



# CHANTLAND

M H S

Material Handling Solutions

## THE WORLD'S FINEST ROBOT PALLETIZER

# FUJI-ACE

HIGH PERFORMANCE  
USER FRIENDLY  
LOW ENERGY CONSUMPTION

Since  
1943



### OVER 7,000 ROBOT PALLETIZER INSTALLATIONS WORLD WIDE

#### FEATURES

- ✦ Unique linear guides designed specifically for Palletizing (Exclusive to Fuji Robotics)
- ✦ Polycarbonate cover to reduce weight
- ✦ EC Series (ENERGY CONSERVATION) designed to save energy and resources
- ✦ Optimized to reduce spare parts holding
- ✦ User friendly programming software
- ✦ Specifically designed hand grippers for every palletizing application
- ✦ Unrivaled in sack, case, pail, drum, shrink-wrapped pack and bottle applications
- ✦ Safety Light Curtain

# SOLUTIONS

[WWW.CHANTLAND.COM](http://WWW.CHANTLAND.COM)

BAG FILLERS ✦ CONVEYERS ✦ PALLETIZERS ✦ SYSTEMS

# QUICK AND EASY TEACHING



## LESS PROGRAMMING MORE PALLETIZING

Often, we hear Palletizing Robots are difficult to program or tend to make mistakes. That may be correct with other robots, but not with the **FUJI-ACE**.

Unlike other robots designed for painting, assembling or welding, the **FUJI-ACE** is designed specifically for Palletizing so doesn't require complex programming of orbital movements between the pick-up and releasing positions.

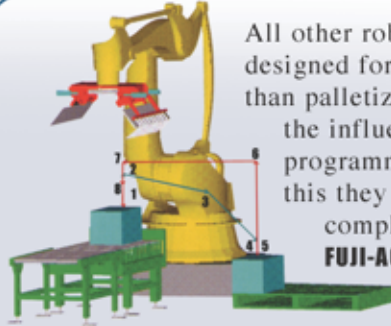
Upon installation, the product pick-up point and release points are set utilizing the "Teaching Pendant". When the points are established, the robot takes over and the orbital paths are automatically calculated by the robot motherboard to create the most efficient movement from pick-up point to placement points.

## FUJI-ACE



To program the **FUJI-ACE** you only have to teach the releasing position of each pattern. Even then you only have to do this for the first two layers as the robot works the rest out itself. All the orbital movements are also worked out automatically.

## ALL OTHER ROBOTS



All other robots originally designed for purposes other than palletizing may still have the influence of its original programming. Because of this they may require more complex teaching that the **FUJI-ACE** does not require.



## OPTIONS

- ◆ Empty Pallet Dispenser & Conveyor with positive pallet placement
- ◆ Slip Sheet Dispenser
- ◆ Cold and Harsh Environment Upgrades
- ◆ Check Weigh and Automatic Product Reject Function
- ◆ Simultaneous Multi-Size Product Handling
- ◆ Bag Turner, Kicker and Flattener Conveyors
- ◆ Filled Pallet Conveyors

