

2015 FLEX IML Vision Inspection

Vision part

Project date | 2015.06

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Specification

Vision System FH Series
 Industry's Fastest Compact Vision System

The Fastest **FH**

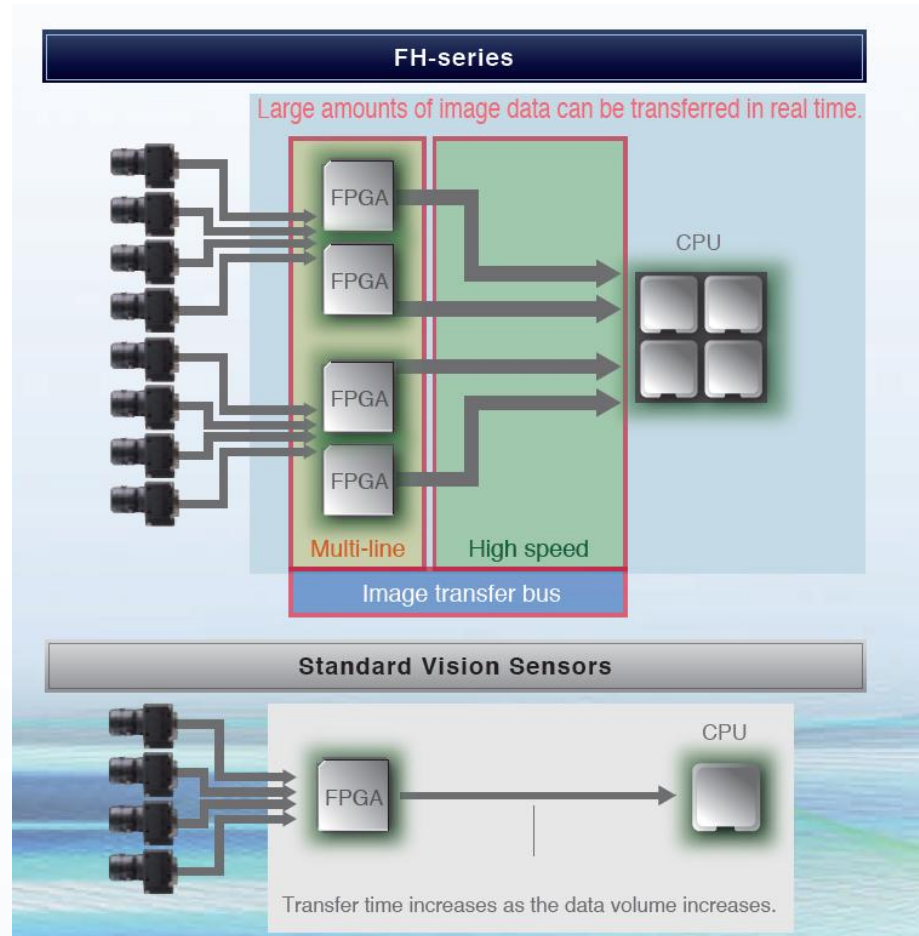
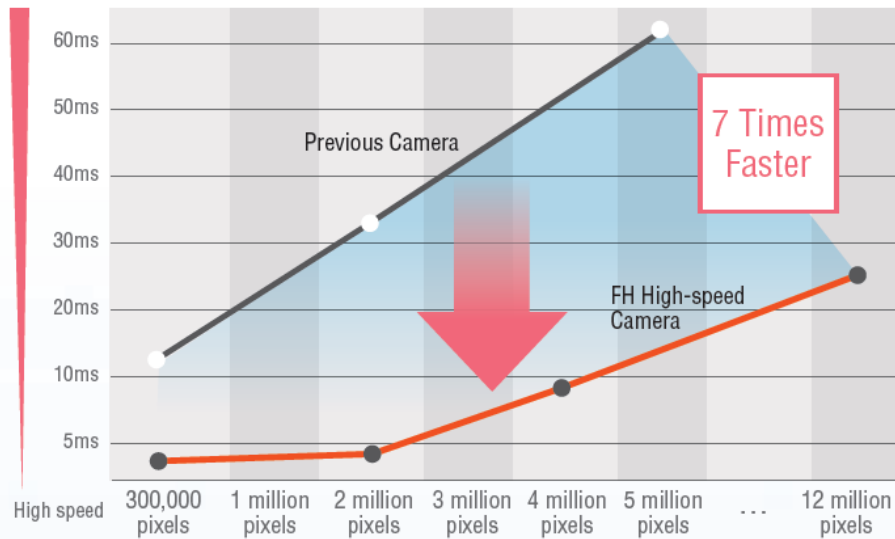
» Easy to Integrate in Machines
 » Increase Machine Speed
 » Perform High-precision Machine Operation



