



AADITYA MECHATRONICS LLP

FAIRIND
COBOTS



FR+

PRODUCT
ECOLOGY

FR3WMS

FR3WML

FR3C

FR3

FR5

FR10

FR16

FR20

FR30

AUTHORISED DISTRIBUTOR

SAVE **50%** in Cost with our Cobots Compared to Others - **BOOST** Productivity, **ENHANCE** Efficiency, and Work **SMARTER** !



FAIRINO ROBOT

Intelligent Human - Robot Cooperation System Solutions

According to different payload and parameter, FAIRINO collaborative robots FR series are divided into six models : FR3, FR5, FR10, FR16, FR20 and FR30.

To provide partners & customers with better quality assurance, FAIRINO has obtained a more comprehensive range of certificates through international certification organizations.

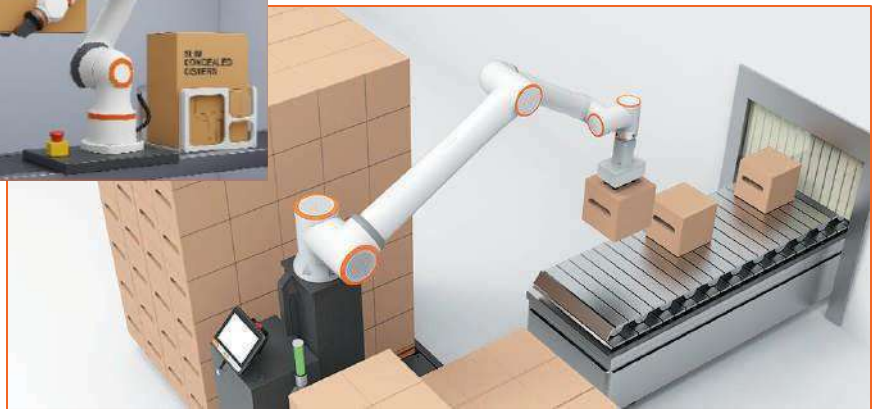
Quality Management System : ISO 9001

Product Certification : CR, CE, KCs, NRTL, RoHS 2.0, NSF, SEMI, IP65

ISO Functional Safety Certification : ISO 10218, ISO 13849, ISO 15066

INDUSTRY PALLETIZING SOLUTION

Abundant welding process kits with a variety of welding technologies, seam welding, straight welding, oscillating welding, arc welding, and multi-layer multi-pass welding. It also incorporates intelligent welding technologies for wire positioning and weld seam tracking, significantly enhancing welding efficiency and ensuring welding quality.



In modern enterprises, palletizing work is very common. Due to the low efficiency of manual handling, many companies have introduced robotic palletizing systems to automate this task.

collaborative robots can perform round-the-clock automated palletizing work, effortlessly and quickly transporting goods to their destinations, saving time and energy. This frees employees from fatigue and repetitive tasks, allowing them to engage in more meaningful work. Additionally, there is no need for safety barriers, enabling true human-robot collaboration.

The platform utilizes a six-axis collaborative robot to accomplish palletizing work, offering easy deployment and quick utilization, truly enabling a plug-and-play experience.

**10-MINUTE ULTRA-FAST
PROGRAMMING SWITCHOVER**

**VARIOUS PALLETIZING PACKAGES
TO MEET INDIVIDUAL NEEDS**

**OVER 30% PRODUCTIVITY INCREASED
IN 7*24 HOUR OPERATION**

SCREW TIGHTENING SOLUTION

Combined with the end intelligent tightening device at the end, it achieves adjustable, controllable, and programmable torque, making it suitable for screw tightening in various scenarios. It can stably, efficiently, and accurately complete the production process, greatly reducing repetitive labor for workers and supporting data traceability.

- ▶ SAFE AND CONVENIENT
- ▶ FLEXIBLE DEPLOYMENT
- ▶ FLEXIBLE FORCE CONTROL
- ▶ HIGH EFFICIENCY IN PRODUCTION



WELDING SOLUTION

Abundant welding process kits, with a variety of welding technologies such as spot welding, seam welding, straight welding, oscillating welding, arc welding, and multi-layer multi-pass welding. It also incorporates intelligent welding technologies for wire positioning and weld seam tracking, significantly enhancing welding efficiency and ensuring welding quality.

