



FUJI YUSOKI KOGYO Co.,Ltd.

The World's Leading Robotic Palletizer



ROBOTIC PALLETIZER

FUJI-ACE

DEVELOPED BY THE PALLETIZER MAKER

A wide range of Fuji-Ace models are available to meet every palletizing need from small and medium-sized businesses to large-scale mass production industries.



According to concepts
narrowed down to palletizer applications

USER-FRIENDLY HUMAN-MACHINE INTERFACE (HMI)

Easily control your palletizing process with a responsive touchscreen, featuring one-touch workflows, AI-optimized patterns, proactive maintenance alerts, and smart self-diagnostic support.

02

HIGH-SPEED AND ENERGY SAVINGS ACHIEVED SIMULTANEOUSLY

As a robotic palletizer, FUJI-ACE delivers world-leading performance with up to 1,800 cycles per hour and a maximum payload of 200 kg – all while consuming as little as 3.5 kVA, the smallest power consumption in its class.

01

TEACHLESS BEST PATH MOVEMENT

The system contains FUJI's proprietary know-how as a palletizer manufacturer, including AI-based calculations for optimal movement paths.

03

ECO & TECHNOLOGY

Environmentally Compatible Design

In today's world, aligning with global environmental standards is more critical than ever. The FUJI-ACE Robotic Palletizer sets a new benchmark engineered with half the weight and only one-quarter the power consumption compared to general-purpose industrial robots. Without question, FUJI-ACE stands as a leader in energy-efficient industrial robotics.

With over 30,000 Robotic Palletizers installed worldwide, FUJI YUSOKI KOGYO is unmatched in "Palletizing" technology. Experience, sharp focus, and dedication to the palletizing industry have enabled FUJI YUSOKI KOGYO to provide the best possible solution to your palletizing needs.



OPERATION ERROR HISTORY>>				
LINE	PRODUCT	LAYER	STEP	SPEED
1	25KG L1	1	2	100
2	25KG L2	5	4	100
3	25KG L3	8	4	100

HALF FINISH

P1 P2 P3

CYCLE STOP STOP

User-Friendly HMI (Touchscreen) equipped with palletizing-specific software, the intuitive touch interface simplifies operations for the end user.

Exclusive Features

- EC Series (Energy Conservation)
- Various kind of application
 - Bag
 - Carton
 - Bundle
 - Drum
 - Case and etc
- Fuji adds a level of flexibility that no other Robotic Palletizer capable of.

On-Screen Simplified Pattern Adjustment. Quick and easy pattern modifications directly from the touchscreen interface.

<<BACK		EDIT BLOCK DATA		HELP	HOME
BLOCK	1	PRODUCT CODE	Product 1		
PROD. INFORMATION		PALL. DIMENSION			
W	200 mm	W	1200 mm		
L	300 mm	L	1000 mm		
H	150 mm	H	150 mm		
WEIGHT	3 kg				
STEPS/LAYER	5	TOTAL LAYERS	8		
LINE	1	SPEED	100%		
PATTERN	1005	FIXED DATA			
COPY	DELETE	P. CAL	ADJUST	CY. COPY	

Cutting-Edge Control Package

Each Fuji Robot comes fully equipped with an integrated control system, offering:

- One software platform for all palletizing needs
- Standardized software with step-by-step troubleshooting guidance
- 400-recipe memory for seamless changeovers
- Automatic path calculation for optimal robot movement
- Actual release position display for precise fine-tuning

<<BACK		pattern data display		redraw	HOME
		NO.	CODE	UP DOWN	
		1	1005		
		2	1105		
		3	1003		
		4	1103		
		5	3004		
		6	1006		
		7	1106		
		8	2006		
		9	2106		
10	4004				
CYCLE1		CYCLE2	CYCLE3	CYCLE4	
MANUAL(9999)		CODE	1005		

Seamless Changeover in 1 Minute from Registered Patterns. Enables rapid product switching without halting production.

