

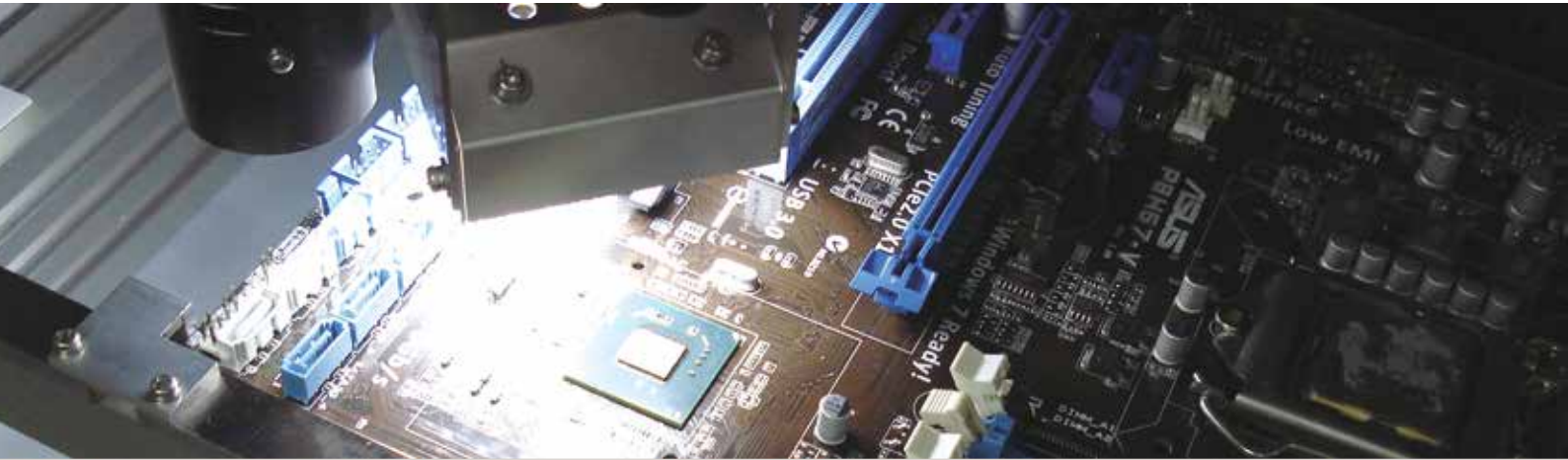
Visual Inspection
Support Machine
neoview



Prevent overlooking by cooperation between human and robot

Visual inspection with a microscope does not achieve **Z**

Neoview has two cameras that make you observe a target location from top and angled views.



Neoview series

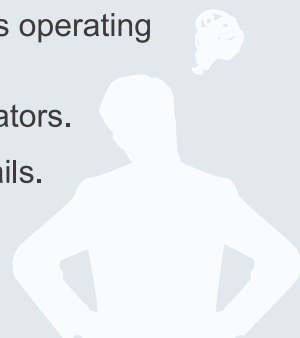


■Reducing labor costs

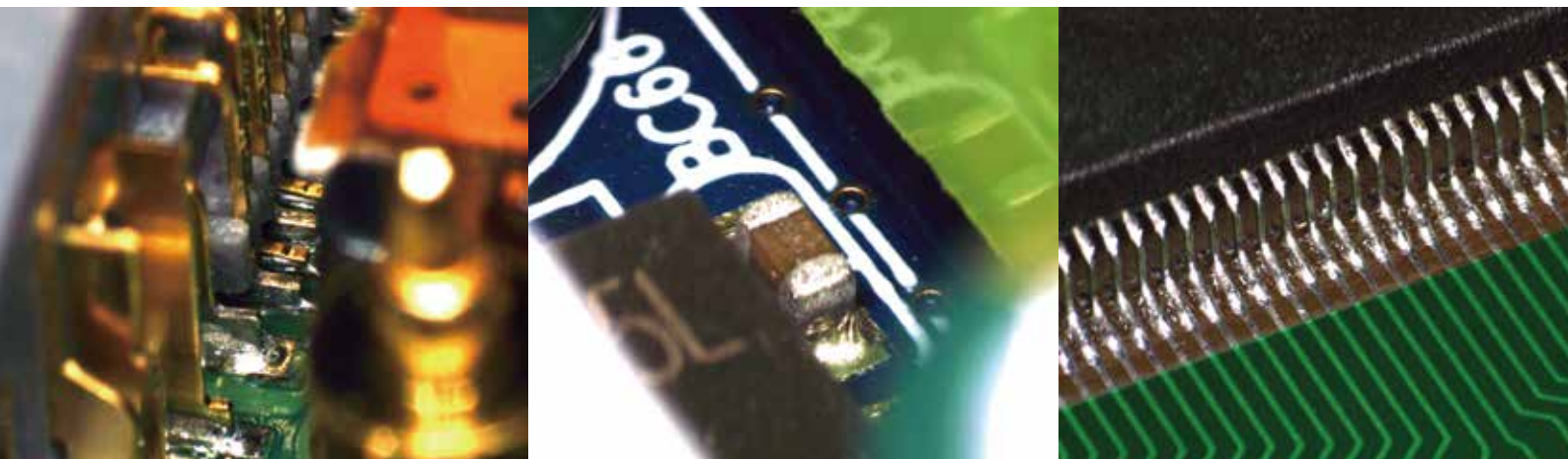
The multi-control function allows operating multiple lines by one operator.