- ▶ ULTIMATE SAFETY
- ▶ FLEXIBLE DEPLOYMENT
- ▶ REDUCED ENTRY BARRIERS
- ▶ MULTI-AXIS COORDINATION
- ▶ HIGH PRODUCTION EFFICIENCY



APPLICATION

CONVEYOR BELT SOLUTION



- ▶ ENHANCE WORK SAFETY
- ▶ DATA RECORDING AND TRACEABILITY
- ▶ REAL-TIME MONITORING AND FEEDBACK
- ▶ IMPROVE PRODUCTION EFFICIENCY
- ▶ REDUCE ERROR RATE AND LOSSES
- ▶ ACCURATE TRACKING AND IDENTIFICATION

PICK AND PLACE SOLUTION

Material handling robots can improve production efficiency, quality, and safety, reduce labor intensity, and provide flexibility and adaptability, bringing higher benefits and competitive advantages to businesses.



EDUCATIONAL SOLUTION



The platform includes common functions in the industrial field, such as gluing, tightening, and material handling, closely aligning with actual production line scenarios. It allows students to experience the real factory atmosphere up close in the classroom, making it an invaluable collaborative robot training platform in the field of education.

GLUE DISPENSING SOLUTION



Paired with an intelligent dispensing device at the end effector, it enables precise operations and is suitable for precise gluing and dispensing tasks in various scenarios. It can achieve stable, efficient, and accurate adhesive application, ensuring the quality of the adhesive work. This greatly reduces repetitive labor for workers and protects their health.

INTELLIGENT WELDING WORKSTATION

Open a new journey of convenient welding with one click

FAIRINO's digital welding process software kit supports various welding techniques, fully meeting the welding needs of different scenarios. The programming-free automatic welding platform developed by FAIRINO can automatically locate welding seam positions, conduct simulation rehearsals in advance, identify problems promptly, and mitigate risks. During the welding process, real-time welding seam deviation compensation is performed to ensure the consistency and precision of the welding operations.

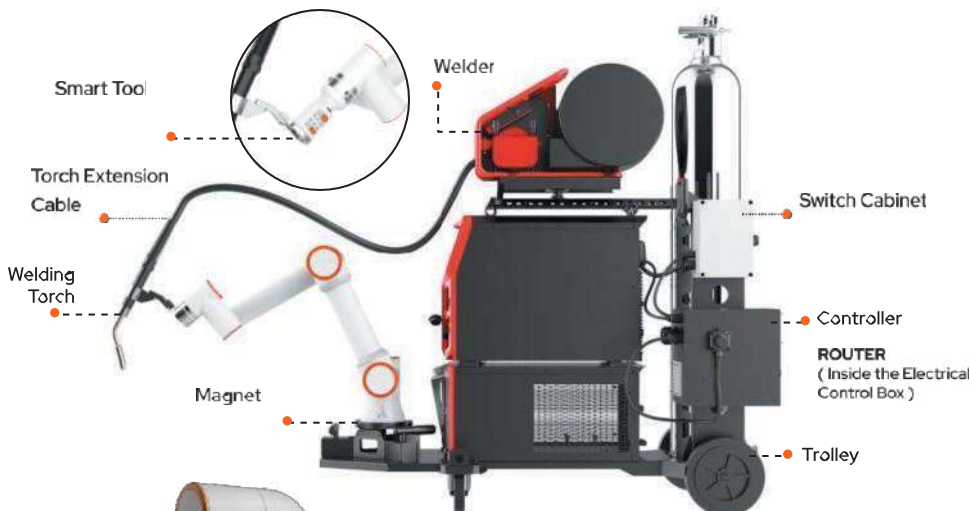
FR-Welding-Hardware

Welding Hardware

Solution	Technical Specification
Welder (with water tank)	Size 1449*750*1098 mm
Smart Tool	Magnetic base for fixation, can be easily moved around.
Switch Cabinet	Magnetic base size 382*331*121 mm
Magnet (3 pcs)	The equipment is fixed on a trolley, which can be moved along with the trolley. The wire feeder can rotate 360° and can be detached from the trolley and placed freely.
Trolley	
Router	
Controller	
Torch Extension Cable	
Welding Torch	