Industry 4.0 Compatibility

- Industrial IoT (IIoT) ready
- SCADA system integration for real-time production changes
- Supports CC-Link, Ethernet, and I/O signal interfaces with robot PLC
- Real-time robot and I/O monitoring

Human-Machine Interface (HMI)

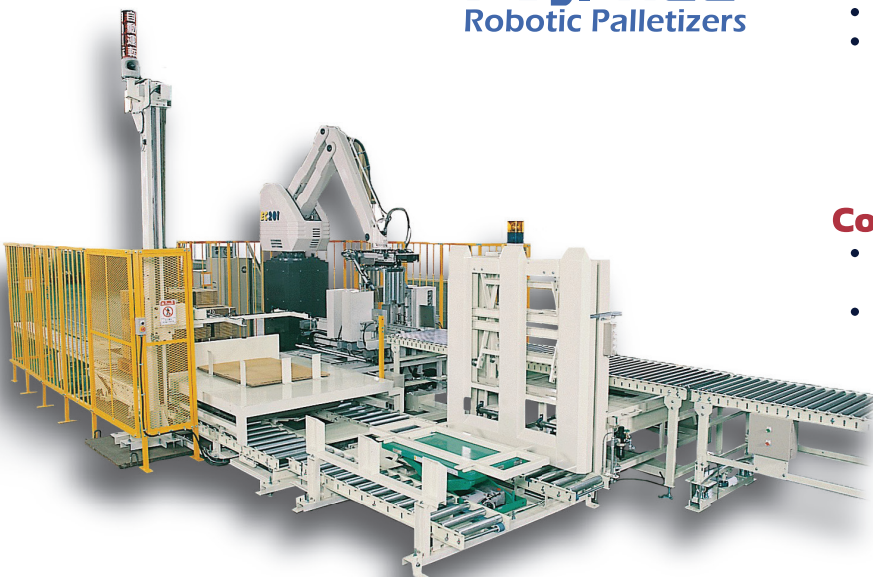
Every Fuji Robot includes a user-friendly interface, comprising:

- Teaching pendant
- Touchscreen panel
- Application-specific software

FUJI-ACE
Robotic Palletizers

Consultation & Product Support

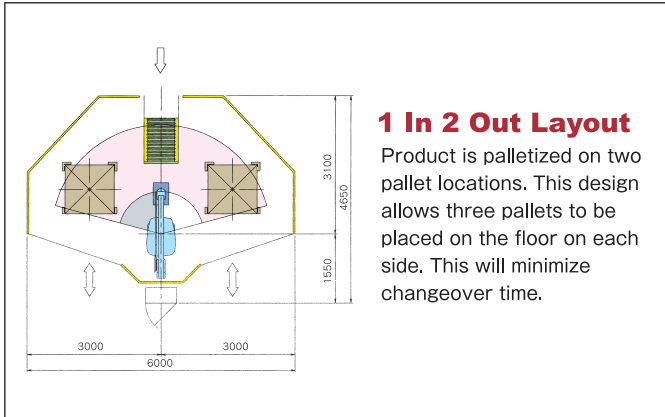
- Solutions tailored to current and future production plans
- Minimum 15 years of spare parts availability



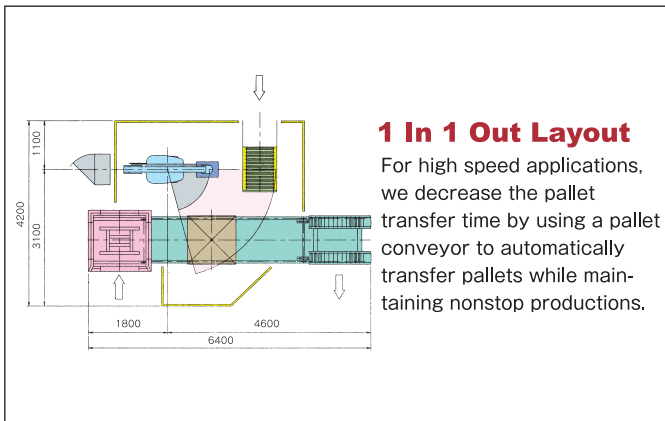
SENSIBLE LAYOUT SOLUTIONS EXPERIENCE COUNTS

FUJI understands that no two production layouts are the same. That's why we offer flexible, innovative layout solutions tailored to your needs. Several standard layouts are provided to help kickstart your design process.

