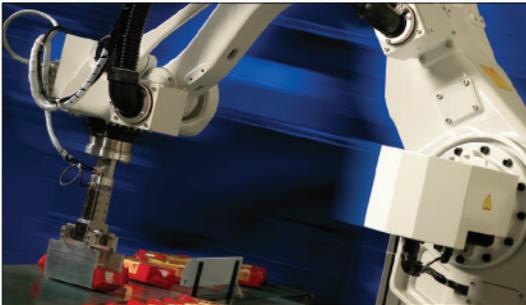


## Vision Guided Robotics

Precise, Efficient, & Consistent

Rich and powerful visual guidance instills new intelligence into modern robots. Robotic systems can not only identify and track a wide variety of parts within their visual field, but also successfully grasp them and execute complex material handling tasks. Our expertise spreads across all major vision technologies, such as those developed by Fanuc, Cognex, and Keyence.



Vision Based Pick and Place Application



End of Arm Tool Mounted Vision System

### How does it work?

Machine vision is primarily used for part orientation, location, and validation.

Image analysis is performed utilizing various parameters such as contrast adjustment, focus, and/or colored filters to identify unique part characteristics. With precise calibration, the image analysis yields accurate part details.

These details can be used for part location to guide robotic interaction, precise part orientation, and part feature inspection.

### Benefits

- Greatly expands the flexibility of robotic cells
- Automates the processes dealing with various products and locations
- Eliminates fixtures and therefore reduces footprint and costs
- Increases reliability and efficiency through vision application

## Specifications

- Vision can identify nearly all products of consistent shape and surface
- Accuracy on the order of microns is achievable in certain applications
- Vision sensor and its accessories can be robot-mounted or stand-alone
- Vision system interfaces with robot, PC, or PLC
- Meets OSHA, RIA, and ANSI safety requirements

## Applications

- Depalletizing - robot visually identifies individual products and picks them off of the pallet
- Assembly - precisely locates different components and assembles them into one work piece
- Inspection and quality control - vision monitors moving products on a conveyor and notifies robot to reject if defective product is found
- Automatic sortation - robot picks product apart into separate spaces based on visual features such as shape, dimension, and color
- Random bin picking - large number of parts arrive randomly piled within a crate without separation, and the robot visually locates each part and picks it out

## Contact

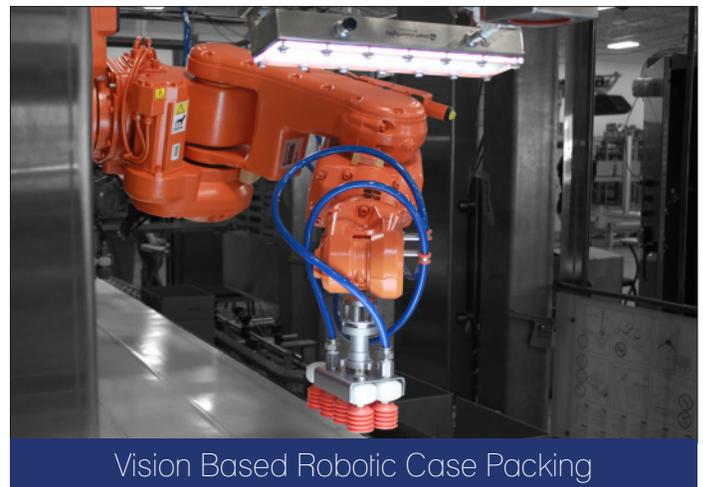
- Interested in implementing this technology in your facility or simply want to know more about it?

Please contact us today for additional information:

- Email: [info@bastiansolutions.com](mailto:info@bastiansolutions.com)
- Phone: (800) 569-6762
- [www.bastianrobotics.com](http://www.bastianrobotics.com)



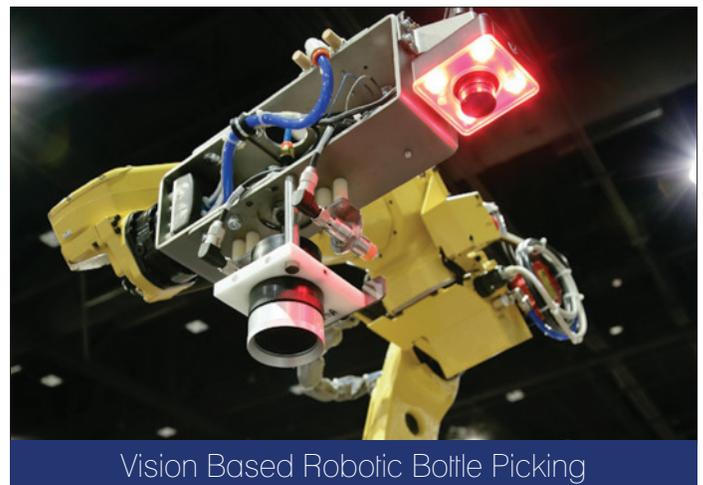
Robot Mounted Product Inspection



Vision Based Robotic Case Packing



Vision Detection at Part Pick Location



Vision Based Robotic Bottle Picking