

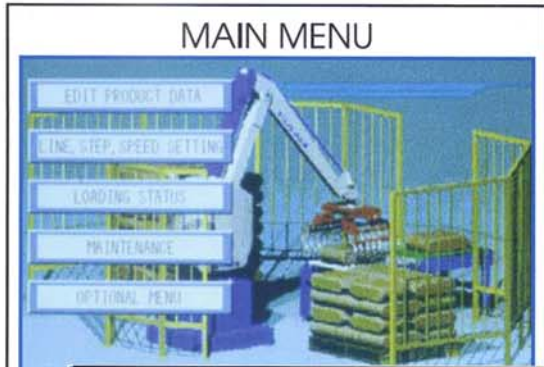


FUJI ROBOTICS™

The World's Leading Robotic Palletizer



With over **10,000** Robotic Palletizers installed worldwide, **FUJI ROBOTICS™** is unmatched in "Palletizing" technology. Experience, sharp focus, and dedication to the palletizing industry have enabled **FUJI ROBOTICS** to provide the best possible solution to your palletizing needs.



User friendly touch screen (HMI) with software that is specific for Palletizing.

Exclusive Features

- EC Series (Energy Conservation)
- Nine (9) different models to choose from:
 - HS - High Speed
 - HD - Heavy Duty
 - W - Super Weight
- Fuji adds a level of flexibility that no other Robotic Palletizer can.

On-Screen simplified pattern adjustment

Cutting Edge Control Package

Every Fuji Robot is equipped with touch screen control complete with:

- High level programming software offering complete onboard control and pattern editing without the need of a Laptop or PC
- Pre-Programmed pallet patterns embedded in the HMI to meet your exact specifications
- Inventory monitoring that corresponds with specific patterns
- Diagnostics designed to identify errors instantaneously
- Onboard automatic lubrication schedule system
- Real time I/O monitoring
- Error history log

Use one of the pre-loaded product patterns or simply make your own. All without the use of a Laptop/PC.

PLC/Ethernet Communication

- Auto pattern change
- Product count sent externally
- Alarm codes to external PLC
- Product count from external PLC to Robot
- Height adjustment for product placement from external PLC to Robot

Teaching Pendant

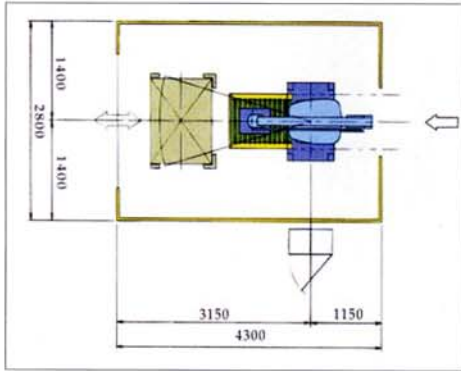
Every Fuji Robot comes with a "user friendly" teaching pendant.



FUJI-ACE
Robotic Palletizers

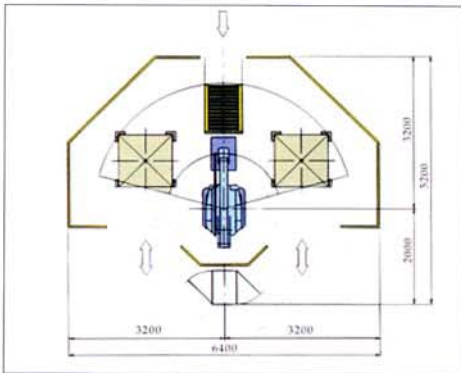
SENSIBLE LAYOUT SOLUTIONS

Fuji knows every layout may not fit an exact mold. Because of this we understand the need for total flexibility and innovative thinking to meet our customer needs. We have provided a few standard layouts that may assist in the beginning phase of your layout design.



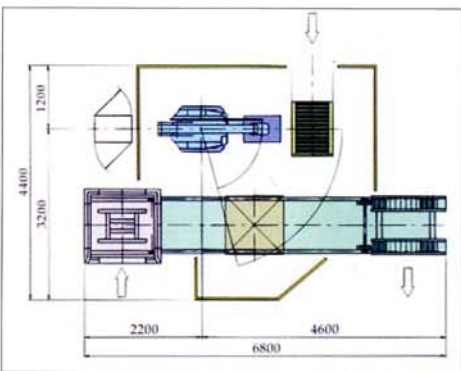
2-1 Layout

Product flows below the robot body. This compact layout provides minimum space requirements and works well in narrow spaces.