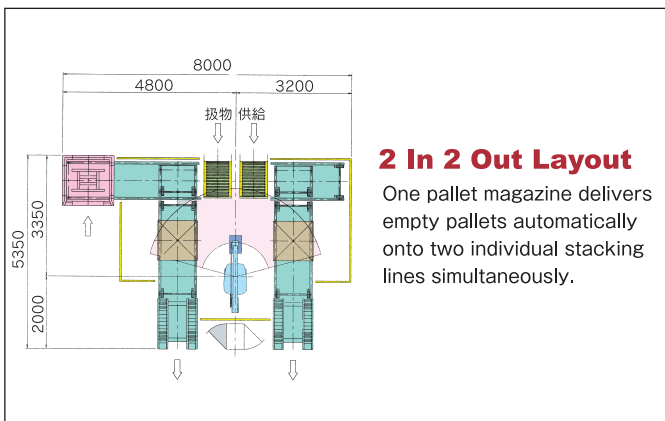
Hand Grippers play a crucial role in robotic palletizing success. FUJI has spent years developing high-quality, cost-effective Hand Gripper solutions. Below is just a sample of our designs :



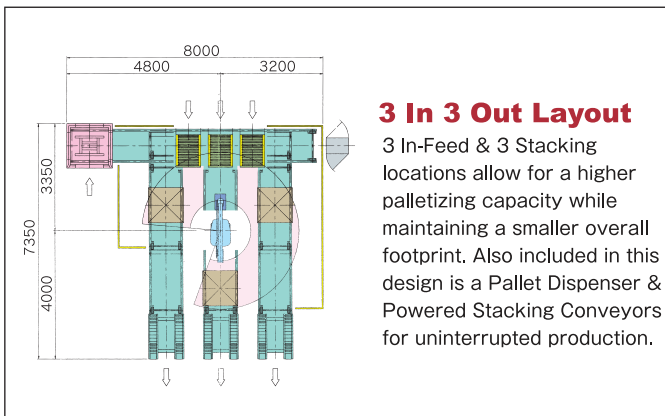
1 In 2 Out Layout
Product is palletized on two pallet locations. This design allows three pallets to be placed on the floor on each side. This will minimize changeover time.



1 In 1 Out Layout
For high speed applications, we decrease the pallet transfer time by using a pallet transfer conveyor to automatically transfer pallets while maintaining nonstop productions.

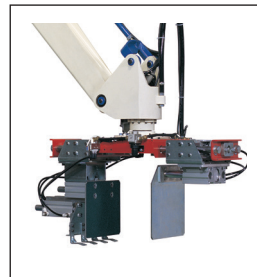


2 In 2 Out Layout
One pallet magazine delivers empty pallets automatically onto two individual stacking lines simultaneously.

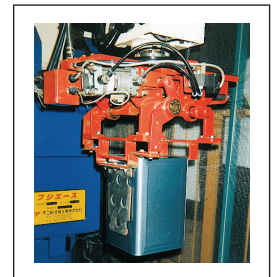


3 In 3 Out Layout
3 In-Feed & 3 Stacking locations allow for a higher palletizing capacity while maintaining a smaller overall footprint. Also included in this design is a Pallet Dispenser & Powered Stacking Conveyors for uninterrupted production.