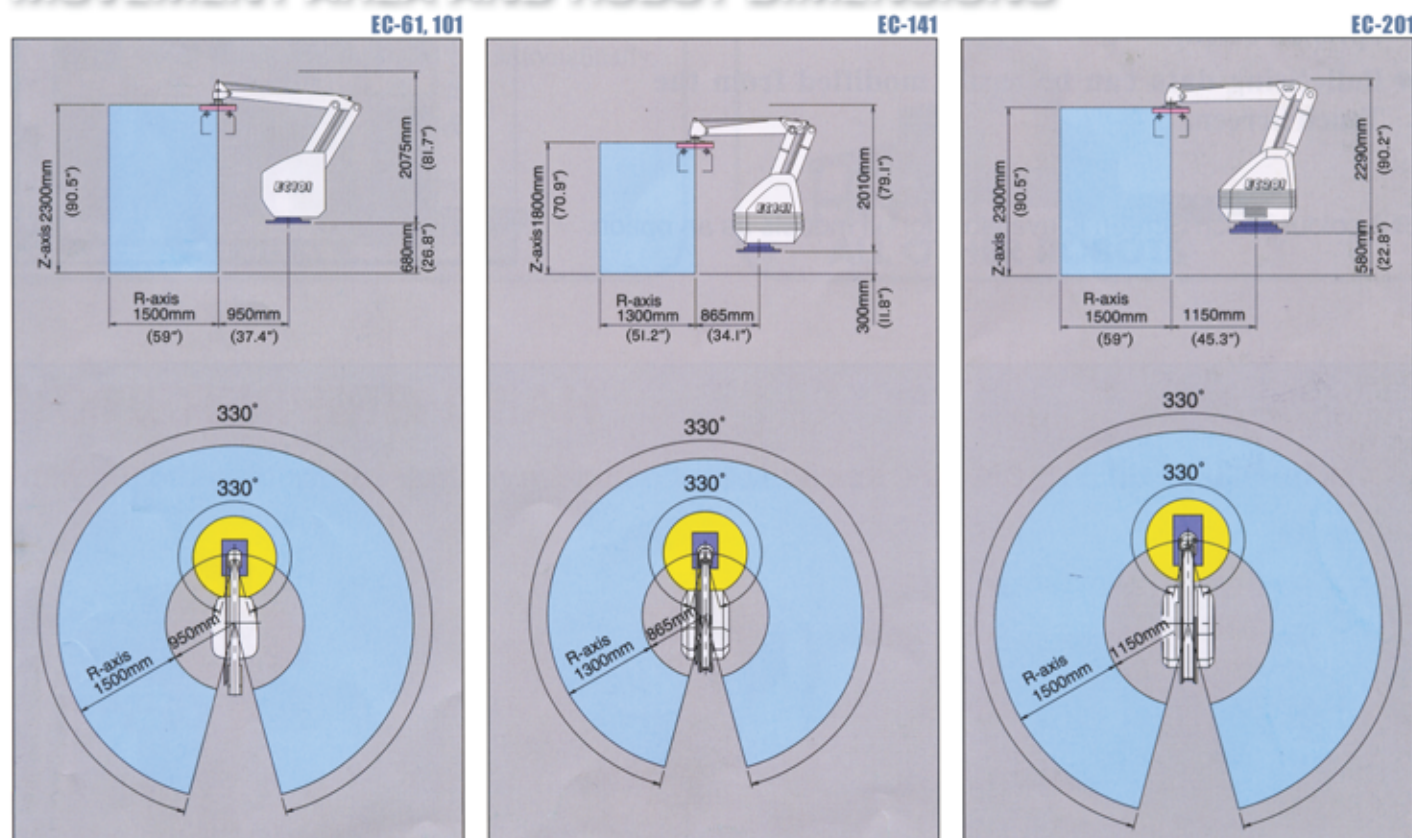


# FUJI ACE TECHNICAL SPECIFICATIONS

Model	EC-61	EC-101	EC-141	EC-201	
Mechanism	Articulated Robot				
Action Mode	Cylindrical				
Weight Capacity (including hand)	90kg (198 lbs)	120kg (264 lbs)	120kg (264 lbs)	200kg (440 lbs)	
Palletizing Capacity (cycles/ hour)	600c/hr	1000c/hr	1400c/hr	1600c/hr	
Degree of Freedom	Standard 4 Axes (up to 5 Axes)				
Operational Space	- Z Axis (vert.)	2300mm (90.5")	2300mm (90.5")	1800mm (70.9")	2300mm (90.5")
	- R Axis (long.)	1500mm (59")	1500mm (59")	1300mm (51.2")	1500mm (59")
	- $\theta$ Axis (turn)	330°			
	- $\alpha$ Axis (wrist)	330°			
Hand Gripper	Clamp, Fork, Vacuum, Custom Designed				
Memory	Standard 30 Patterns, Max 400 Patterns (Option)				
Teaching Method	Teaching Playback/ Teaching Support/ Teachingless(Option)				
Power (200/220v 3PH 50/60Hz)	1.9KVA	2KVA	4KVA	6.5KVA	
Main Body Weight (without hand)	700kg (1544 lbs)	800kg (1764 lbs)	700kg (1544 lbs)	1150kg (2536 lbs)	

**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 effected by layouts and product types, and can only be confirmed after a detailed analysis of an application.