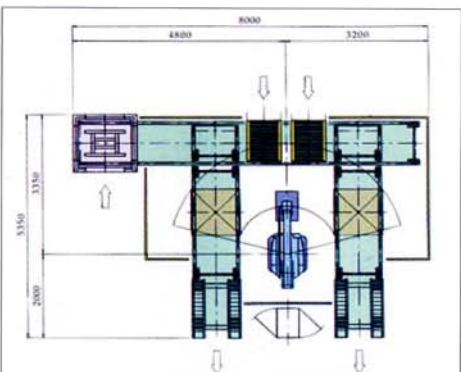
2-2 Layout

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.



3-1 Layout

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



3-LW Layout

One pallet magazine delivers empty pallets automatically onto two individual stacking lines simultaneously.

EXPERIENCE COUNTS

We understand how End Effectors play an intricate role in successful robotic palletizing applications. Given this critical point, we have spent years developing and refining high quality and cost effective End Effectors. Below is a small sample of our End Effector designs:

End Effectors To Suit Your Requirements



Box End Effector



Can End Effector



Bag Depalletize



Case Depalletize



Bag End Effector



Case End Effector



Book End Effector



Bag End Effector



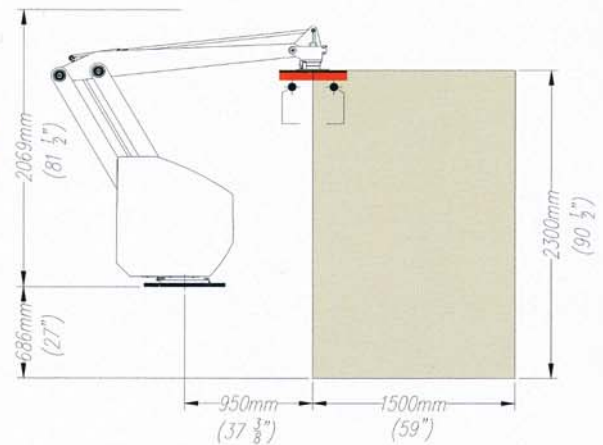
EC-61

ROBOTIC PALLETIZER



The **EC-61** is the most efficient Robotic Palletizer in its class utilizing only 2.3 kva. Given the cycle rate to power ratio this robot provides the most economical solution while meeting moderate production requirements. Offering two **EC-61** models Fuji provides a solution for High Speed (HS) and/or Heavy Weight (HD) applications.

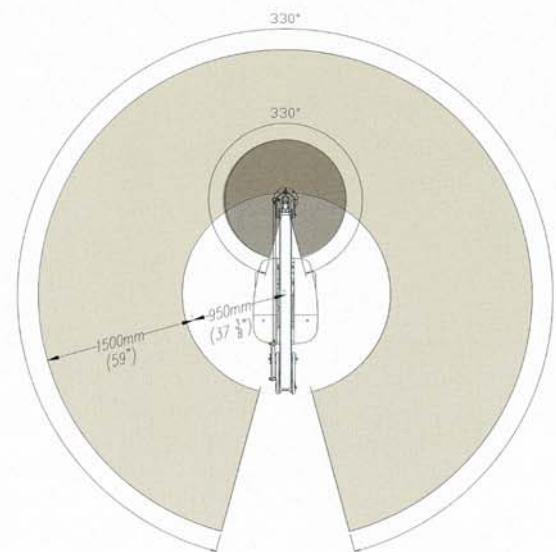
EC-61 Operating Range



EC-61 Series Technical Specifications

Fuji ACE Model	EC-61HS	EC-61HD
Type of Motion	Multi-Articulated	
Action Mode	Cylindrical	
Load Capacity (Including End Effector)	70kg (150 lbs)	160kg (350 lbs)
Palletizing Capacity (cycles / hour)	900	500
Degree of freedom	4 axis	
Operating Area	Z axis (vertical)	2300 mm (90.5")
	R axis (longitudinal)	1500 mm (59")
	Theta axis (rotation)	330° (360° Option Available)
	Alpha axis (wrist)	330°
Repeatability	± 0.5mm	
Memory	400 programming locations available	
Teaching method	Teaching playback / Teaching Support	
Power Requirements	(200 / 220V, 3 phase, 50 / 60 Hz)	
Power Consumption (Without Peripheral Equipment Load)	2.3 KVA / 6 amps	
Robot Weight (Without End Effector)	700 Kg (1544 lbs)	
Pneumatic Consumption (*Using Standard Fuji Case or Bag End Effector)	*5.7 SCFM @ 70 psi (.48 MPa)	