Hand Grippers To Suit Your Requirements



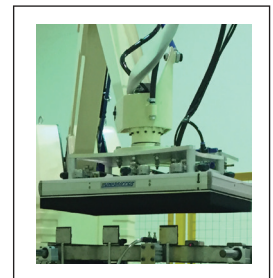
Box Hand Gripper



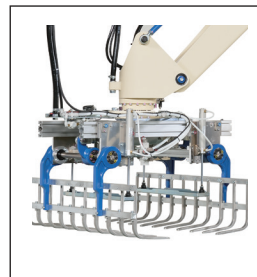
Can Hand Gripper



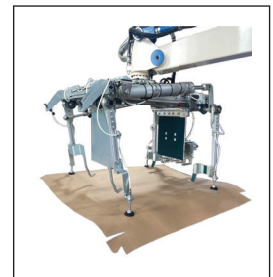
Bag Depalletize



Case Depalletize



Bag Hand Gripper



Multifunction Hand Gripper

Fuji-Ace can handle a wide variety of product forms, shapes, and packaging types. Our extensive experience and technological know-how enable us to offer optimal hardware and software solutions tailored to diverse industries.

Here are a few examples of our installations:

ACTUAL INSTALLATIONS



BAGS

Fuji-Ace excels in handling bags, achieving up to 1,600 cycles/hour. We have installations across industries producing products in bags, including rice, sugar, flour, fertilizer, chemical powders, animal feed, cement, and more.

CASES

Fuji-Ace can handle multiple case sizes simultaneously. Each robot can palletize three different product types at once. Multiple cases can be picked up for higher efficiency. Product changes can be made easily from the HMI.



OTHERS

Fuji-Ace also handles a wide range of other items such as shrink-wrapped bottles, barrels, tin cans, paper bundles, and crates across food, beverage, pharmaceutical, chemical, fertilizer, and household goods industries. Functions such as slip sheet, pallet, or plywood pick-up are available to meet specific needs.

EC-102

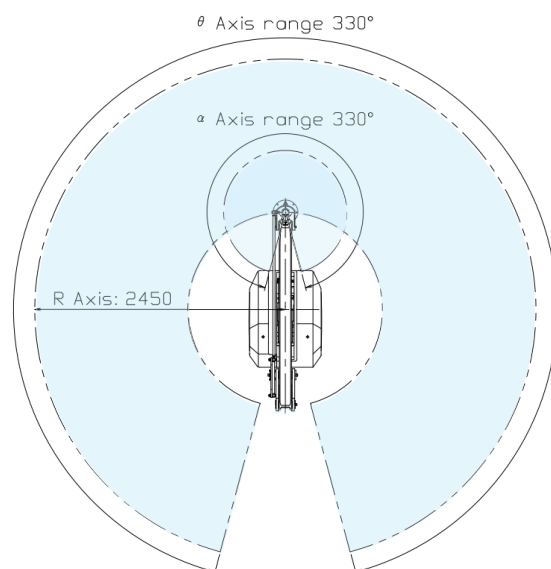
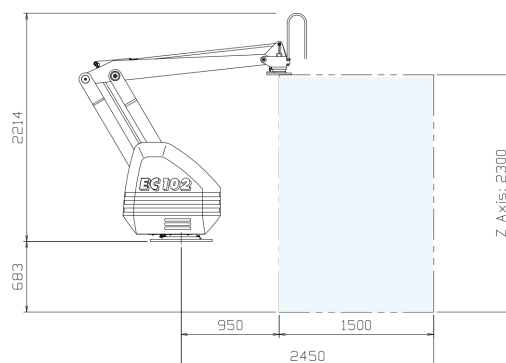
ROBOTIC PALLETIZER



EC-102 : Next Generation Palletizer

designed for high-speed and heavy-duty applications, this model covers a wide range of production needs with cost-effective performance.