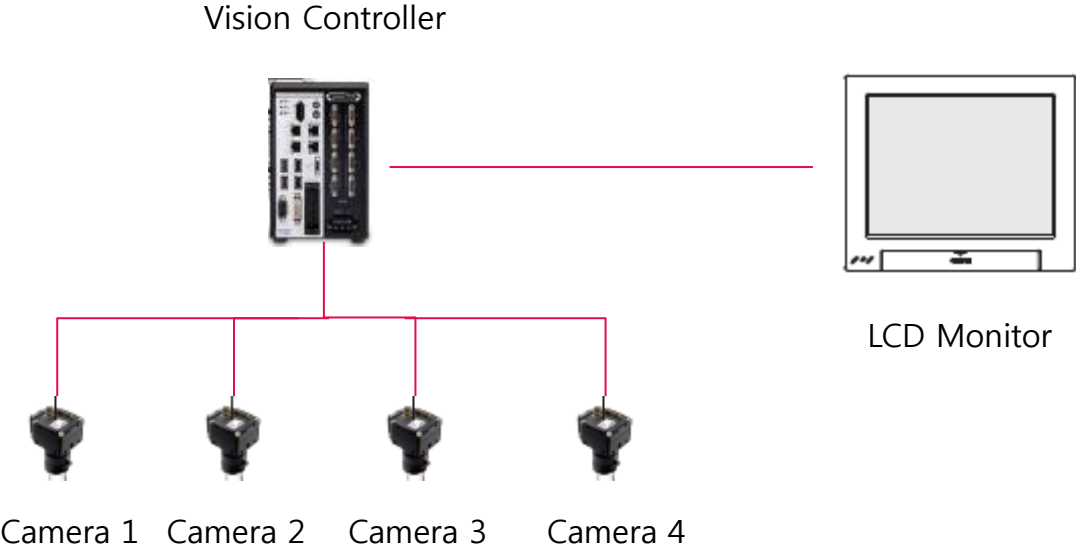
Specification

High-speed Image Input **Fastest: 3.3 ms**

Camera resolution, driven by higher expectations for quality, continues to increase. OMRON has greatly reduced the input time and image transfer time to provide high-speed processing to match the speed of Machine applications for high-resolution images. Even with more Cameras and higher resolution, high-speed image input will contribute to increasing throughput.

