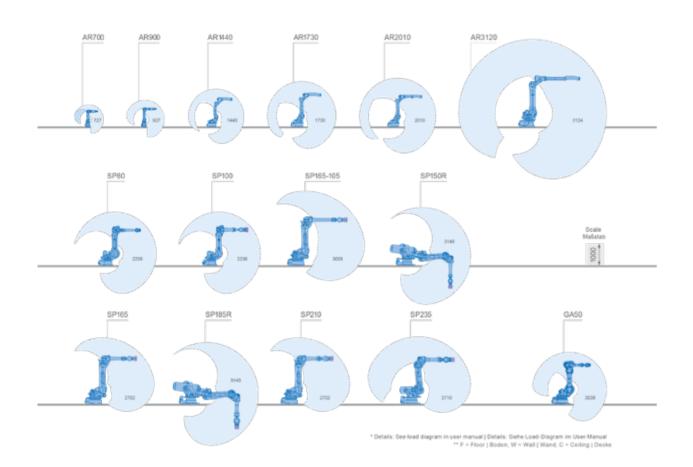
From the simplest to the most complex EOAT, ARIA Technologies specializes in designing and building customized End-of-Arm-Tooling at competitive pricing.





# YASKAWA

### YRC1000 / YRC1000microRobot Overview | Roboterübersicht



Technical data		Arc Welding   Lichtbogenschweißen  AR-series   AR-Serie					Spot Welding   Punktschweißen								Laser Welding & Cutting   Laserschweißen-	
Technische Daten							SP-series   SP-Serie									
reclinisone Daten		AR700	AR900	AR1440	AR1730	AR2010	AR3120	SP80	SP100	SP165- 105	SP150R	SP165	SP185R	SP210	SP235	GA50
Industrial robot controller Industrieroboter-Steuerung		YRC1000	YRC1000	YRC1000	YRC1000	YRC1000	YRC1000	YRC1000	YRC1000	YRC1000	YRC1000	YRC1000	YRC1000	YRC1000	YRC1000	YRC1000
Controlled axes Gesteuerte Achsen		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Max. payload * Max. Traglast *	[kg]	8	7	12	25	12	20	80 (88*)	100 (110*)	105 (120*)	151.5 (165*)	165 (180*)	186.5 (200*)	210 (225*)	235 (250*)	50
Repeatability Wiederholgenauigkeit	[mm]	± 0.01	± 0.01	± 0.02	± 0.02	± 0.03	± 0.07	± 0.03	± 0.03	± 0.05	± 0.05	± 0.05	± 0.05	± 0.05	± 0.05	± 0.015
Max. working range R Max. Arbeitsbereich R	[mm]	727	927	1440	1730	2010	3124	2236	2236	3058	3140	2702	3140	2702	2710	2038
Weight Gewicht	[kg]	35	37	150	250	260	560	630	660	1090	1760	1020	1830	1080	1345	855
Power supply, average Mittlere Anschlußleistung	[KVA]	1	1	1.5	2	2	2	4	5	5	5	5	5	5	5	4.5
Mounting option ** Montagemöglichkeit **		F, W, C, tilt/geneigt	F, W, C, titigeneigt	F, W, C, tilt/geneigt	F, W, C, titigeneigt	F, W, C, tit/geneigt	F, W, C, titigeneigt	F, W, C, til/geneigt	E	F	Shelf- mounted	F	Shelf- mounted	F	F	F
Protection class / Options Schutzklasse / Optionen		IP67	IP67	IP54/67	IP54/67 IP65/67	IP67	IP67	IP54/67	IP54/67	IP54/67	IP54/67	IP54/67	IP54/67	IP54/67	IP54/67	IP54/67





## **Smart Vision**

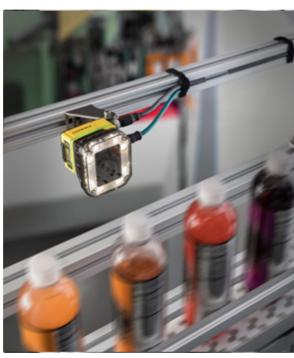
Partner to **COGNEX** 

ARIA Technologies is a system integrator partner to Cognex advanced machine vision & industrial barcode reader systems, delivering instant improvements to any manufacturing process by enabling products to be made at higher speed, without defects and at lower cost.