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



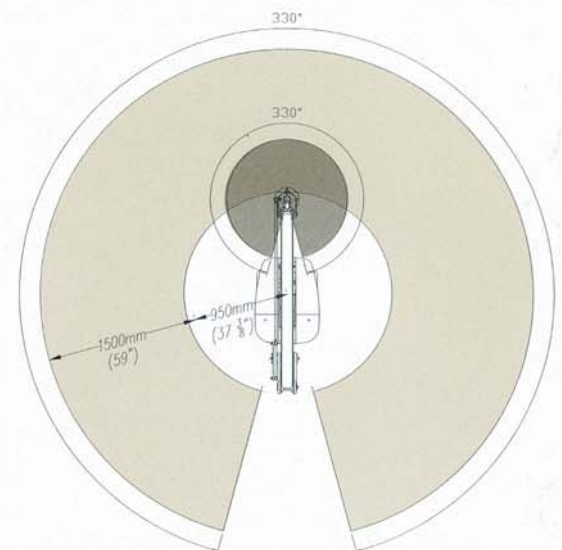
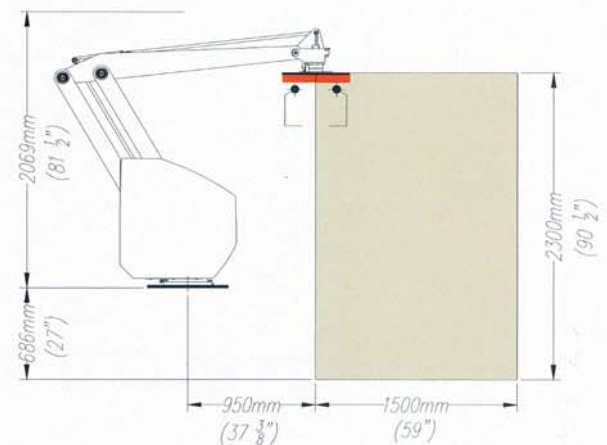
EC-101

ROBOTIC PALLETIZER



Similar to the EC-61, the **EC-101** is also a very efficient Robotic Palletizer utilizing only 2.5 kva. The **EC-101** offers a higher palletizing capacity than the EC-61 making this a very popular robot among moderate production rates. With two **EC-101** models Fuji offers a solution for High Speed (HS) and/or Heavy Weight (HD) applications.

EC-101 Operating Range



EC-101 Series Technical Specifications

Fuji ACE Model	EC-61HS	EC-61HD
Type of Motion	Multi-Articulated	
Action Mode	Cylindrical	
Load Capacity (Including End Effector)	70kg (150 lbs)	160kg (350 lbs)
Palletizing Capacity (cycles / hour)	1300	800
Degree of freedom	4 axis	
Operating Area	Z axis (vertical)	2300 mm (90.5")
	R axis (longitudinal)	1500 mm (59")
	Theta axis (rotation)	330° (360° Option Available)
	Alpha axis (wrist)	330°
Repeatability	± 0.5mm	
Memory	400 programming locations available	
Teaching method	Teaching playback / Teaching Support	
Power Requirements	(200 / 220V, 3 phase, 50 / 60 Hz)	
Power Consumption (Without Peripheral Equipment Load)	2.5 KVA / 6.5 amps	
Robot Weight (Without End Effector)	700 Kg (1544 lbs)	
Pneumatic Consumption (*Using Standard Fuji Case or Bag End Effector)	*5.7 SCFM @ 70 psi (.48 MPa)	