Operating Range



Technical Specifications

Fuji ACE Model		EC-102
Type of Motion		Multi-Articulated
Action Mode		Cylindrical
Load Capacity (Including Hand Gripper)		160kg
Palletizing Capacity (cycles / hour)		1200
Degree of freedom		4 axis
Reach	Z axis (vertical)	2300mm
	R axis (longitudinal)	2450mm
	Theta axis (rotation)	330°
	Alpha axis (wrist)	330°
Memory		400 programming locations available
Teaching method		Auto teaching system
Power Requirements		(200/220V, 3phase, 50/60 Hz)
Power Consumption (Without Peripheral Equipment Load)		3.5kVA
Robot Weight (Without Hand Gripper)		700kg
Air consumption* (Using Standard FUJI Case or Bag Hand Gripper)		160 NI/min@70psi(0.5Mpa)

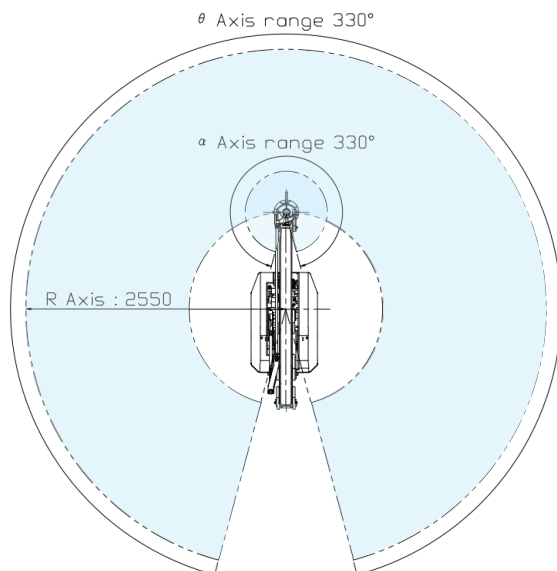
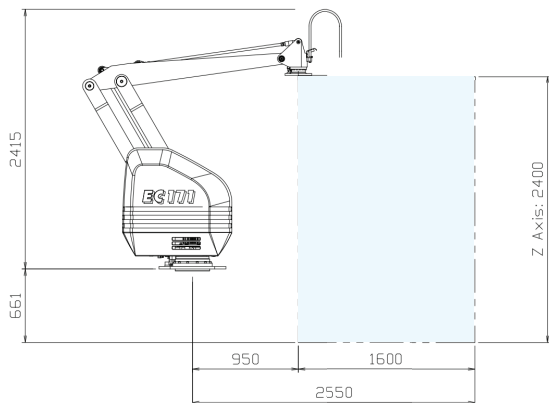
Note: Capacity rates can be significantly affected by layouts, product types, and can be confirmed after a detailed analysis of an application.



EC-171

ROBOTIC PALLETIZER

Operating Range



EC-171 : Wide Working Envelope & Compact Rotation

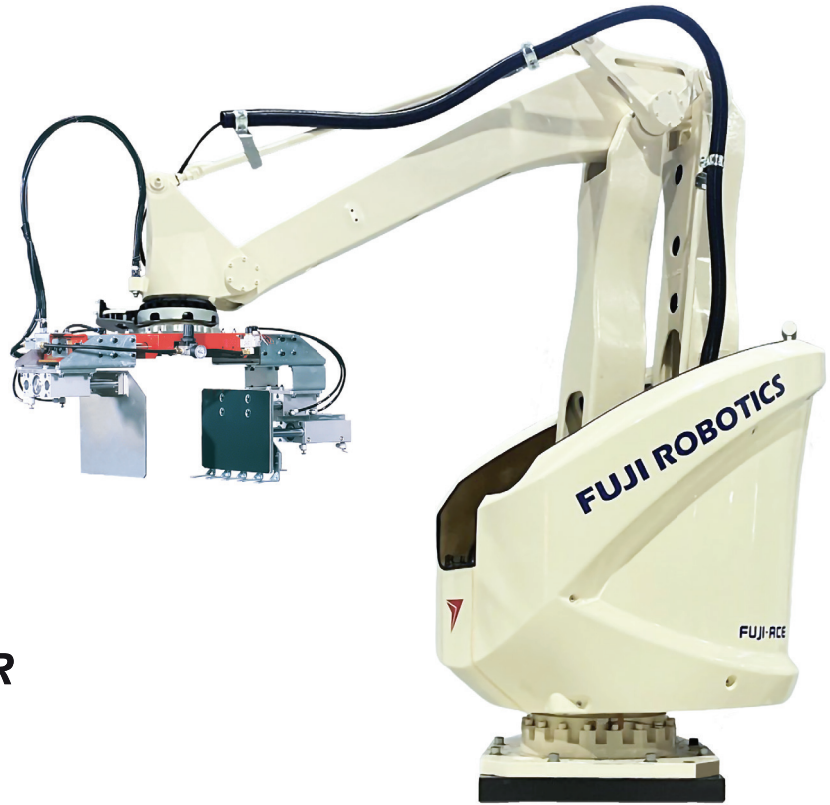
offers the largest working envelope in the FUJI lineup while maintaining a compact rotation radius. Despite using just 4 kVA, the EC-171 excels in high-capacity, space-limited environments.