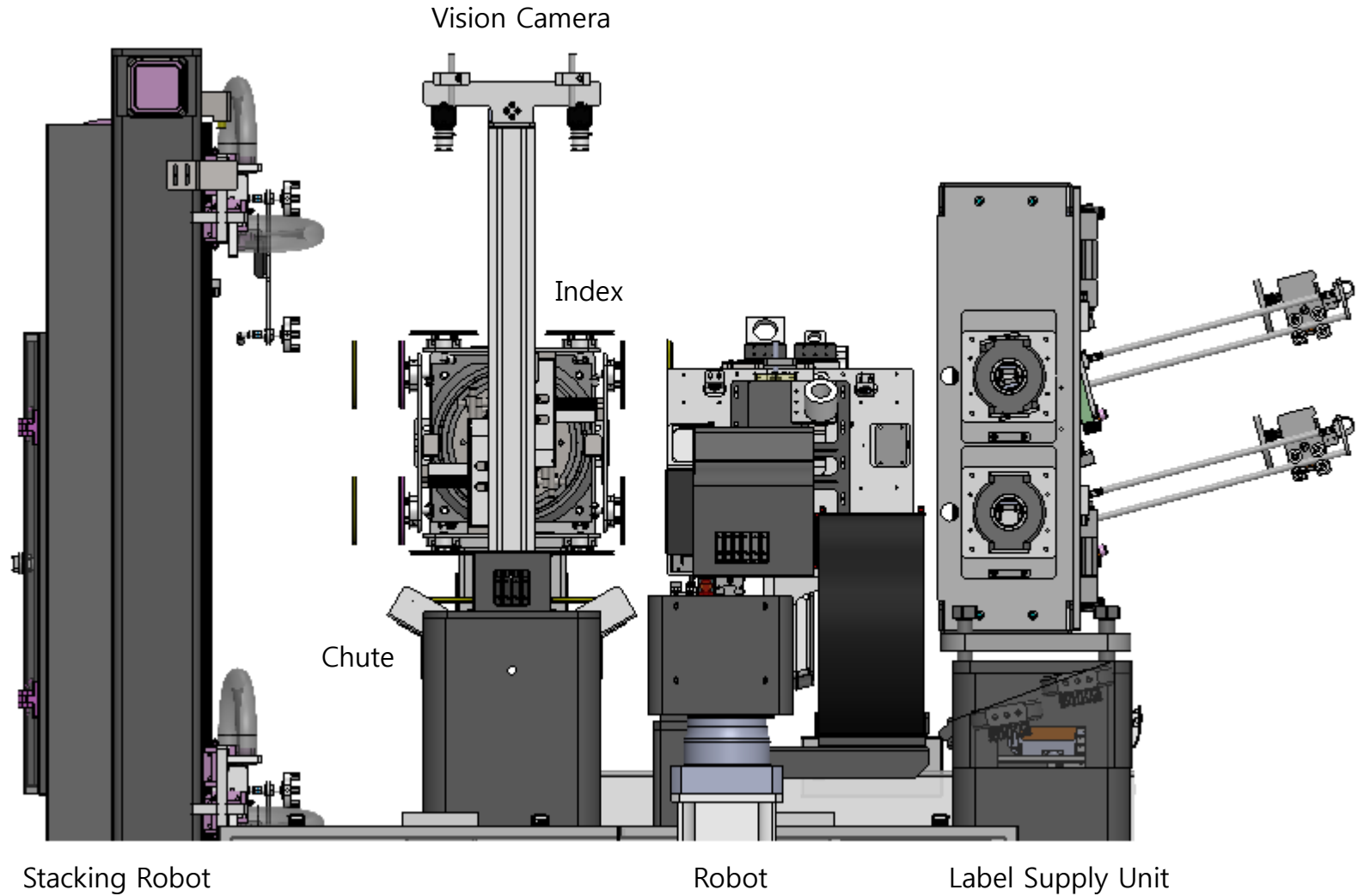


Composition

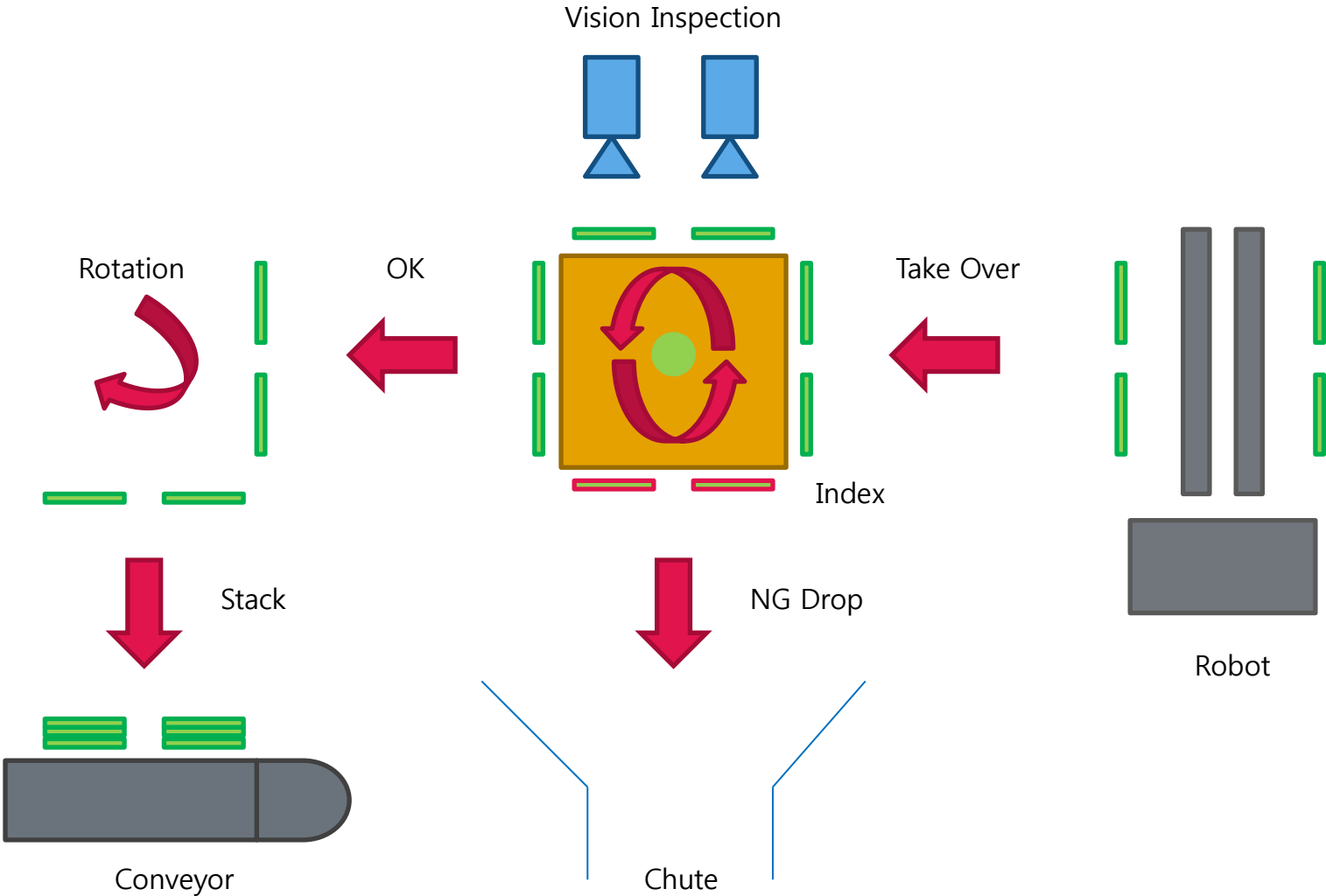


1 Controller / 4 Cameras System

Composition



Process



Inspection Point

Processing Item	Description
Fine Matching	Difference can be detected by overlapping and comparing (matching) registered fine images with input images.
Character Inspect	Recognize character according correlation search with model image registered in [Model Dictionary].
2DCode	Recognize 2D code and display where the code quality is poor.
Barcode	Recognize barcode, verify and output decoded characters.
Circular Scan Edge Position	Measure center axis, diameter and radius of circular workpieces.
Search	Used to identify the shapes and calculate the position of measurement objects.
Flexible Search	Recognizing the shapes of workpieces with variation and detecting their positions.
Defect	Used for appearance measurement of plain-color measurement objects such as defects, stains and burrs. (max 0.2mm)
Color Data	Used for detecting presence and mixed varieties of products by using color average and deviation.