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



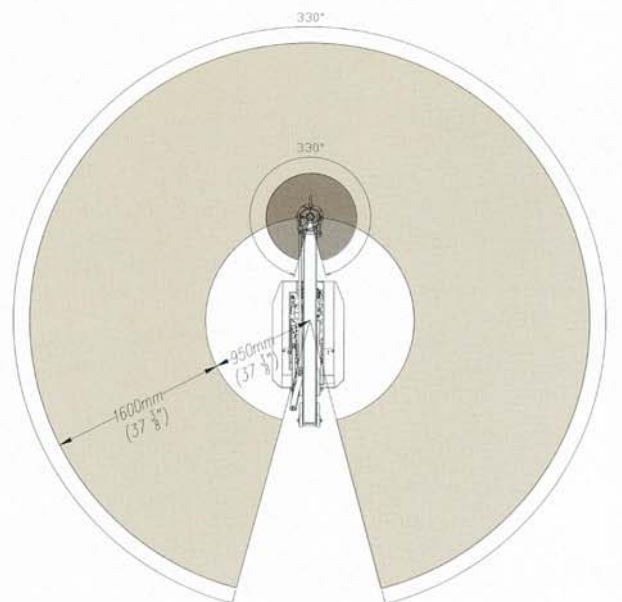
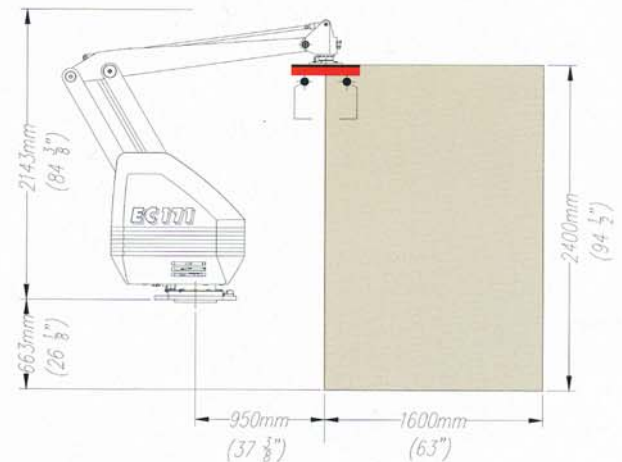
EC-171

ROBOTIC PALLETIZER



The **EC-171** robot has the largest working envelope of all Fuji Robots while maintaining the smallest rotation radius. The **EC-171** is energy efficient using only 4 kva while still allowing the robot to work in tight space conditions and accomplishing a very high palletizing rate. With two **EC-171** models Fuji can offer a solution for High Speed (HS) and/or Heavy Weight (HD) applications. This is truly a fantastic addition to our product line.

EC-171 Operating Range



EC-171 Series Technical Specifications

Fuji ACE Model		EC-171HS	EC-171HD
Type of Motion		Multi-Articulated	
Action Mode		Cylindrical	
Load Capacity (Including End Effector)		80kg (170 lbs)	130kg (280 lbs)
Palletizing Capacity (cycles / hour)		1500	1000
Degree of freedom		4 axis	
Operating Area	Z axis (vertical)	2400 mm (94.75")	
	R axis (longitudinal)	1600 mm (63.125")	
	Theta axis (rotation)	330° (360° Option Available)	
	Alpha axis (wrist)	330°	
Repeatability		± 0.5mm	
Memory		400 programming locations available	
Teaching method		Teaching playback / Teaching Support	
Power Requirements		(200/220V, 3 phase, 50/60 Hz)	
Power Consumption (Without Peripheral Equipment Load)		4 KVA / 10.5 amps	
Robot Weight (Without End Effector)		750 Kg (1654 lbs)	
Pneumatic Consumption (*Using Standard Fuji Case or Bag End Effector)		*5.7 SCFM @ 70 psi (.48 MPa)	
<p>Note: Capacity rates can be significantly affected by layouts, product types, and can be confirmed after a detailed analysis of an application.</p>			



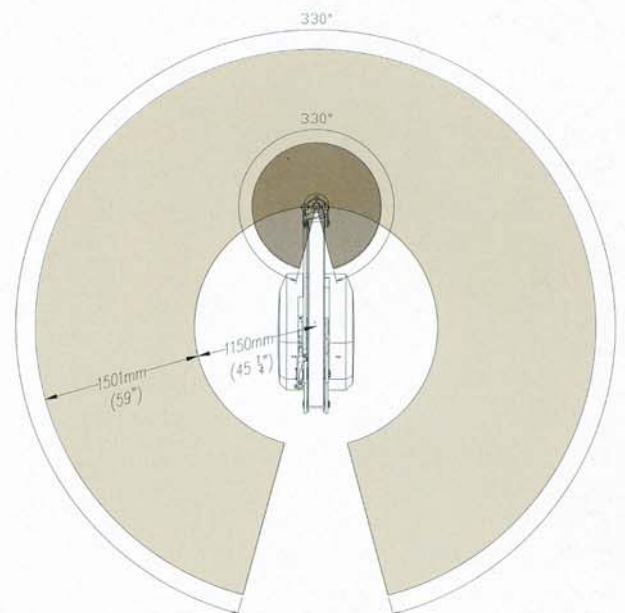
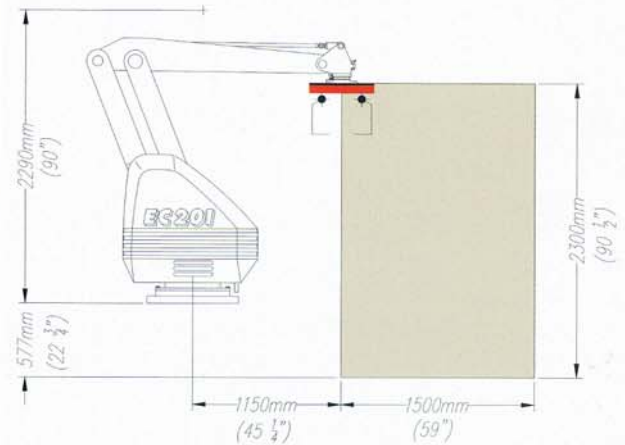
EC-201