Technical Specifications

Fuji ACE Model		EC-171
Type of Motion		Multi-Articulated
Action Mode		Cylindrical
Load Capacity (Including Hand Gripper)		160kg
Palletizing Capacity (cycles / hour)		1500
Degree of freedom		4 axis
Reach	Z axis (vertical)	2400mm
	R axis (longitudinal)	2550mm
	Theta axis (rotation)	330°
	Alpha axis (wrist)	330°
Memory		400 programming locations available
Teaching method		Auto teaching system
Power Requirements		(200/220V, 3phase, 50/60 Hz)
Power Consumption (Without Peripheral Equipment Load)		4kVA
Robot Weight (Without Hand Gripper)		750kg
Air consumption* (Using Standard FUJI Case or Bag Hand Gripper)		225 NI/min@70psi(0.5Mpa)

Note: Capacity rates can be significantly affected by layouts, product types, and can be confirmed after a detailed analysis of an application.

**NEW
MODEL**



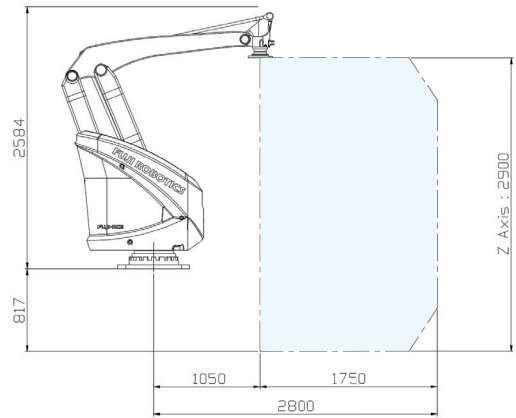
EC-202

ROBOTIC PALLETIZER

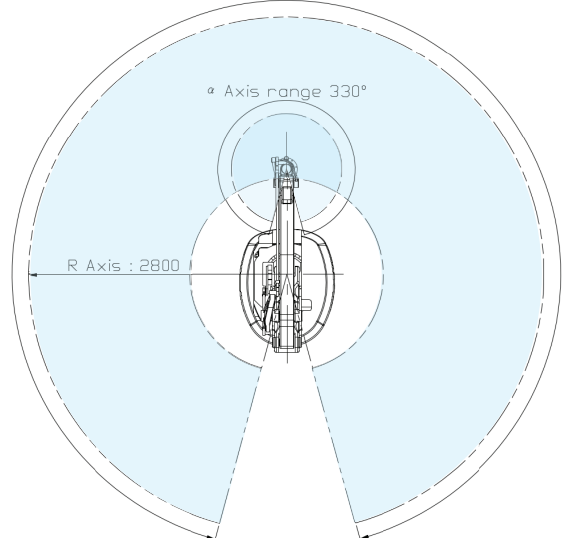
EC-202 : Wider, Faster, Stronger

Developed through years of intensive R&D, the EC-202 represents the next generation of palletizing performance. With a wider working range, higher operating speeds, and a more robust structure, it delivers superior throughput, stability, and reliability to maximize your production potential.