It induces the reduction of operators.

→Refer to page 6 for more details.



ero defect overlooking.



Neoview's distinctive technologies realize advanced visual inspection.

■Improving the quality and efficiency of visual inspection

Neoview eliminates impossibility, unevenness and waste of visual inspection. Easy operation improves inspection quality.

→Refer to page 4 for more details.

■Guaranteed traceability

The inspection results are recorded together with images. Traceability can be guaranteed with minute data.

→Refer to page 5 for more details.



■Linking with various kinds of AOIs.

Neoview is leading the industry on the number of linkable AOIs. It is trustworthy for future changes of AOI.

→Refer to page 8 for more details.

■Numerous installation records

Here are examples of effects after installation.
→Refer to page 9 for more details.

Double-Camera Observation

Neoview has top and angled cameras to observe a variety of components.

*High-definition camera unit

*Cameras smoothly turn 360 degrees.



Image of top camera

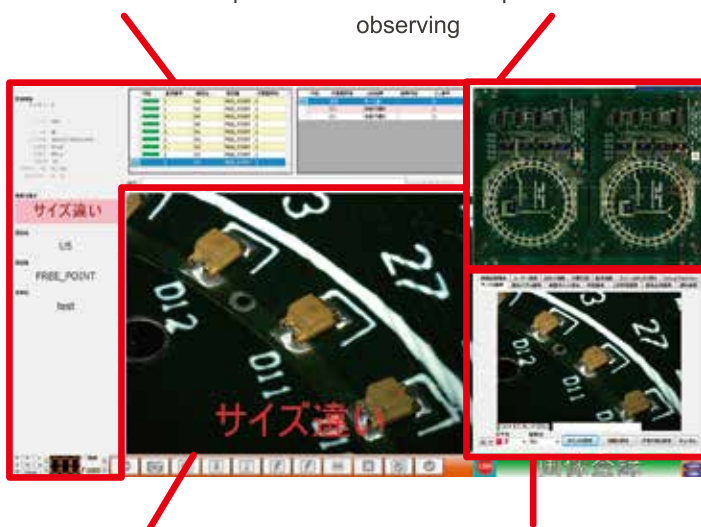


Image of angled camera

Screen Structure

Information about defective components

A location map that shows where you are observing

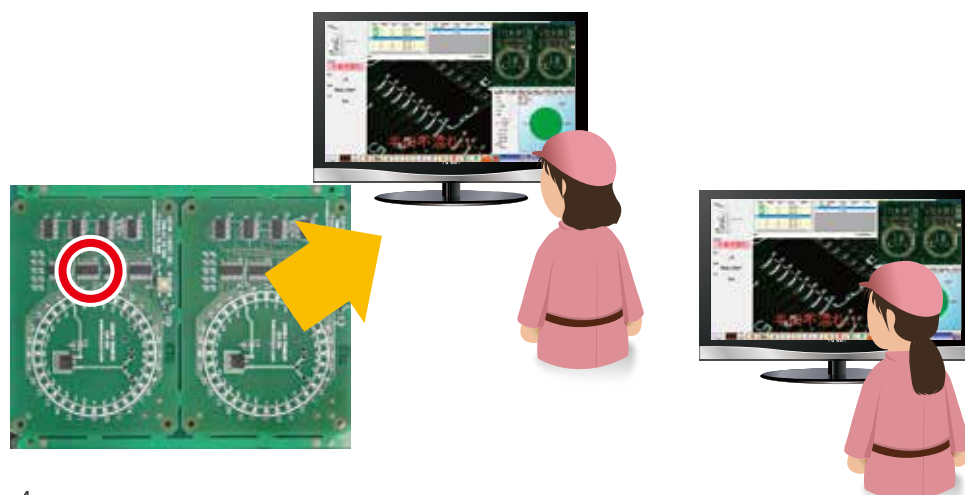


Zoomed in image of observing on a PCB

Sample image

Improve Inspection Quality

The quality of the visual check task depends on the ability of each personnel and is difficult to keep constant. Neoview levels the ability of each personnel by making the process of the visual check task simple and uniform.