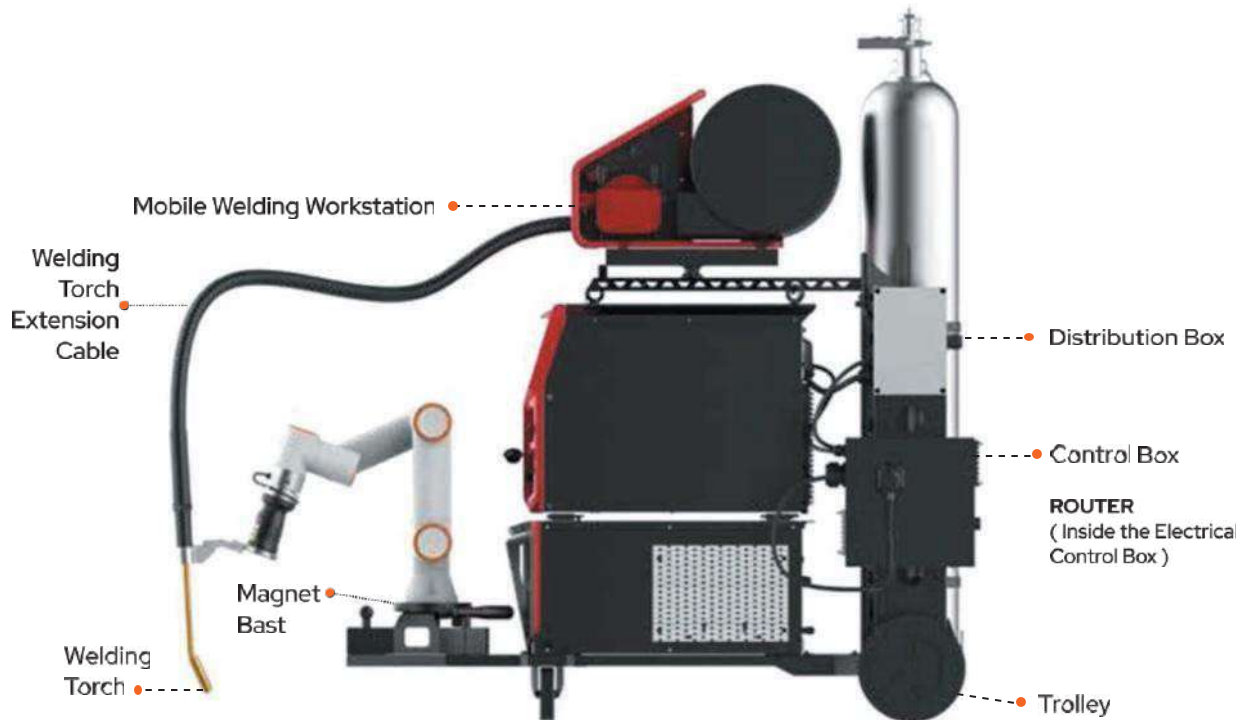
Robot Vision

Solution	Technical Specification
Camera	Working Distance 350-800mm
IPC Industrial Processing	Near Field on View 270mm*200mm@350mm
Computer	Far Field of View 630mm*450mm@800mm
IPC Graphics + Graphics	Resolution 1440*1080
Card Display Card	z-axis Repeatability 0.08mm @ 500mm
Vision Software	Fastest Acquisition Time 0.8s



I MOBILE WELDING SOLUTION

The mobile welding solution integrates core equipment units such as a mobile trolley, magnetic base, SMART TOOL, and six-dimensional torque sensor, and each equipment unit works together to give full play to its respective advantages and bring a new experience to welding work.



APPLICATION ADVANTAGES

- ▶ High flexibility
- ▶ Easy Operation
- ▶ Precision control
- ▶ Improved Efficiency



APPLICATION SCENARIOS

Suitable for precision welding tasks in complex spatial structures

- ▶ Building steel structure
- ▶ Shipbuilding
- ▶ Sheet Metal Industry
- ▶ Electronics Manufacturing
- ▶ Production of auto parts



WELDING ROBOT YS10-1440-W

Faster, more accurate and more reliable. Suitable for all types of CO₂/MAG/MIG/TIG welding and plasma cutting

SPECIFICATION

Model No.	YS10-1440-W
Number of axes	6
Maximum payload	10kg
Approx. weight	176kg (without Cabinet or welding machine)
Repeatability	± 0.05mm
I/O terminals	16 digital inputs/outputs 2 analog outputs



6-AXIS HANDLING ROBOT YS20-1840

Faster, accurate and reliable. Suitable for pick-n-place, machine tending, palletizing and painting

SPECIFICATION

Model No.	YS20-1840
Number of axes	6
Maximum payload	20kg
Approx. weight	260kg (without Cabinet or welding machine)
Repeatability	± 0.08mm
I/O terminals	16 digital inputs/outputs 2 analog outputs