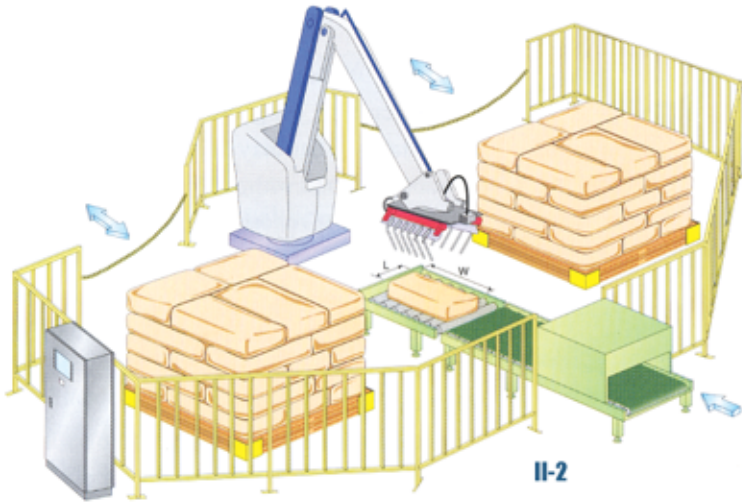
## MOVEMENT AREA AND ROBOT DIMENSIONS





## TYPICAL LAYOUTS

There are many layout options available to match your exact specifications. Because we offer a high speed robot, we have the luxury to provide additional options while maintaining high outputs. The most common layouts (shown below) are a small sample of the hundreds of possibilities.

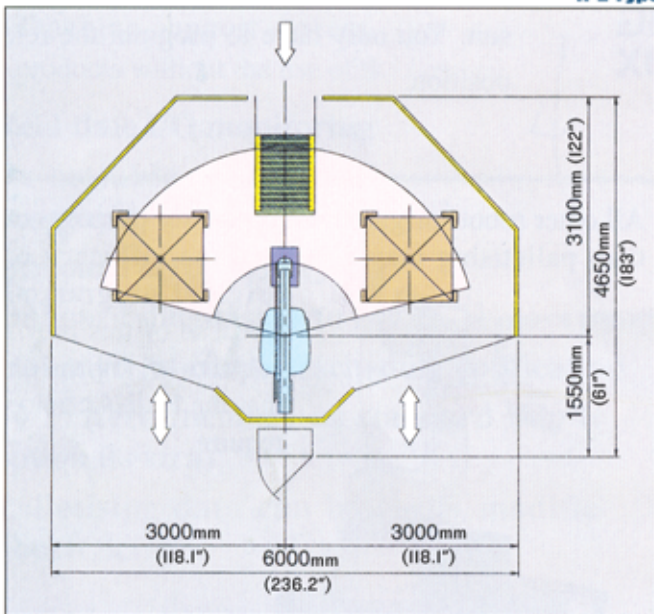


II-2

## WARNING

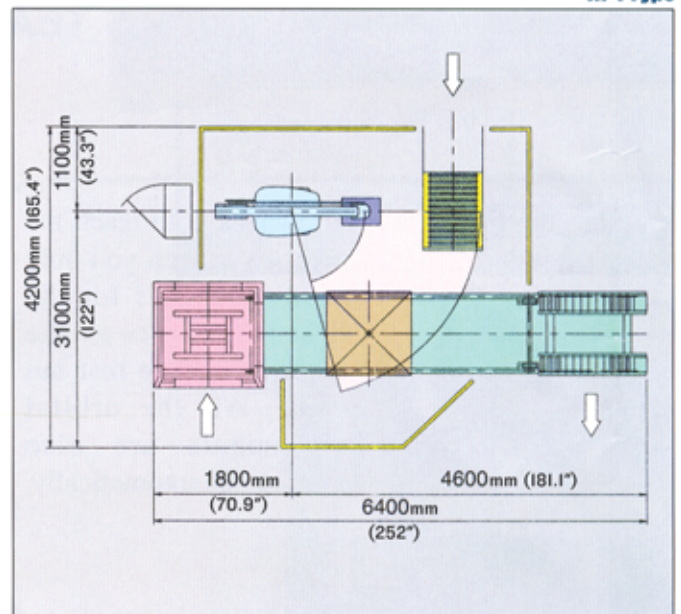
- ✦ The **FUJI-ACE** must be installed within a guarded area and to local safety specifications.
- ✦ The electrical system must be securely grounded.
- ✦ Fuji Robotics will not accept any responsibility for modifications made to the robot system without their written consent.
- ✦ Fuji Robotics will not accept any responsibility for the use of the robot system in applications other than the purpose for which it was designed.
- ✦ Chantland-MHS will train and instruct you on the correct installation methods.