Easy Operation

STEP 1

Input a production ID.



STEP 2

Set a PCB.



STEP 3

Observe a location of warning.



STEP 4

Press a result-input button.



Inspection has been completed.

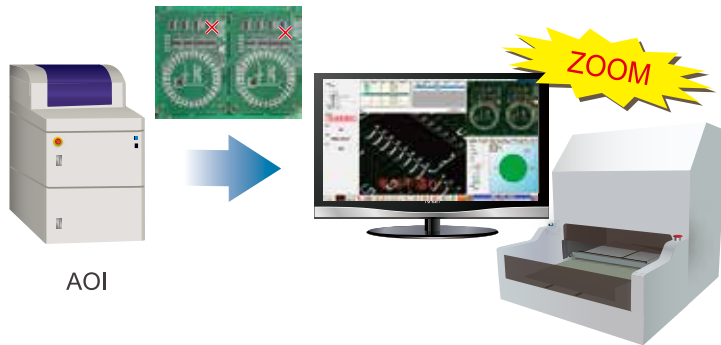


Inspection results are stored automatically.



Prevention of Overlooking

When the AOI detects a problem, the Neoview zooms into the location. The video is sent to a monitor automatically in order to prevent overlooking. All the operator needs to do is keep their eyes on the monitor and press a result-input button.



Store Inspection Data to Ensure Traceability

Inspection results with camera images are automatically stored on a PC. You can ensure traceability of product quality since stored results include the information when it was checked, who checked it, what was observed, and how it was judged.



Less Operation for the Best View

The learning feature, which Neoview introduced to the world, became the standard feature of visual inspection support machines. Moreover, Neoview has "Automatic camera view control" feature that optimizes the angle of cameras to obtain the best view for each type of AOI warning without any user operation.

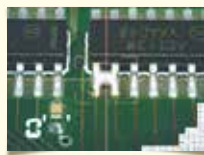
■"Quadrant angle" view control

displays defective area diagonally.
It is effective for "lifting" confirmation.



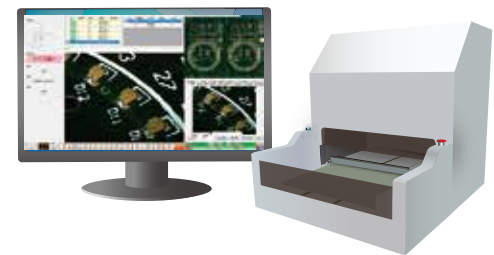
■"Pin confrontation" view control

faces defective area to the front.
It is effective for "short-circuited pin" confirmation.



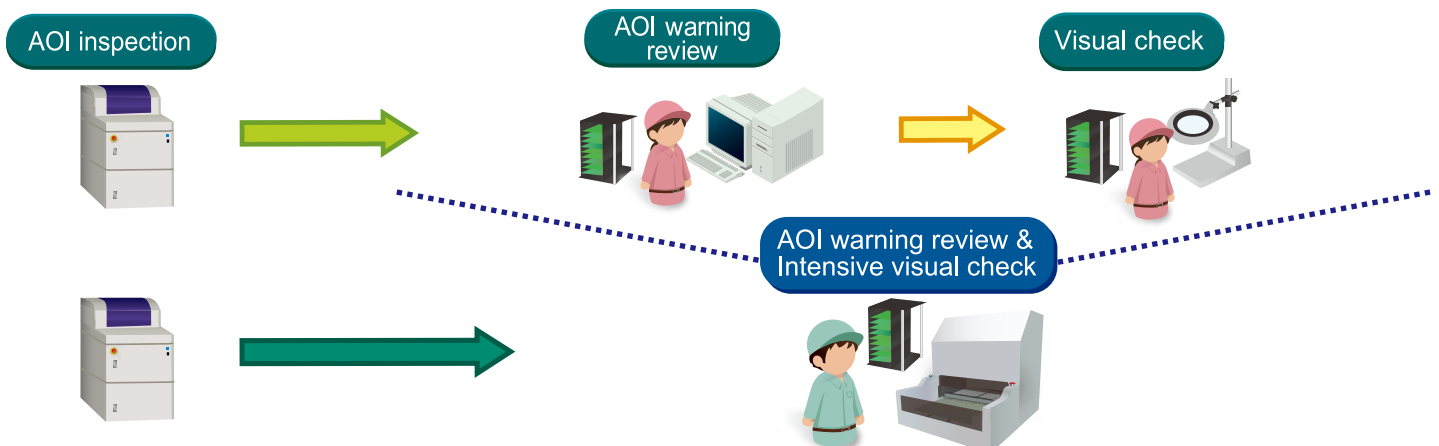
When the camera view angle is changed manually, Neoview's learning feature memorizes the camera view angle and reproduces it next time.