ROBOTIC PALLETIZER



Through many years of research and development the **EC-201** robot is one of the most technologically advanced robotic palletizers on the market today. With three **EC-201** models to choose from, Fuji offers a solution for High Speed (HS), Heavy Weight (HD) and/or Super Heavy Weight (W) applications.

EC-201 Operating Range



EC-201 Series Technical Specifications

Fuji ACE Model	EC-201HS	EC-201HD	EC-201W
Type of Motion	Multi-Articulated		
Action Mode	Cylindrical		
Load Capacity (Including End Effector)	70kg(150 lbs)	200kg(440 lbs)	320kg(700 lbs)
Palletizing Capacity (cycles / hour)	1800	1600	600
Degree of freedom	4 axis		
Operating Area	Z axis (vertical)	2300mm (90.5")	
	R axis (longitudinal)	1500mm (59")	
	Theta axis (rotation)	330° (360° Option Available)	
	Alpha axis (wrist)	330°	
Repeatability	± 0.5mm		
Memory	400 programming locations available		
Teaching method	Teaching playback / Teaching Support		
Power Requirements	(200/220V, 3 phase, 50/60 Hz)		
Power Consumption (Without Peripheral Equipment Load)	6.5 KVA / 17 amps	7 KVA / 18.4 amps	
Robot Weight (Without End Effector)	1150 Kg (2536 lbs)		
Pneumatic Consumption (*Using Standard Fuji Case or Bag End Effector)	*5.7 SCFM @ 70 psi (.48 MPa)		

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



Fuji Ace Technical Specifications

Fuji ACE Model	EC-61HS / HD	EC-101HS / HD	EC-171HS / HD	EC-201HS / HD	EC-201W
Type of Motion	Multi-Articulated				
Action Mode	Cylindrical				
Load Capacity (Including End Effector)	70kg (150lbs) / 160kg (350lbs)	70kg (150lbs) / 160kg (350lbs)	80kg (175lbs) / 130kg (280lbs)	70kg (150lbs) / 200kg (440lbs)	320kg (700 lbs)
Palletizing Capacity (cycles / hour)	900 / 500	1300 / 800	1500 / 1000	1800 / 1600	600
Degree of freedom	4 axis				
Operating Area	Z axis (vertical)	2300mm (90.5")		2400 mm (94.75")	2300 mm (90.5")
	R axis (longitudinal)	1500mm (59")		1600 mm (63.12")	1500 mm (59")
	Theta axis (rotation)	330° (360° Option Available)			
	Alpha axis (wrist)	330°			
Repeatability	± 0.5mm				
Memory	400 programming locations available				
Teaching method	Teaching playback / Teaching Support				
Power Requirements	(208/220V, 3 phase, 50/60 Hz)				
Power Consumption (Without Peripheral Equipment Load)	2.3 Kva / 6 amps	2.5 Kva / 6.5 amps	4 Kva / 10.5 amps	6.5 Kva / 17 amps	7 Kva / 18.4 amps
Robot Weight (Without End Effector)	700 kg (1544 lbs)		750 Kg (1654 lbs)	1150 Kg (2536 lbs)	
Pneumatic Consumption (*Using Standard Fuji Case or Bag End Effector)	*5.7 SCFM @ 70 psi (.48 MPa)				

Note: Specifications are subject to change without notice. Capacities as stated above are the maximum that may be achieved by the robot under ideal conditions. Capacity rates can be significantly affected by layouts, product types, and can be confirmed after a detailed analysis of an application. *Pneumatic consumption may vary with use of a third party End Effector.



Concerns about the natural state of our planet have never been higher. Some manufacturers have not yet recognized the role that robotics can play in energy conservation. Robots make the palletizing process more efficient and we think smart players in the industry will adapt this reality sooner than later. With all this in mind **FUJI** offers energy conscious robots - (EC-Series).

THINK GREEN



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