Operating Range



θ Axis range 330°



Technical Specifications

Fuji ACE Model		EC-202
Type of Motion		Multi-Articulated
Action Mode		Cylindrical
Load Capacity (Including Hand Gripper)		200kg
Palletizing Capacity (cycles / hour)		1800 or more
Degree of freedom		4 axis
Reach	Z axis (vertical)	2900mm
	R axis (longitudinal)	2800mm
	Theta axis (rotation)	330°
	Alpha axis (wrist)	330°, (* optional 360°)
Memory		400 programming locations available
Teaching method		Auto teaching system
Power Requirements		(200/220V, 3phase, 50/60 Hz)
Power Consumption (Without Peripheral Equipment Load)		6.5kVA
Robot Weight (Without Hand Gripper)		1252kg
Air consumption* (Using Standard FUJI Case or Bag Hand Gripper)		280 NI/min@70psi(0.5Mpa)

Note: Capacity rates can be significantly affected by layouts, product types, and can be confirmed after a detailed analysis of an application.



Fuji Yusoki Kogyo Co., Ltd.

★ **Japan Head Office and Factory**

2327-1 Higashi Takatomari
 Sanyo-Onoda, Yamaguchi 756-0088 JAPAN
 Phone : +81-(0)836-83-4365
 FAX : +81-(0)836-83-7272

● **Fuji Yusoki (Thailand) Co., Ltd.**

1550 Thanpoom Tower, 10th Floor,
 New Petchburi Road, Makkasan,
 Ratchathewi, Bangkok 10400, Thailand
 Phone : +66-2095-5655
 E-mail : osb.thailand@fujiyusoki.com

● **Fuji Yusoki Vietnam Office**

Room 904, 9th floor, Zen Plaza Building,
 No. 54-56 Nguyen Trai Street, Ben Thanh Ward,
 Ho Chi Minh City, Vietnam
 E-mail : osb.vietnam@fujiyusoki.com

● **Indonesia Office - Jakarta, Indonesia**

● **Hong Kong Office - N.T., Hong Kong**

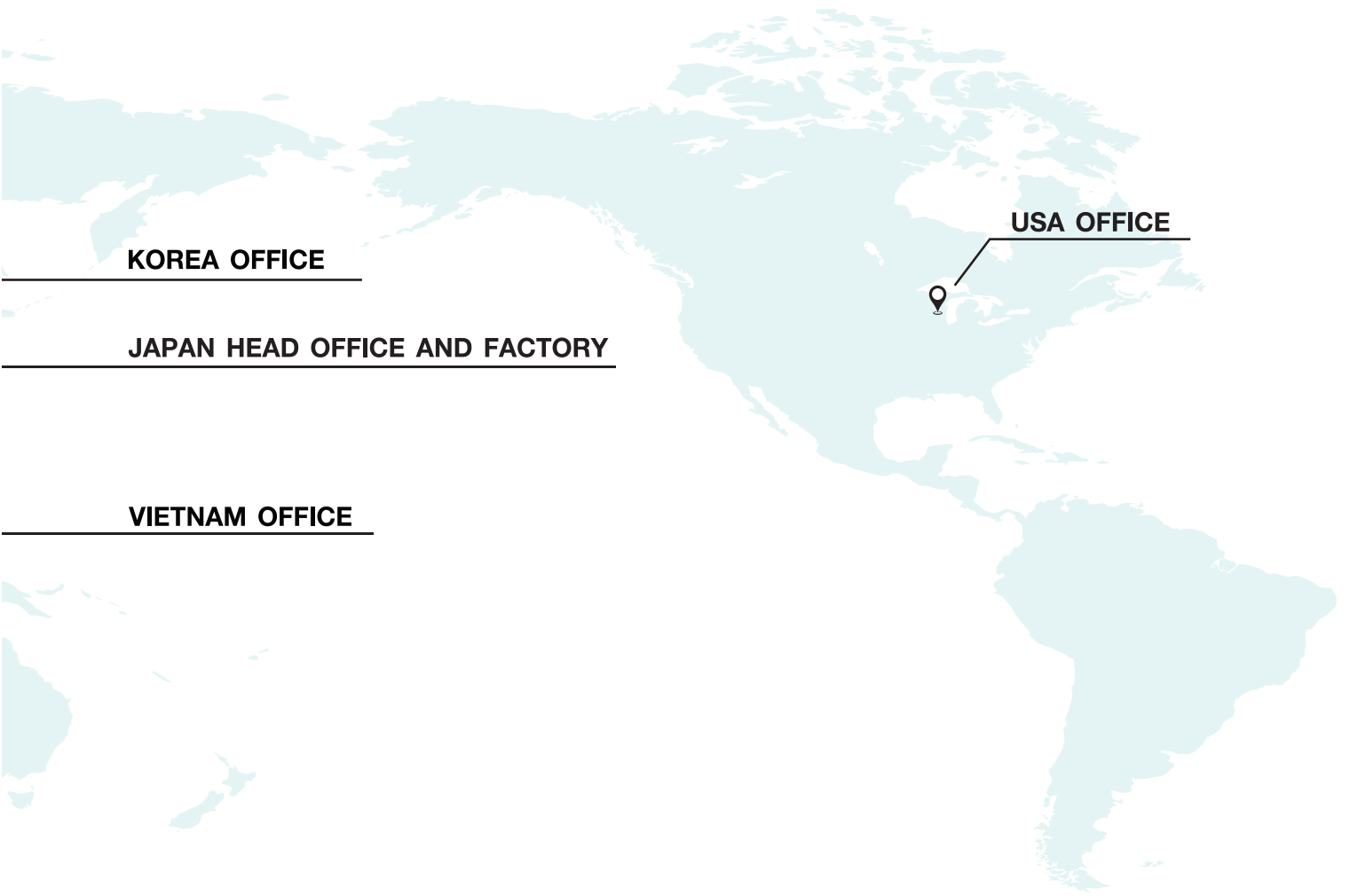
● **Korea Office - Gyeonggi-Do, South Korea**

