

Simple and friendly

Kawasaki Robot

Kawasaki Vision System

3D sensor head

	3D laser sensor	Stereo sensor
Working distance (mm)*	100	250, 400
View area (mm)*	38×29 ~ 99×74, 3types	120×90 ~ 290×230, 4types
Laser class	slit type 2 projector, class2	—
LED lighting	high intensity red lamp, 4pcs	high intensity red lamp, 4pcs
Dimension (mm)	129 (W) ×110 (H) ×122 (D)	210 (W) ×110 (H) ×49 (D)
Weight (g)	about 950	about 1,260

*Contact us for a special type of sensor.

	LSC (standard)	LSC (wide)
Working distance (mm)*	1,400 ~ 2,000	1,700 ~ 3,500
Measurement area (mm)*	800 (W) ×800(D) ×600(H)	1,400 (W) ×1,400 (D) ×1,800 (H)
Laser class	class 3R	class 3R
Dimension (mm)	610 (W)×125 (H) ×125 (D)	1,100 (W) ×125 (H) ×125 (D)
Weight (g)	about 4.8	about 6.5

*Contact us for a special type of sensor.

Vision Processing Unit K-HIPE-R-PC



Features

- PC-based type
- Fast recognition by multi-core CPU
- Selectable memory media, HDD or SSD
- Connectable multi-cameras or multi-sensors
- Connectable to various equipment by Ethernet, DeviceNet, Serial I/O, Parallel I/O
- Available 0.3~5 mega-pixel GigE camera and camera link

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.



ISO certified in Akashi Works.

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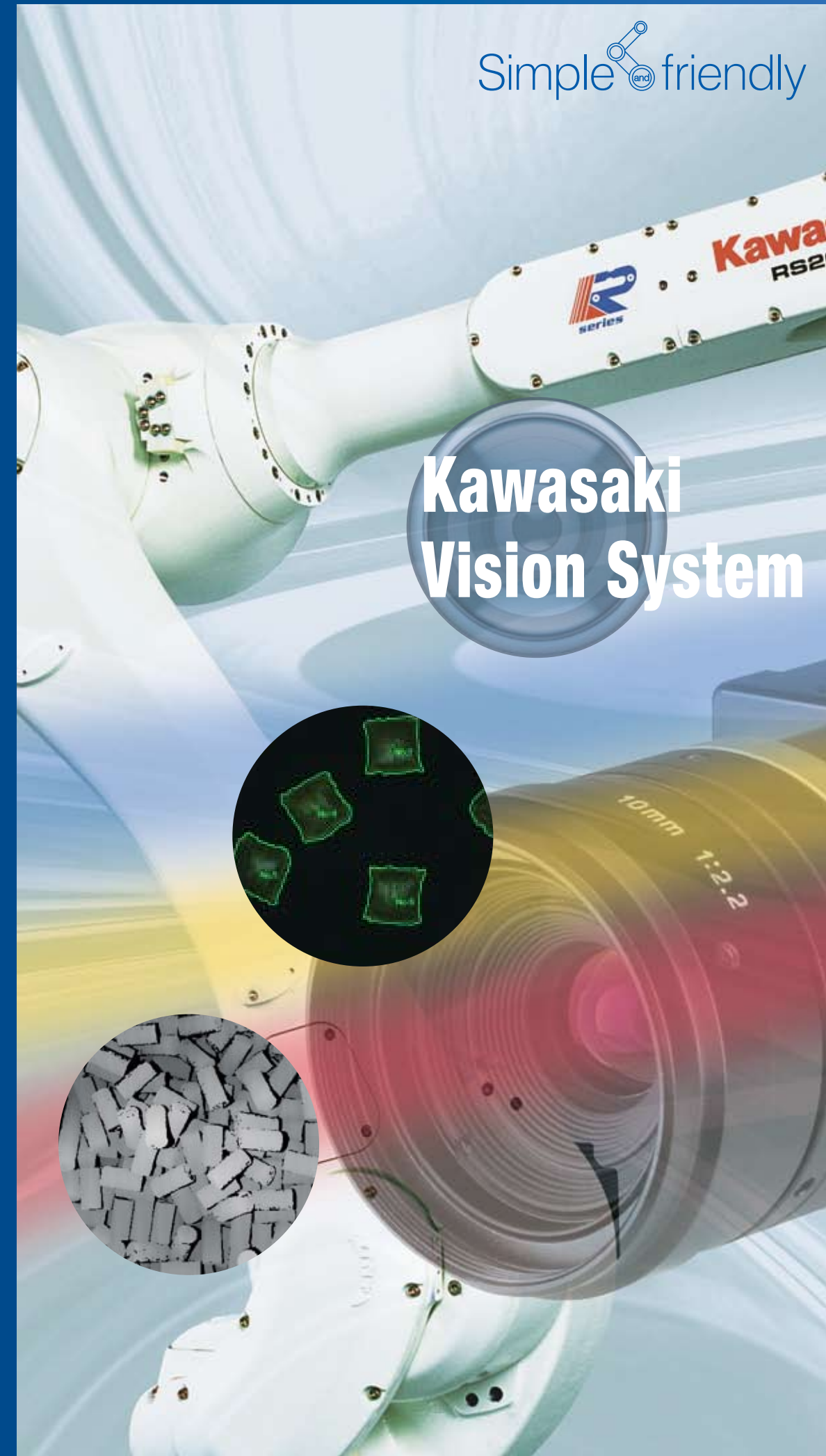
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* Materials and specifications are subject to change without notice.