■Learning feature



Intensive Visual Check

You can add inspection points, where operators must check regardless of AOI warnings, as needed. Neoview shows added points after checking all AOI warnings in one process.



A multi-control function that increases inspection efficiency with fewer operators (optional feature)

The visual inspection support machine so far was able to operate only one machine by one operator, and the number of operators as same as one of machines is required for operation.

The multi-control function overturns this common sense, and it is possible to operate a multiple machines by one person.

Furthermore, since the workload of each operator is appropriately distributed, waiting time during visual inspection is minimized, which leads to cost reduction.

Overview of Multi-control Function

No multi-control function



An operator operates one machine.

As AOI judges as pass continuously, an operator keeps on waiting.

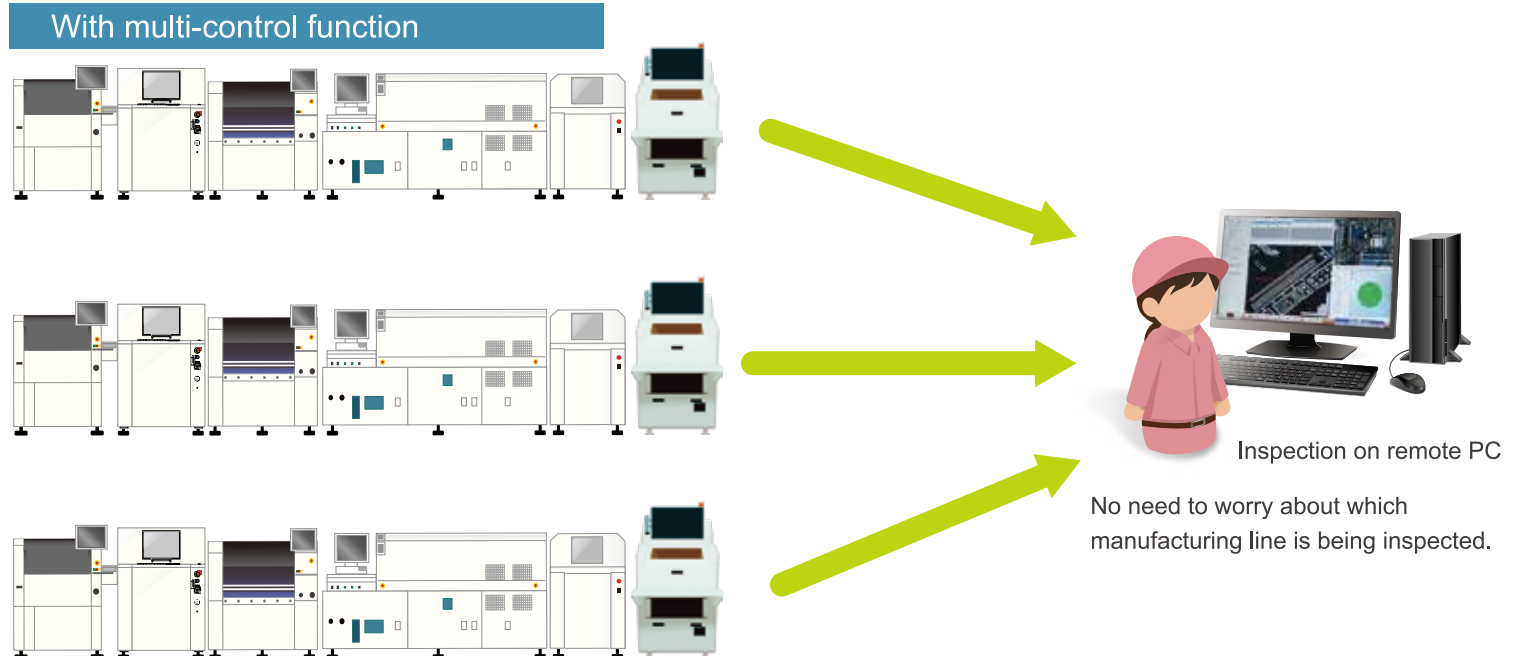


A single operator can operate multiple machines.