The global leader in machine vision and barcode reading









## Perfection in Pneumatic Motion

Partner to FEST









We integrate Festo's portfolio for compressed air preparation, pneumatic actuators, directional control valves and valve terminals as well as mechanical and vacuum gripping solutions in all our state-of-theart systems.

### Why are we collaborating with Festo?

- · For an outstanding and consistent quality.
- For uninterrupted production and reduced downtimes.
- For higher energy efficiency and sustainable operation.
- For high level of expertise in the industry and technical competence.





## Industrial Robots-MELFA



From simple pick and place applications, to complex assembly tasks, Mitsubishi Electric industrial robots are equipped with class leading speed and precision.

Mitsubishi Electric industrial robots are coupled with intelligent options like 3D vision, force sensing, seamless PLC integration, and the ability to operate in "collaborative applications."

Designed to work in a diverse range of high-speed applications, the RH (horizontal type) SCARA robots are ideal as a high speed robotic solution for even the most demanding of applications.

Mitsubishi Electric has the robots required for today's demanding manufacturing applications.





### **Industrial Robots**

Partner to **STÄUBLI** 

Stäubli Robotics is a leading international player in industrial automation, providing engineering and technical support recognized for their efficiency and reliability.

From SCARA, 6 axis robots and cobots to mobile robot systems and AGV, our Stäubli powerful, high-precision solutions allow us to work with clients in many industries to help them tackle the challenges of Industry 4.0.

Stäubli serve customers worldwide who aim to increase their industrial productivity without compromising quality, reliability or safety.



















Pharmaceutical Machine tools

Semi conductor







Washing











Quality control



Packaging

## **ARIA Cloud Industrial Platform**

ARIA IoT-based platform is a cloud-based service that visualizes and optimizes performance, maintenance and energy usage.



## **Energy Monitoring**

ARIA IoT-based platform is a cloud-based service that visualizes and optimizes your energy usage. After conducting the energy management system at your facility, the platform monitors and analyzes millions of data points each day and creates valuable insights. It enables you to analyze the performance and energy efficiency of your equipment at any time, and identify and prioritize corrective measures instantly.

The platform easily allows you to generate detailed follow-up reports that provide a breakdown of all equipment, buildings and energy systems connected to the platform. The reports visualize energy, performance, economy and CO2 savings. These reports can be used by those working in operations, finance and environmental projects to give them immediate access to real-time information allowing them to make the right decisions.



### **Predictive Maintenance**

Predictive maintenance (PdM) techniques are designed to help determine the condition of equipment in order to predict when maintenance should be performed or possible breakdowns. Predictive maintenance promises cost savings over routine or time-based preventive maintenance, as the tasks are performed only when warranted.

#### **Predictive maintenance measures include:**

Vibration / Pressure / Temperature / Flow Rate / Weight / Torque / Speed / Stroke / Humidity / Level Sensors.



### Performance Monitoring

Machine/robot real-time performance monitoring generates data that can be used to evaluate machine operational conditions and efficiency, needed for required perfective maintenance (PdM) and others smart factory applications.



# ARIA Energy Solutions

### **Energy Audits ISO 50002-compliant**

Our ISO 50002–compliant energy auditing process creates savings-opportunity plans based on our clients' specifications. These assessments focus on the largest consuming energy components, processes or equipment to identify opportunities for the reduction of energy waste, improvement of energy efficiency, and optimization of energy supply.



### **Energy Management Strategies ISO 50001-compliant**

Good energy-management strategies and plans are essential to achieving energy conservation and efficiency targets. Facility owners can take prescriptive actions, and identify and evaluate targets and KPIs to ensure they are realistic and effective. All strategies developed for our clients meet the international ISO 50001 requirements to develop a plan, identify and implement improvements, measure results, and then enable continuous improvement.





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