● **U.S.A Office - Chicago, Seattle, California**

● **Europe Office - Dusseldorf, Germany**

● **China Office - Shanghai, China**

● **India Office - Ahmedabad, India**



KOREA OFFICE

USA OFFICE

JAPAN HEAD OFFICE AND FACTORY

VIETNAM OFFICE

NOTE

Fuji Ace Technical Specifications

Fuji ACE Model		EC-102	EC-171	EC-202
Type of Motion		Multi-Articulated		
Action Mode		Cylindrical		
Load Capacity (Including Hand Gripper)		160kg		200kg
Palletizing Capacity (cycles / hour)		1200	1600	1800 or more
Degree of freedom		4 axis		
Reach	Z axis (vertical)	2300mm	2400mm	2900mm
	R axis (longitudinal)	2450mm	2550mm	2800mm
	Theta axis (rotation)	330°		
	Alpha axis (wrist)	330°, (optional 360°)		
Memory		400 programming locations available		
Teaching method		Auto teaching system		
Power Requirements		(200/220V, 3phase, 50/60 Hz)		
Power Consumption (Without Peripheral Equipment Load)		3.5kVA	4kVA	6.5kVA
Robot Weight (Without Hand Gripper)		700kg	750kg	1252kg
Air consumption*(Using Standard FUJI Case or Bag Hand Gripper)		160-280 NI/min@70psi(0.5Mpa)		
<p>Note: Specifications are subject to change without notice. Capacities stated above represent the maximum achievable by the robot under ideal conditions. Actual performance may vary depending on layout and product types, and should be confirmed following a detailed application analysis. *Pneumatic consumption may vary when using third-party Hand Grippers.</p>				

THINK GREEN

Concerns about the natural state of our planet have never been higher. Some manufacturers have yet to recognize the role that robotics can play in energy conservation. Robots enhance the efficiency of the palletizing process, and we believe that forward-thinking industry players will embrace this reality sooner rather than later. With this in mind, FUJI offers energy-conscious robots (EC-Series.)