K-HIPE-R-PC

(PC-based image processing device for Kawasaki vision systems)

K-HIPE-R-PC4
(for automobile industry)

Dimensions: 173(W)x254(H)x396(D) mm
Power requirements: 85-264V, 220W
Ambient temperature: 0-40℃

K-HIPE-R-PC5
(for duAro)

Optional item dedicated to duAro

K-HIPE-R-PC6
(for general-purpose robots)

Dimensions: 149(W)x257(H)x224(D) mm
Power requirements: 85-264V, 220W
Ambient temperature: 0-40℃

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https://robotics.kawasaki.com/

✻ Materials and specifications are subject to change without notice.

Kawasaki Robot

CAUTIONS TO BE TAKEN TO ENSURE SAFETY

- For those persons involved with the operation / service of your system, including Kawasaki Robot, they must strictly observe all safety regulations at all times. They should carefully read the Manuals and other related safety documents.
- Products described in this catalogue are general industrial robots. Therefore, if a customer wishes to use the Robot for special purposes, which might endanger operators or if the Robot has any problems, please contact us. We will be pleased to help you.
- Be careful as Photographs illustrated in this catalogue are frequently taken after removing safety fences and other safety devices stipulated in the safety regulations from the Robot operation system.

QUALITY SYSTEM CERTIFICATION DNV·GL ISO 9001 MGMT. SYS. RvA C 024

ENVIRONMENTAL SYSTEM CERTIFICATION DNV·GL ISO 14001 MGMT. SYS. RvA C 024

ISO certified in Akashi Works.

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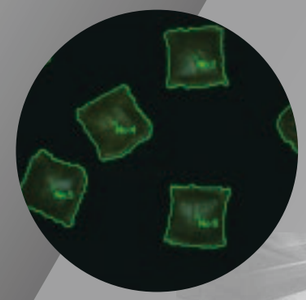
Printed in Japan

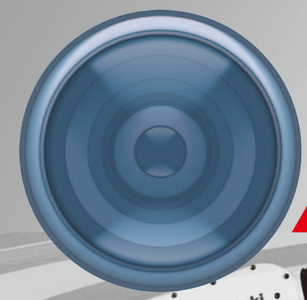
Kawasaki
Powering your potential

Vision System

50th ANNIVERSARY Kawasaki Robotics

Kawasaki Robot
Kawasaki Vision System

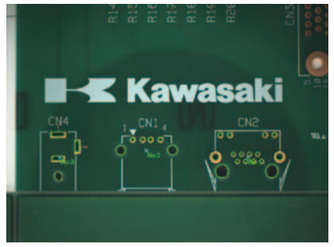




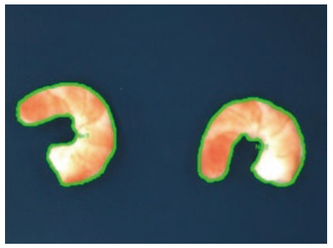
2D Vision system

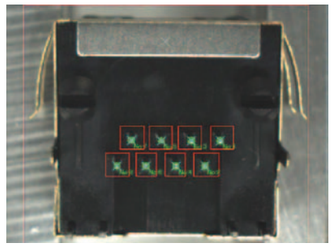
Kawasaki Robot Solutions K-VFinder

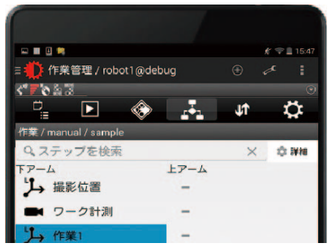
- Based on our know-how accumulated over many years, the Kawasaki vision system comes with all the functions necessary for robot applications. When implementing the system, no complicated setup is needed to communicate with Kawasaki robots.
- Pattern matching and binary-based measurements can be combined and defined easily. The system comes with an adjustment-assistance function and a user-friendly manual, enabling even vision-processing beginners to use the system without difficulty.
- In addition to positional measurements, the system can also handle applications such as character recognition and inspections. (Please consult Kawasaki.)



Positional measurement for a PC board


Positional measurement for food ingredients of indeterminate shape

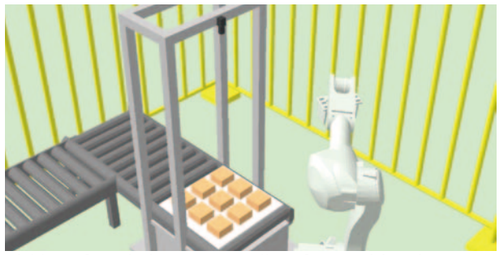

Positional measurement of pins on a PC board

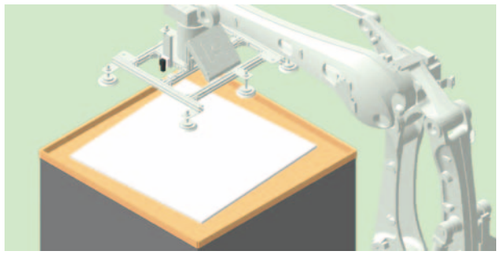


Vision programming on a tablet for Kawasaki duAro robot

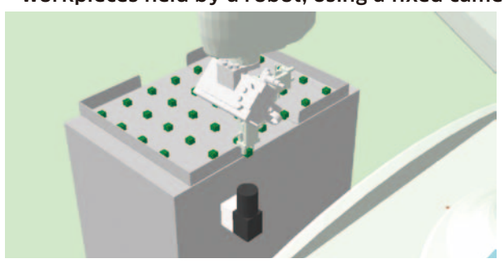
Application examples

①Positional measurement and calibration of workpieces using a fixed camera or hand camera

