

Top Ten Reasons for RVT's Vision Guided Robotics

1. Reduce & Reallocate Labor:

Use vision to guide robots to automate what historically required human interaction.

2. Reduce & Eliminate Precision Dunnage:

Saves millions of dollars annually.

3. Enhance Quality: Eliminates human error by allowing visual and mechanical inspection techniques.

4. Reduce Downtime: Increases equipment utilization, detects necessary path changes, and prevents unnecessary downtime.

5. Flexibility & Elimination of Hard Fixturing: Various part styles can be handled by the same system cell using vision identification.

6. Ergonomics: Automates the human process of material handling and increases employee safety.

7. Adaptability: Offers a flexible and easy system for handling new parts.

8. Works with any Robot: eVF software works with any industrial robot, any generation that supports serial, Ethernet or industrial communication protocol.

9. Off-the-Shelf Components: Uses common components and standard integration to make systems easy to install and repair. Simplicity and Standardization.

10. The Future: RVT's VGR grows and evolves as you do.



Vision Guidance Solutions



Vision Guided Robotics (VGR)

Robotic VISION Technologies (RVT) provides VGR solutions which enable intelligent guidance for automation in material handling, assembly, and other complex processes.

Intelligent Vision

Robots that see, think and react can operate and adapt in ever-changing production environments.

About Robotic VISION Technologies

Robotic VISION Technologies (RVT) is a recognized leader in the field of intelligent machine vision and robot vision software.

RVT's software and technologies enable vision recognition and robot guidance processes in manufacturing, logistics, material handling, for automated systems.

eVisionFactory Version 6.5 features both the Henry Ford Technology Award-winning Single Camera 3D (SC3D), and the ground breaking Random Bin Picking (RBP) Vision Guided Robotic (VGR) technologies.

eVisionEngine is a vision guidance library offering an expanse of commercial uses to wide range of customers in the robotics' industry.

RVT software is installed in hundreds of applications; operating mission critical production every day.

RVT's Technical Center in Bloomfield Hills MI has feasibility & testing facilities with four leading robot manufacturers and a crack technical team that continually advance the vision guidance industry.



Our Customers

Department of Defense and Fortune 500 companies using RVT's technologies include:

- U.S. Navy
- Toyota
- Ford
- GM
- Chrysler
- Honda
- Nissan
- Harley-Davidson
- Battelle
- Boeing
- Johnson & Johnson
- And many more

Automatic Configuration Technologies

eVF enables the industry's fastest training, installation, testing, and calibration cycles. Exclusive features to eFV:

AutoCal™ -- Automatically calibrates the camera to the robot coordinate system in less than 5 minutes.

AutoTrain™ -- The AutoTrain feature is a fully automated one button vision system training feature. The vision system automatically moves the robot and camera through multiple image positions as it measures features to automatically build a mathematical model of the part which allows for rapid response to part model or engineering changes without the need for CAD data.

AccuTest™ -- The AccuTest feature is a fully automated one button vision solution testing feature. The vision system automatically moves the robot and camera through multiple positions, simulating allowable part movement, confirming all programmed features are found. This feature validates the vision solution accuracy, lighting and robustness prior to commissioning at the end user's facility. Upon completion of testing the system automatically computes accuracy data up to 6σ and up to 6 degrees of freedom.

Markets & Applications



Industrial

Robotic VISION Technologies (RVT) provides a vision guided robotic software platform for industrial applications for the automotive, general manufacturing, materials handling, and inspection markets.

Applications Include:

- Random Bin Picking
- Material Handling
- Inventory Organization & Management
- Moving-Line Part Tracking & Handling
- Palletizing & De-palletizing
- Racking & De-racking
- Assembly
- Part Inspection/Error Proofing

Government & Defense

RVT's vision intelligence solutions are ideal for government and defense applications.

Applications Include:

- Logistics & Hazardous Material Handling
- Explosive Ordinance Disposal
- Combat Vehicle Situational Awareness & Surveillance
- Depot Management
- Object Detection & 3D Calculation
- Border & Transportation Security



Available 6.5 Products

SC3D (Single-Camera 3D)

Includes

SC2.5D (Single Camera 2.5D)

SC2D (Single -Camera 2D)

Random Bin Picking

Featureless Tray Picker

Modules:

Bead inspection
Bar Code Reader/Scanner
Stereo Camera 3D
Pose Averages
Structured Light
Part ID
Stationary Camera
(2D,2.5D,3D)
(SR) Surround ID

**SL3D (Structured Light 3D),
patent protected**



BAE SYSTEMS

Chairman's Award



**Henry Ford
Technology Award**

Technical Center & Sales Office
Robotic VISION Technologies
281 Enterprise Court, Suite 400
Bloomfield Hills, MI 48302
248-977-4048 Phone

Headquarters
Robotic VISION Technologies
10001 Georgetown Pike, 1037
Great Falls, VA 22066

Contact Us
contactus@roboticVISIONtech.com
www.roboticVISIONtech.com