Images from multiple machines can be observed with one remote PC.

Since it can be inspected at a remote place via the network, there is no need to stand in front of each machine. There is no need to worry about which manufacturing line is being inspected.

With multi-control function



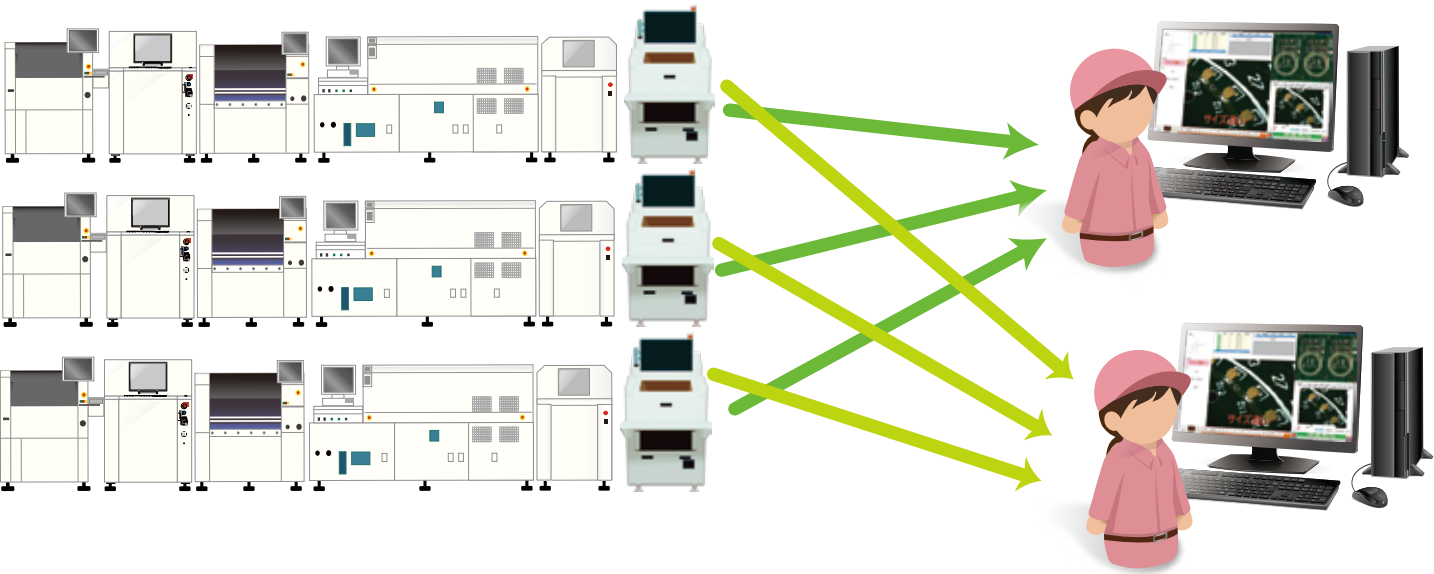
Observing with the Best View

Even after introducing the multi-control function, its usability is the same as operating one machine.

You can rotate and zoom the image as if you are controlling one machine.