II-2 Type



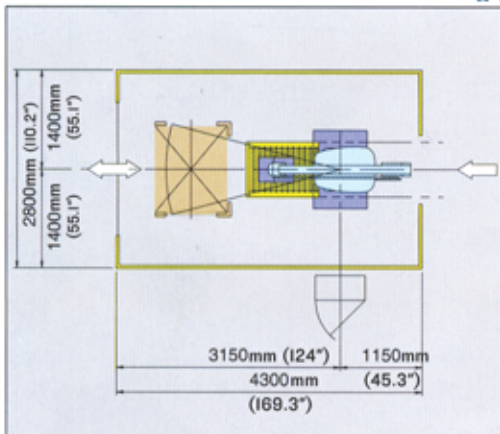
The product is palletized alternately to twin pallet locations. This design allows pallets to be stacked on the floor on each side minimizing changeover time.

III-1 Type

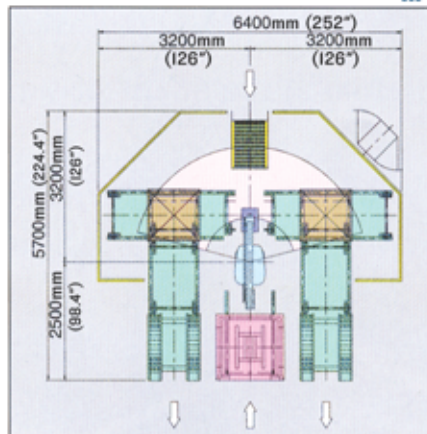


For high-speed low labor applications, we fit a pallet dispenser and conveyor to automatically transfer pallets while maintaining non stop production.

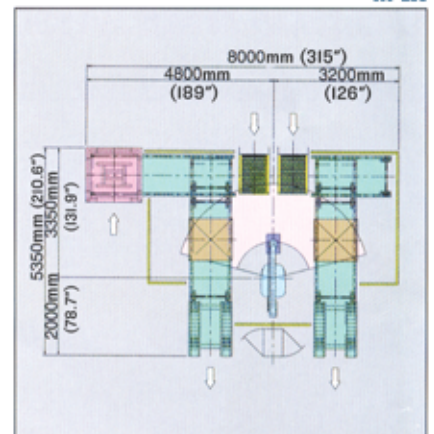
II-1



III-E



III-LW





# FUJI ORIGINAL USER FRIENDLY TEACHING SYSTEM

## ALL OPERATIONS CARRIED OUT FROM TOUCH SCREEN

All of the **FUJI-ACE** operations can be monitored through the touch screen. In normal operation there is no need for a teaching pendant outside of the control box.

### ◆ EASY TEACHING

- Pre-programmed pallet patterns embedded in the software.
- Standard programs can be customized to match your specifications.
- You can select, view and modify the parameters of each product simply by using the touch screen.
- Check programmed positions with "Movement" key
- Teaching support system allows you to program new product sizes, patterns and pallets by use of pendant.