TECHNOLOGY PARTNERS





AADITYA MECHATRONICS LLP



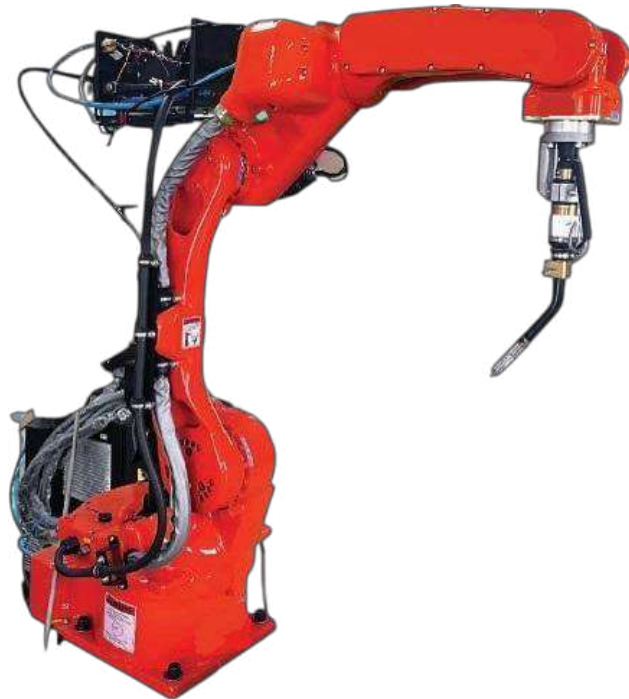
**PALLETIZING &
DEPALLETIZING**



PICK & PLACE



WELDING



LOADING & UNLOADING



MACHINE TENDING

ROBOTIC AUTOMATION SOLUTIONS



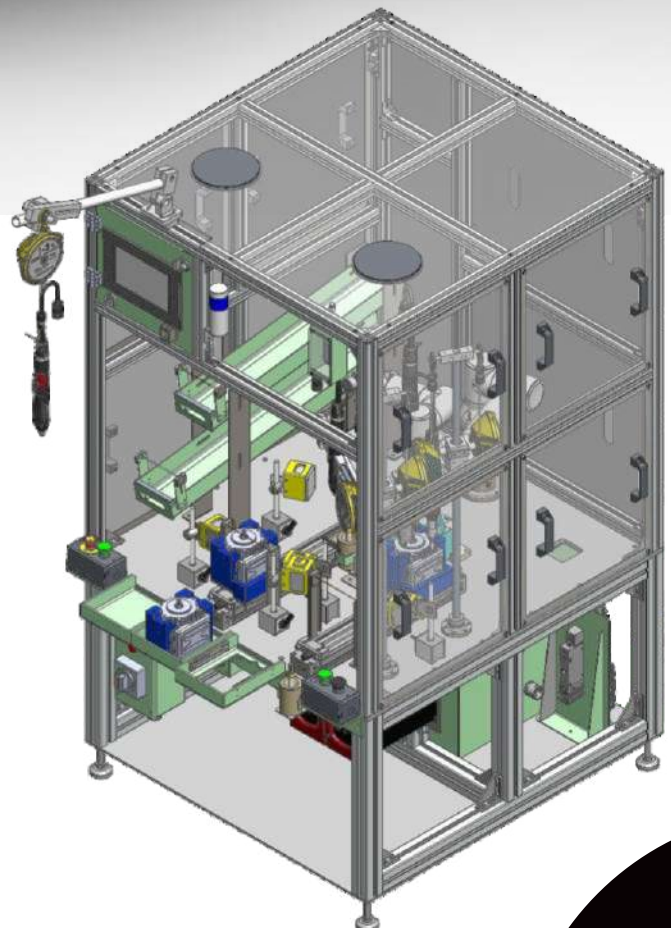
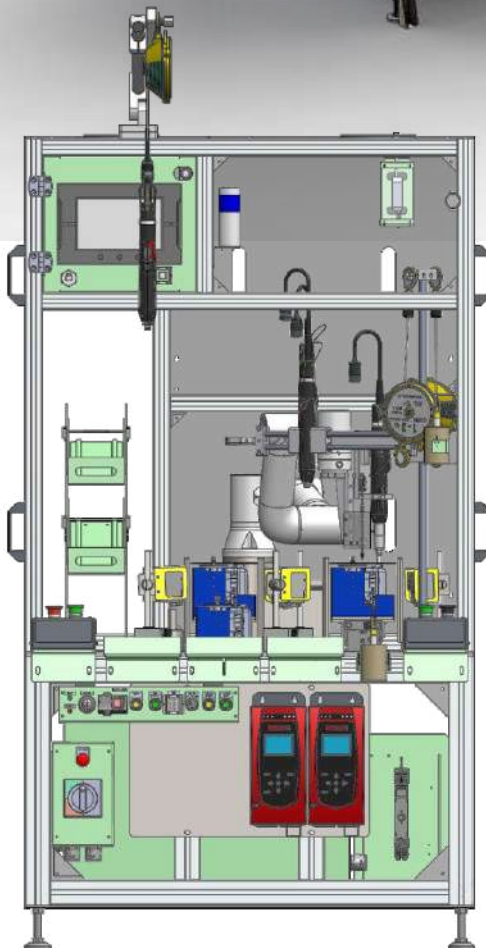
ASSEMBLY