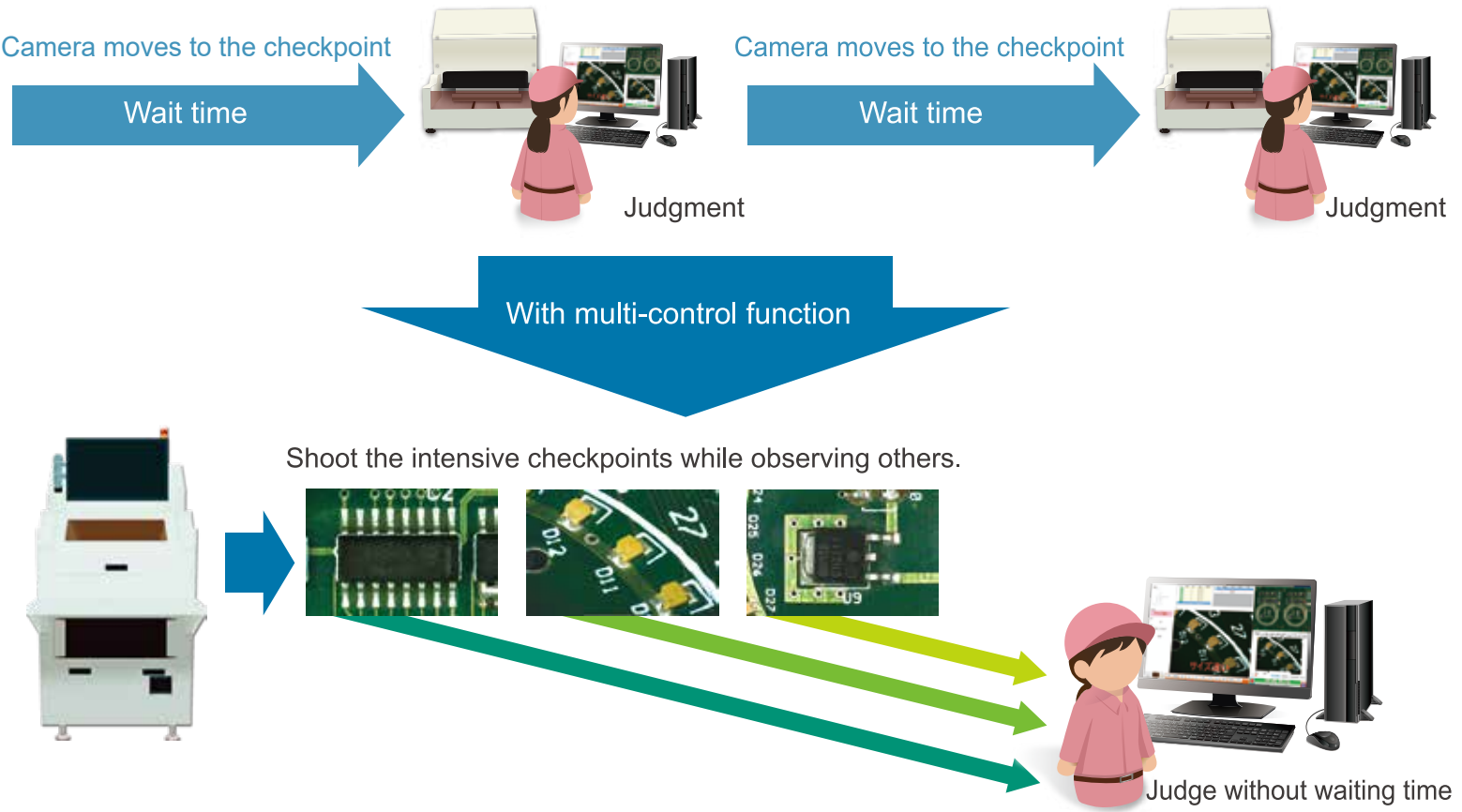
Distributing the Workload of Each Operator

The workload on an operator varies because of lines with excessive false judgment of AOI and lines with large volume in production, which depend on the product to be manufactured and the line configuration. As a result, efficiency management of operators was not easy. The multi-control function distributes the workload to multiple operators and prevents work from concentrating on specific operators. In addition, it is also possible to set conditions according to the operation, such as limiting the inspection of specified products to specific operators.



Confirming Intensive Checkpoint with Still Images

With the multi-control function, the inspection time of intensive checkpoint can be kept to a minimum. Still images for intensive checkpoints are taken continuously in advance without the interaction of an operator. It is; therefore, not necessary to wait until the camera moves and displays the next checkpoint. If you cannot judge with a still image, you can observe the checkpoint by rotating and zooming the image as usual.



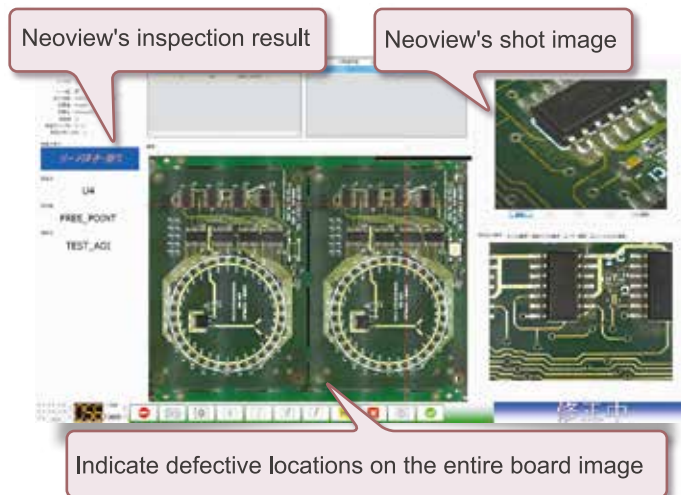
Rework quickly by linking with Neoview! Neoview Rework (option)

Neoview Rework is software that assists PCB rework task by utilizing the results of visual inspection with Neoview.