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High performance vision system, applied to various usages flexibly and immediately

Kawasaki's Vision system is a multifunctional, high-speed, and high-precision visual sensing system that can be used on a wide range of sites immediately. The adoption of Vision systems enables no positioning of works to be required and the initial setup per work to be simplified.

2D vision system

Recognition module



Features

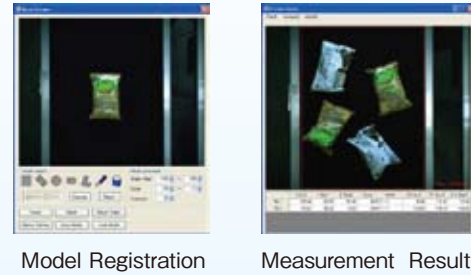
- Fast recognition and High accuracy recognition
- Pattern matching, Binarization, and Color recognition processing
- Recognition of various objects (shapes and colors)
- Inspection, Discrimination of both sides
- Easy operation

Distribution module

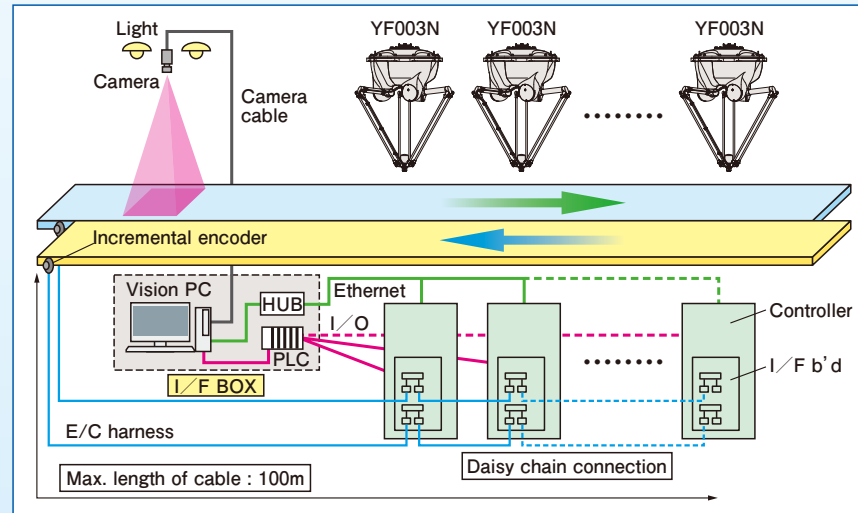


Features

- Work position is distributed to the multiple robot (max. 8) based on the result of the vision.



Configuration example



3D vision system



Features

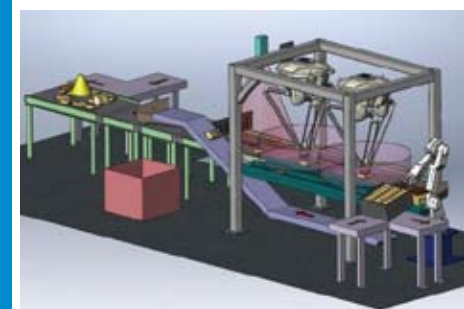
- Kawasaki's original 3D sensor are selectable as to applied content and required accuracy.
- Insusceptible system to change of lighting environment and object's surface condition
- View area is selectable according to usages. Except 2-laser slit type, 1-laser slit type is selectable. (3D laser sensor)
- Working distance and view area are selectable according to usages. (Stereo sensor)
- Detectable by only stand-alone camera through wide area (LSC)
- On-line interference check function (bin-picking)

3D sensor lineup [Kawasaki Original Equipments]

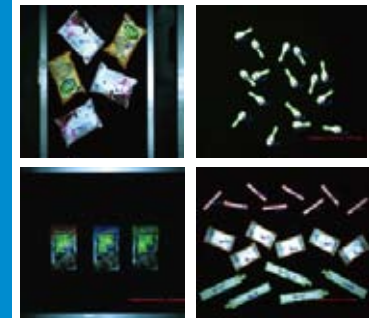
Name	3D laser sensor	Stereo sensor	Laser slit scan camera (LSC)
	Narrow view	Middle view	Wide view
Externals			
Feature	Hole center, space difference, and gap measurement (Gray image)	3D-measurement of registration pattern (Gray image)	High density 3D-measurement of work area (Distance image)
Usage	Measurement, inspection, Position correction	Parts picking, Position correction	Bin-picking, Environment recognition (interference avoidance)