### ◆ REAL TIME I/O MONITORING

### ◆ RE-SETTABLE COUNTERS CORRESPONDING TO SELECTED PROGRAMS

### ◆ ONBOARD ERROR HISTORY LOG

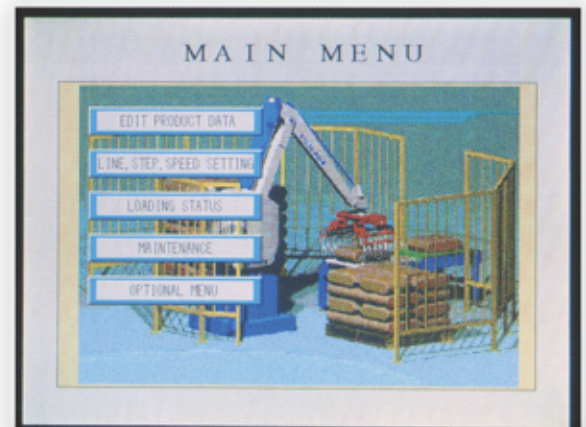
### ◆ ONBOARD DIAGNOSTICS TO IDENTIFY ERRORS IMMEDIATELY

### ◆ ONBOARD LUBRICATION SCHEDULE NOTIFICATION

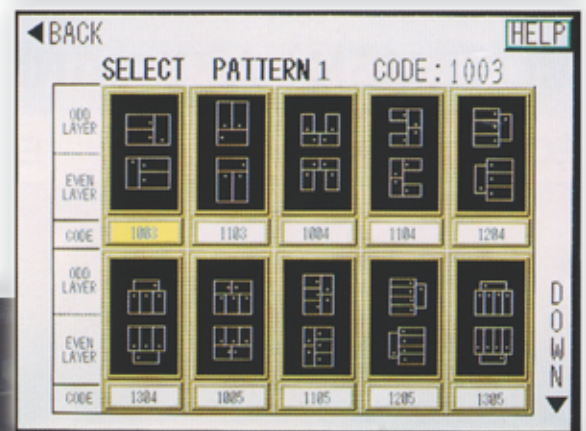
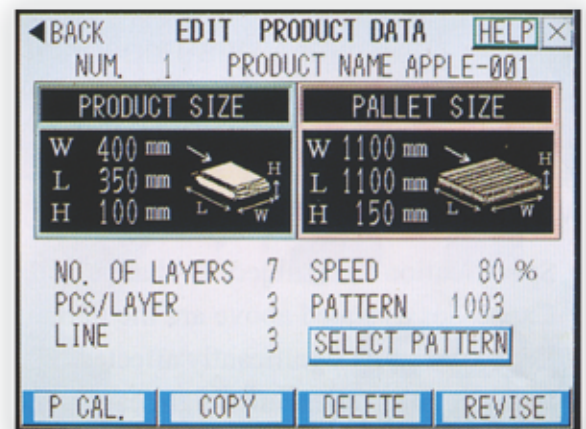
### ◆ 30 PATTERN MEMORY AS STANDARD (UP TO 400 AS AN OPTION)

### ◆ PALLETIZING DATA CAN BE EASILY MODIFIED FROM THE TOUCH SCREEN.

A color Touch Screen is available for all models as an option.



All **FUJI-ACE** include monochrome Touch Screens standard



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Since  
1943



## FULLY AUTOMATIC BAG PALLETIZERS

- ◆ Stacks paper, poly and jute bags on pallets and slipsheets
- ◆ Touch screen operator interface
- ◆ Capacities to 2,400 bags per hour
- ◆ Customized design to fit your plant requirements.

ESTABLISHED IN 1943, Chantland-MHS is a premier manufacturer specializing in the design and fabrication of conveyors, bag, box and drum filling equipment and automatic bag palletizers. We provide personal service, innovative designs, quality machinery and guaranteed solutions to industry worldwide.

Our headquarters in Humboldt, Iowa, encompasses over 95,000 square feet of manufacturing and office space. Our facility houses a material testing lab, training rooms for our employees and meeting rooms for our customers and guests. We also maintain regional sales offices in Collinsville, Oklahoma and Littleton, Colorado to manage our national packaging equipment representative network.

In addition to our patented machine designs, we utilize the newest technology and decades of experience to ensure our customers receive the finest equipment available.

**CALL ON US FOR YOUR MATERIAL HANDLING NEEDS,  
AND PUT OUR EXPERIENCE TO WORK FOR YOU!**

**VISIT OUR WEBSITE: [www.chantland.com](http://www.chantland.com)**

### 60th Anniversary Historical Brochure

A historical overview of the Chantland-MHS Company highlighting our development and expansion from our beginnings in 1943.

### Conventional Bag Palletizer Brochure

Highlights the features of our four models of Automatic Bag Palletizing Equipment with speed from 10 bags per minute (600 bags per hour) to 40 bags per minute (2,400 bags per hour).

### Bulk Bag Systems Brochure

Six page color brochure illustrates our award winning designs of automated bulk bag fillers and unloaders.



### Packaging Equipment Brochure

Eight page color brochure details our complete line of filling and weighing equipment for valve and open mouth bags, boxes, drums, pails and totes.

### Conveyor Equipment Brochure

Eight page brochure highlights our bulk material, bag and package handling conveyors. Portable, stationary, and custom designs for applications from horizontal to vertical.

BAG FILLERS

CONVEYORS

PALLETIZERS

SYSTEMS

Hwy. 3 East, PO Box 279, Humboldt, Iowa, U.S.A. 50548 / Ph. 515.332.4045 Fax 515.332.1502

[www.chantland.com](http://www.chantland.com)