Since a judgement result and images of defective parts shot by Neoview are shown on the monitor, reworking on a PCB proceeds smoothly. You can also record contents of rework tasks.

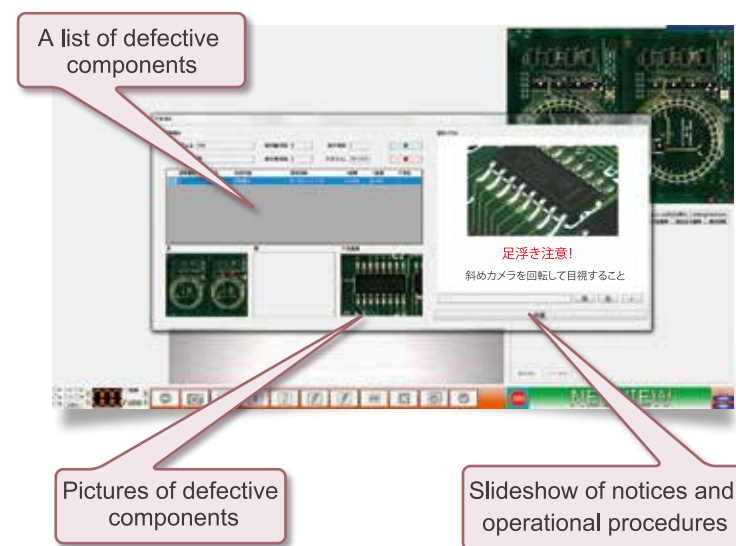
When you recheck a PCB that has been reworked with Neoview, the recheck result is recorded along with the reworked result.

By centrally managing the results of visual inspection and correction work, quality confirmation after product shipment can be performed quickly.



Various Simple and Easy-to-Use Functions

Customer opinion has improved Neoview's feature for more than a decade.



Standard features
Inspection results stored in a relational database(Max16TB)
AOI defect review feature
AOI defect review and intensive visual inspection in succession
Automatic camera view control
Camera view setting learning feature
Defective tendency display
Designated defect confirmation by manager
Past trouble warning
Laser pointer
Taking out PCB during inspection
Sample image display
Outputting inspection result in CSV, HTML, and XML
Picture taking feature
Optional features
AOI machine type license (Needed for each AOI machine type connected to Neoview)
AOI machine count license (Needed for each AOI machine connected to Neoview)
Rework task support software: Neoview Rework
Camera code reader

Linkable with AOI of Various Manufacturers

Saki Corporation	(Japan)	BF-3Di series (3D), 2D AOI (BF-Planet-XII, BF-FrontierII, BF-Comet)
Nagoya Electric Works	(Japan)	NVI-G300 (3D), NVI-FZH II, NVI-FXH II, NVI-D100, NLB-15000, NLB-7700
Yamaha Motor	(Japan)	YSi-V (3D), YSi-12
Panasonic	(Japan)	IP-121, IPKV3, IPKV2
JUKI	(Japan)	RV-2-3D
JUTZE	(PRC)	MD-2000, LD-2000, XD-2000, LI-2000, MI-3000, LI-5000
TRI /Test Research, Inc.	(Taiwan)	TR7700 SIII 3D, TR7500
Koh Young Technology	(South Korea)	Zenith (3D), Zenith Lite (3D)
PEMTRON CORP.	(South Korea)	EAGLE 3D-8800
Mirtec	(South Korea)	MV-7 OMNI (3D)
ViTrox	(Malaysia)	V810 (X-ray)

Neoview realizes quality improvement and cost reduction by linking with AOI. We are endorsed by customers at manufacturing sites such as automobiles, mobile phones and PCs. Only Neoview can connect so many AOIs from multiple manufacturers. In accordance with the customer's needs, many connecting functions are still under development.



Get quicker, higher AOI yield rates and zero defect overlooking.

Neoview drastically decreases the number of defect overlooking and also cuts expenses of countermeasures.

Effect 1 Reduce labor costs with multi-control function.

For customers who installed the multi-control function, 8 lines are supported by 3 operators and reduced the operators by 60%!

The installation cost was recovered by engaging the hands-free operators to the manufacturing site.

Effect 2 Zero overlooking defect and reducing the cost of countermeasure.

