



Kawasaki Robot e-News is an electronic bimonthly newsletter that provides our customers with useful information on robotics.

New Year's Message



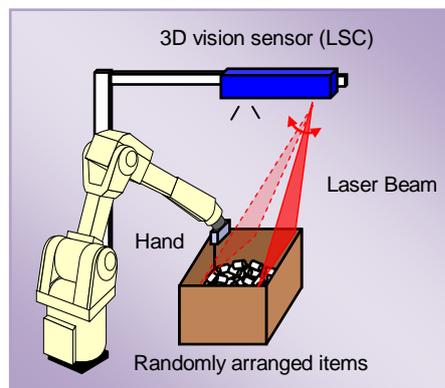
Happy New Year to you all!
 The end of 2012 witnessed a change in leadership in many countries around the world. One of these nations was Japan, which elected a new government in December. At Kawasaki, we share the same desire all of you hold for peace and prosperity around the world.
 The global economy remains unstable, and labor costs are on the rise in countries across Asia. These conditions have fueled the steady growth in demand for robots, and all around the world robots are being introduced to industries in which production is not yet fully automated and streamlined.
 Moving into 2013, Kawasaki will continue responding to these global trends by providing robot products and systems which satisfy the individual needs of users in different countries.
 We wish you all the best and look forward to serving you in the new year.

Laser Slit Scan Camera (LSC)

The laser slit scan camera (LSC) is a 3D vision sensor that can recognize objects in 3D, making it ideal for the automatic picking of randomly arranged items. LSC processes distance images in which height data is represented by gray values. It employs an active method which projects a slit beam of light from a semiconductor laser to obtain a distance image. Unlike a stereo camera and other cameras which use passive methods, the LSC can obtain the height data of an object* with no visible pattern or outline on a flat or curved surface. In addition, the LSC can stably obtain images even when changes in the ambient light or material surface reflectance occur. It is equipped with a motor which moves the mirror to scan a laser slit beam and measure large containers (W 800×D 800×H 600 mm) within a wide area in one single sweep. *(Cylindrical objects only)



Item	Specifications
Working distance (mm)	1,400 to 2,000
Measurement area (mm)	800 (W)×800 (D)×600 (H)
Laser class	Class 3R
Dimension (mm)	610 (W)×125 (D)×125 (H)
Weight (kg)	Approx. 4.8



Compact Controller

Kawasaki recently released the "E9*", a new small controller designed for used with the "picKstar YF03N", a high-speed picking robot. While the "YF03N" was originally controlled by the "E20", "E30", and "E40", the new "E9*" is much more compact than existing controllers (approx.1/3 the volume for "E20", approx.1/5 the volume for "E30", "E40"). It has a width of 500 mm, a height of 268 mm, and a depth of 580 mm. This compact size enables it to be installed vertically or horizontally in practically any location, such as under a conveyor or on an arm mount rack. The new "E9*" controller is equipped with a newly-developed, large-capacity, compact power unit that can accept power from a single phase 200V input, enabling the "YF03N" to accelerate rapidly. Functional safety technologies are employed that eliminate the need for electromagnetic contactors, thereby making the product more reliable. The "E9*" controller can also be used with the "YS02N", the new picKstar model, to provide the production line with more flexibility and help save space.