Application

High-speed picking



① Pattern matching

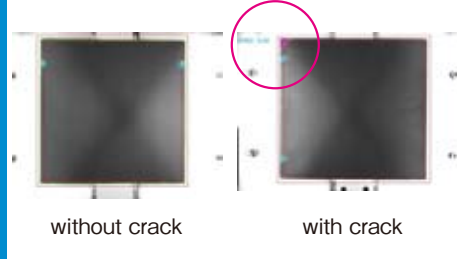


② Binarization



Inspection

Crack inspection for glass plate



Discrimination of items

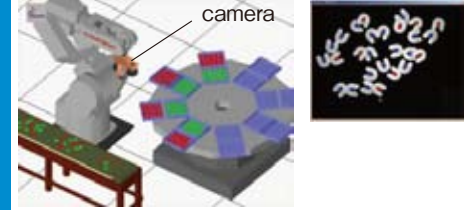
Character recognition QR-code recognition



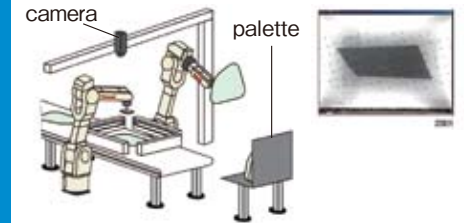
bar-code recognition



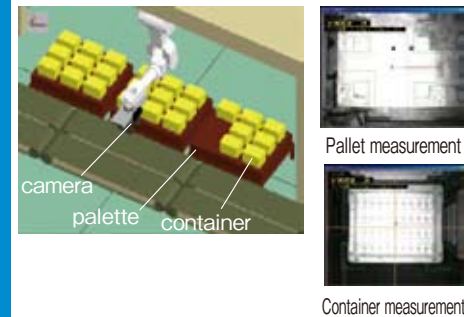
Alignment of various shape's object



Glass picking

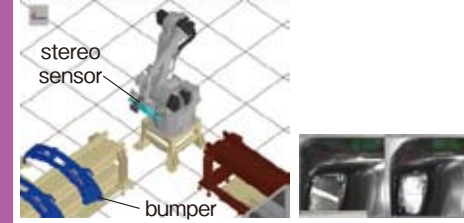


Palletizing and de-palletizing

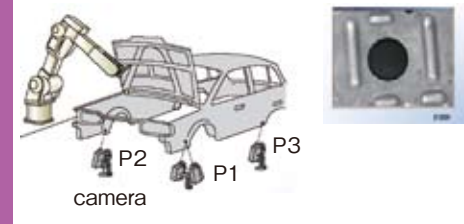


Application

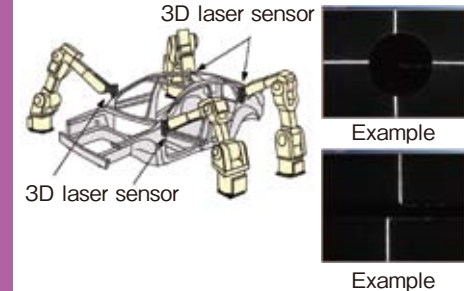
Bumper picking system Stereo sensor



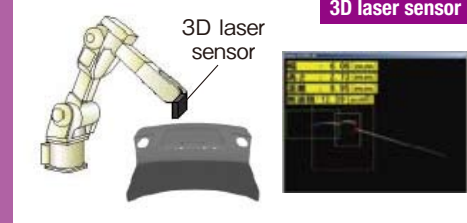
Sealing system Multi cameras



Body inspection 3D laser sensor



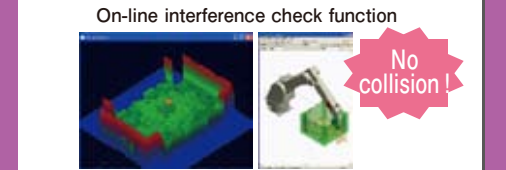
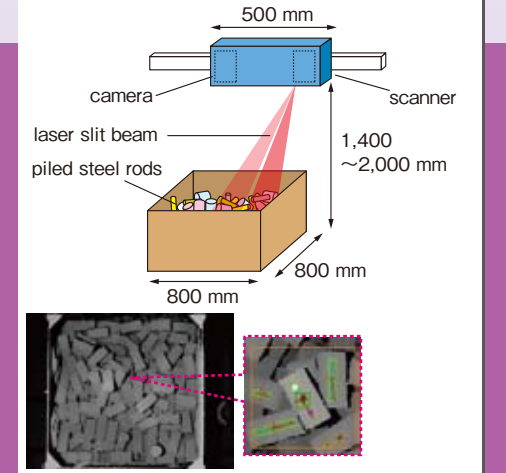
Sealing material inspection system 3D laser sensor



Seal material coating Stereo cameras



Steel rods bin-picking LSC (standard)



De-palletizing system for bags LSC (wide)