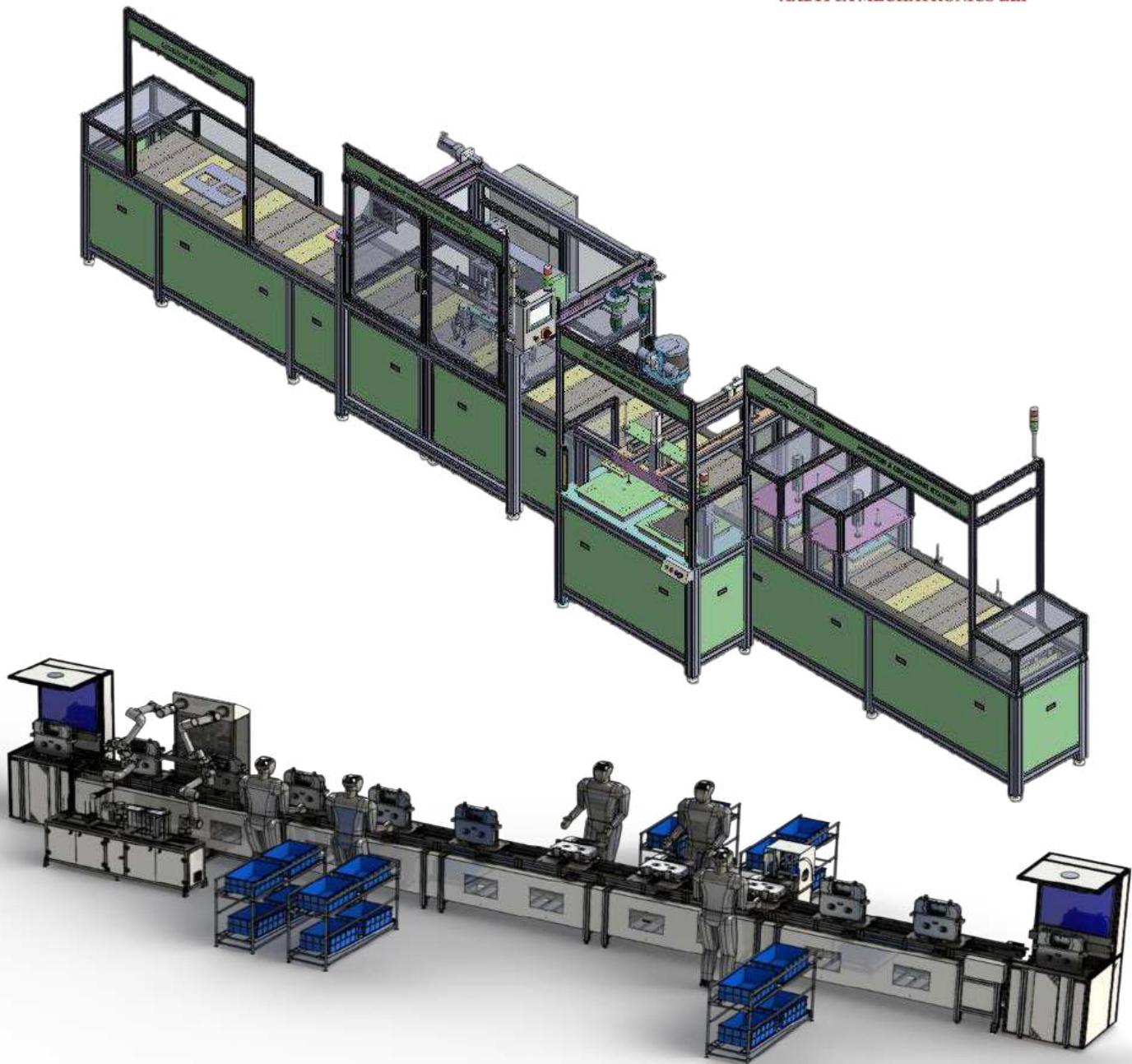
Vision

Creating a unique market value for our company, embracing new challenges in robotic automation, and driving Industry 4.0 transformation for every client without cutting-edge solutions."

Mission

We provide complete Robotic and SPM Automation solutions, helping clients adopt technology cost effectively with quick support for any robot related issues."





Automatic & Semi-Automatic Assembly Lines and Many More...

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