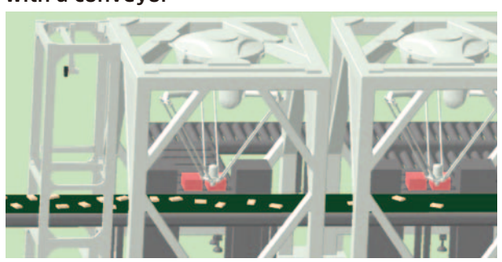

Picking of workpieces on a pallet after positional measurement


Inclination measurement using a camera attached to the robot hand

②Positional measurement and calibration of workpieces held by a robot, using a fixed camera


Calibration of inclination angle by positional measurement of the workpiece.

③Picking by several robots that are synchronized with a conveyor


Several robots pick up workpieces that are continuously transported on a conveyor

Commercially available vision systems

- The robot controller is equipped with a TCP/IP communication function, and can connect with various commercially available 2D vision systems.
- Since communication programs can be created according to the vision manufacturers' specifications, customization is possible.
  Connection examples: Keyence (CV-X), Panasonic (PV), Cognex (In-Sight EZ)

3D Vision system

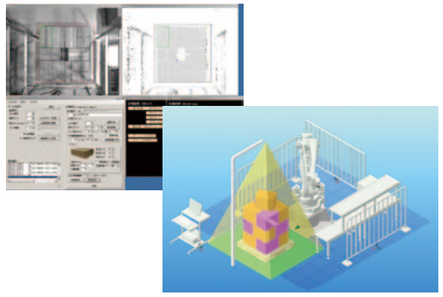
Kawasaki Robot Solutions K-Vstereo NEW

- Initial adjustment work is drastically reduced thanks to suitable robot application packages.
- High-speed recognition is possible using dedicated vision equipment.

Depalletizing of cardboard and paper bags

Specifications

Measuring range	1,100mm×1,100mm
Distance to object	1,900mm - 3,700mm (distance from top of workpiece)
Processing speed	less than 1 second (processing time fluctuates depending on the object)
Resolution of Z	±3.5 to ±12mm (varies with distance to the object)
Resolution of XY	±1.2mm to ±2.5mm (varies with distance to the object)



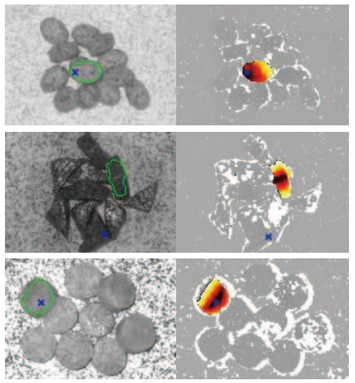
Features

- Registration of the target workpiece is not necessary. Automatic recognition is possible with only dimensional information of the workpiece from outside.

Picking of bulk stacked food ingredients of indeterminate shape

Specifications

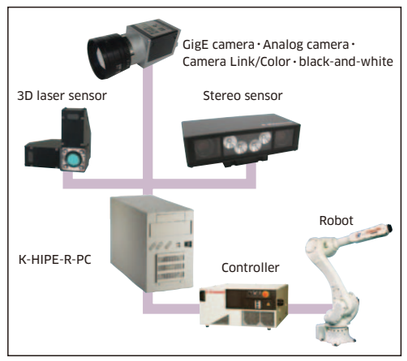
Measuring range	450mm×540mm
Distance to object	790mm - 1,200mm
Processing speed	less than 1 second (processing time fluctuates depending on the object)
Resolution of Z	±1mm (varies with distance to the object)
Resolution of XY	±0.5mm to ±0.8mm (varies with distance to the object)


White-fleshed fish
Konjac
Japanese white radish

Features

- Bulk stacking of food ingredients of indeterminate shape is possible.
- Registration of workpieces needs no special skills thanks to the original workpiece registration method.

Other Kawasaki 3D vision systems



Name	3D laser sensor	Stereo sensor
Externals	Narrow view	Middle view
Feature	Hole center, space difference, and gap measurement (Gray image)	3D-mesurement of registration pattern (Gray image)
Usage	Measurement・inspection, Position correction	Parts picking, Position correction

Features

- Our original 3D sensor is unaffected by the intensity of ambient illumination and surface conditions of the workpiece.
- Sensor specifications such as the field of vision can be changed according to the application.

Commercially available vision systems

- The robot controller is equipped with a TCP/IP communication function, enabling smooth connection with various commercially available 3D vision systems.
- Since communication programs can be created according to the vision manufacturers' specifications, customization is possible.