



» DESCRIPTION

The V-500iA series is a PC-based vision solution that enables:

- V-500iA/2DV: standard 2D Vision
- 2D Visual Line Tracking
- V-500iA/3DL
- 3D COMPENSATION
- VISION SHIFT

V-500iA/2DV STANDARD 2D VISION

EASE OF USE

- Fast and easy set-up
- Easy application building
- Integrated instruction set

OPTION: HISTOGRAM TOOL

The Histogram Tool visualises possible grey scales around the piece. The goal is to recognise if there is enough free space around the piece for the gripper. This avoids parts to be broken and reduces costs.

OPTION: IMAGE SAVE B

The Image Save B allows to save up to 10 000 images. This feature is extremely useful for quality control or troubleshooting, in order to look for possible mistakes in the program.

V-500iA 2D VISUAL LINE TRACKING

ENHANCED PROCESS SOLUTION

Visual Line Tracking provides robotic process solutions for:

- Sorting non-fixtured parts on moving conveyors
- Picking up non-fixtured parts on moving conveyors
- Placing parts onto fixtures located on moving conveyors
- Assembling components

OPTION: DUAL ARM VISUAL LINE TRACKING

It is possible to use one controller to handle two robots in a visual line tracking application. This feature is enabled with the Dual Arm Visual Line Tracking software option.

OPTION: VISUAL LINE TRACKING FOR MULTIPLE ROBOTS

It is possible to use up to four single robots in a visual line tracking application. These Robots are connected to only one Vision System.

V-500iA/3DL

3DL Vision is used for reliable part location and orientation, regardless of variations in part size and occlusions. It allows Bin Picking and Panel Picking.

- Recognition of parts position (X,Y,Z) and orientation (W,P,R)
- 100% FANUC Product (Hardware and Software)

3D COMPENSATION

Since a camera is a 2D sensor, it cannot provide 3D information. One camera only provides a straight line on which the object exists. The 3D positional compensation is used to determine 3D position of work pieces (e.g. car bodies) using three or more 2D cameras.

VISION SHIFT

VISION SHIFT is a help to setting up spot and arc welding systems in order to compensate mismatches between the configuration as shown in offline programming programs and the real configuration. Before VISION SHIFT, those gaps had to be calibrated by manual teaching on the floor.

1. VISION SHIFT utilises a 3D positioning capability of its vision sensor to measure the gap and calibrates the robot program automatically.
2. VISION SHIFT also has a capability to automatically set tool center points (TCP).
3. It takes about 30 minutes for VISION SHIFT to measure and calibrate robot programs with high-precision and non-contact measurements, instead of hours when done manually. VISION SHIFT thus offers a significant reduction in total set-up time.
4. VISION SHIFT provides also a Coordinated Pair Setting. Perfect for the best possible Setup of a Dual-, Triple-, and Quadarm applications.