

Suggestion of Machine Vision System for Alignment

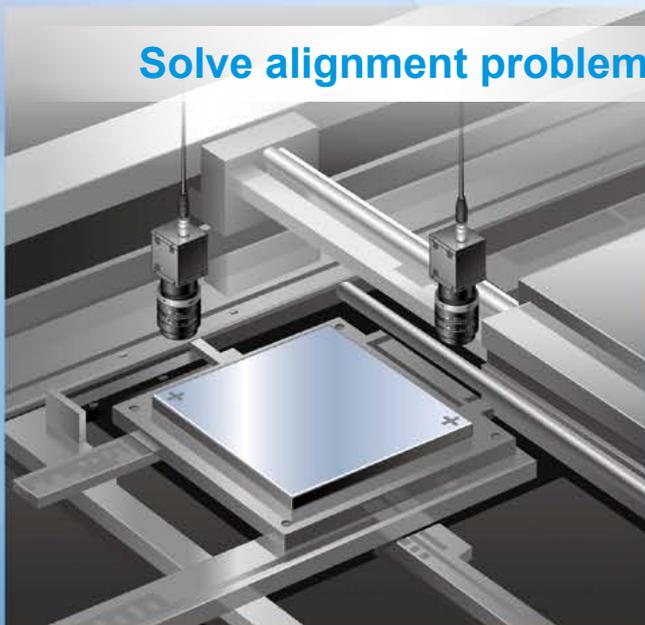
Suggestion 1 Auto calibration function

Suggestion 2 Calibration graphics

Suggestion 3 Alignment simulation function [PC setup software]

Suggestion 4 Sample setting data

Solve alignment problems



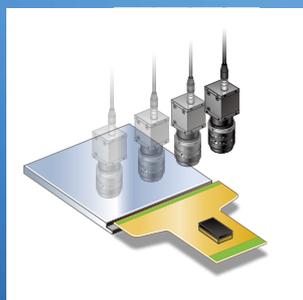
Supported stages: UVW, XYθ, Xθ, XθY and YθX (also supports Line θ)

Application examples

Applying LCD and film

Crimping LCD and film boards

IC tray positioning



System configuration example

- PV240 IMAGECHECKER
Controller unit:
ANPV0242ADP
- 2M grey digital camera:
ANPVC1210
- Keypad 3 m 9.843 ft type:
ANVP03
- XGA monitor 10.4 inches:
ANPVM11021

*In addition to the above, digital cameras, keypads, lenses and cables are available. Please consult us for further information.

Auto calibration function

The alignment mark is captured and the coordinates of the camera and stage are automatically calibrated.

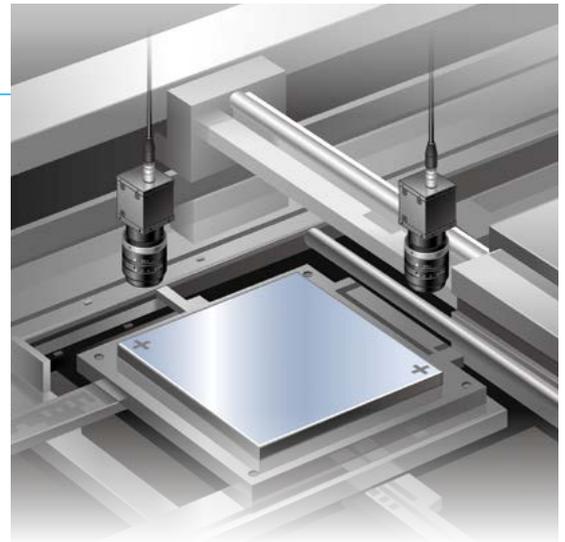
[Setting procedure]

- 1 **Calibration setting**
 - Stage setting • Mark setting
 - 2 **Using auto calibration function**
 - *The coordinates of camera and stage are automatically calibrated.
- Calibration complete

Settings are easy by using the sample setting data!
*Can be downloaded from our website.

No troublesome settings and calculations!

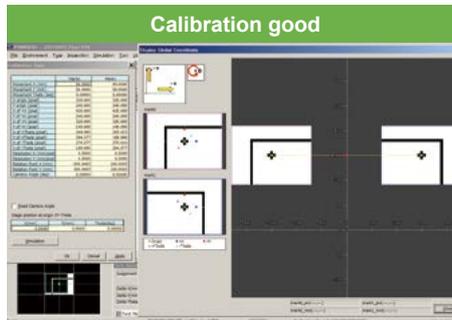
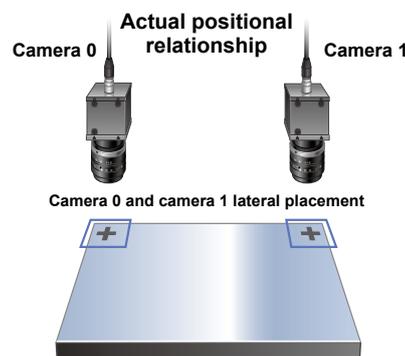
» The difference in two camera views and flexible camera attachment (rotation and tilt) also supported.



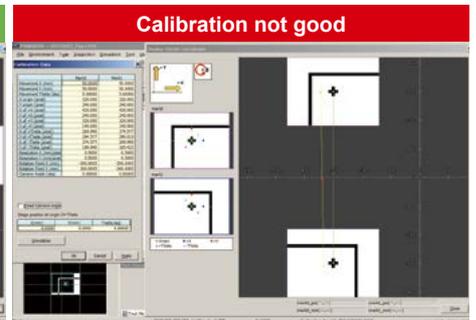
Calibration graphics

Auto calibration result can be verified visually.

Easy to verify whether or not calibration was performed accurately, one of the factors for alignment problems.



Auto calibration result: Lateral placement same as actual positional relationship



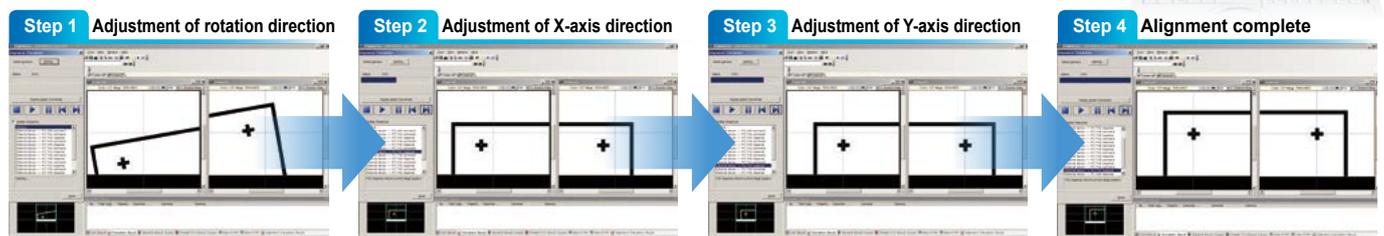
Auto calibration result: Vertical placement different from actual positional relationship

Alignment simulation function [PC setup software]

*PC setup software can be downloaded from our website.

Alignment operation can be replicated on a PC.

The operation can be verified in stages through simulation that splits the alignment operation into 4 steps.



» In the event of a problem, as long as you have an image, you can use the PC setup software to check the alignment operation at your desk. This is convenient for determining the location of the source of the problem.

» By being able to check the output values, you can tell whether the problem is caused by image processing or whether it originates in the device.

Sample setting data

*Sample setting data can be downloaded from our website.

Sample setting data saved with basic alignment conditions is available.

Default settings are easily created by changing conditions such as the marks used by the user.