

# **Cost Effective Solutions for Pick and Place**

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## Channel Partners

**Rockwell  
Automation**

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***IAI* - Intelligent Actuators, Japan  
Cartesian & SCARA Robots.**

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# WHAT DO WE DO ?

- **Manufacturing Automation**
- **Pick and Place Systems**
- **Transfer Systems**
- **Robotics**
- **End of Line Automation**
- **Manufacturing Intelligence**

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# **IN THIS PRESENTATION WE WILL COVER -**

- 1. Type of Pick and Place Systems**
- 2. Considerations for Choosing Pick and Place**
  - 1. Technologies for Pick and Place**
  - 2. Case Studies**

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# Type of Pick and Place Systems

- **Mechanical systems**
- **Pneumatic Systems**
- **Electrical Actuators**
- **Robots**

# Considerations for Choosing Pick and Place Systems

- **Cycle Time of operation**
- **Accessibility Options**
- **Space Constrains**
- **Component shape**
- **Environment**
- **Safety considerations**

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# Technologies for Pick and Place Systems

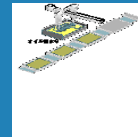
- Linear Movements
- End to End Positioning
- Multi-positioning
- Rotary Actuators
- Gripping Systems
- Multiple component handling



slitting.swf



XY Tube filling.swf



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## Cartesian Pick and Place

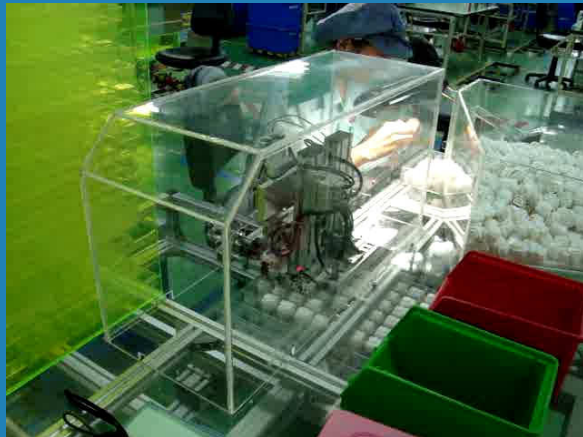
- **Linear Axis Mounted on each other**
  - **No rotary movement**
  - **End to end or multi position**
  - **Single axis or multi axis**
- **Can be built with pneumatic or servo axis**



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## Multi Axis Cartesian Pick and Place

**Example - Linear Slides mounted on each other to form X-Y-Z three axis system.**



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## SCARA Pick N Place

- Combination of Linear and Rotary Axis
- Can be used for very high speed application
- Can be expensive



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## Examples 3 axis Application

**3-Axis Cartesian for  
Cream Dispensing**



**3-axis Application  
for Part feeding**

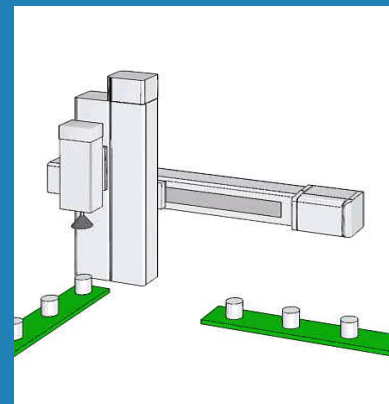


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# Coordinated Handling with Pick and Place

## EXAMPLE

- Coordinated Conveyors,
- Servo Systems
- Linear Slides
- Gripper
- Transfer



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## Case Study

### EXAMPLE 1 – Palletizing Gantry

Heavy Part,  
Difficult to handle manually  
Operator fatigue



### EXAMPLE -2 Palletizing - Robot

Flexible Packaging  
Multiple products  
Programmable



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QUESTIONS ?

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