After installing a Neoview in a factory, which has an AOI, the number of defect overlooking was halved within a month. It also surprisingly decreased costs of countermeasures.

Effect 3 Reliable inspection environment even with a new AOI.

Neoview is capable of working with many kinds of AOIs. Neoview delivers a reliable inspection environment even if you have issues with a new AOI. In addition, QC-Aid, quality control support software*1, reveals quality information such as AOI's false alarm and defect ratio to make your quality control quicker and more effective.

*1 This software is optional.

Effect 4 Achieve higher AOI yield rates.

Neoview automatically keeps pictures of defective components as the operator performs a visual check.

Those images make an AOI's operator clearly realize what is causing those defects. By referring to those images, action to tune up and optimize AOI's inspection programs surprisingly becomes quicker and easier.

Effect 5 Improve inspection quality.

Operating Neoview is extremely simple.

All operators need to do is keep an eye on the monitor and press a result-input button.

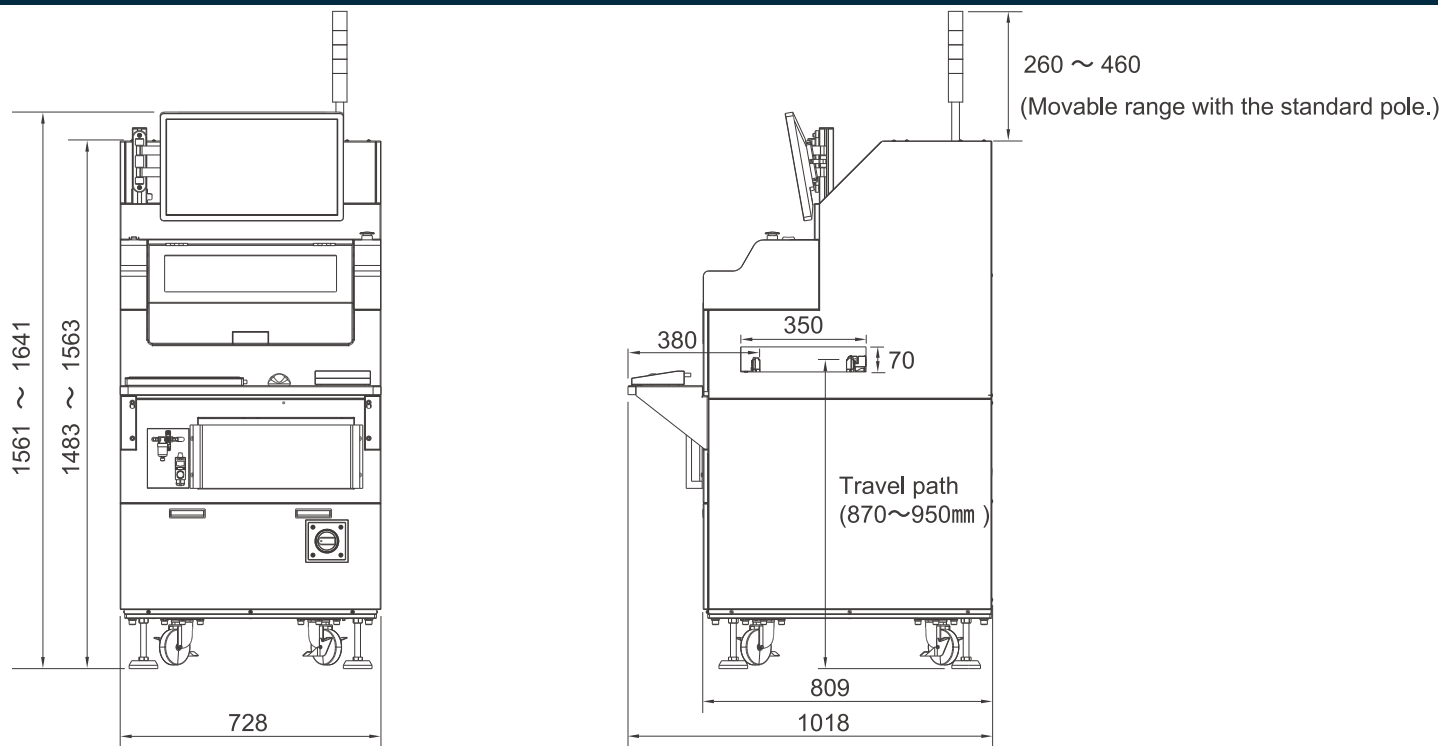
This simpleness delivers stable and reliable inspection processes to your inspection environment.

Effect 6 Store all inspection results with images and ensure product quality.

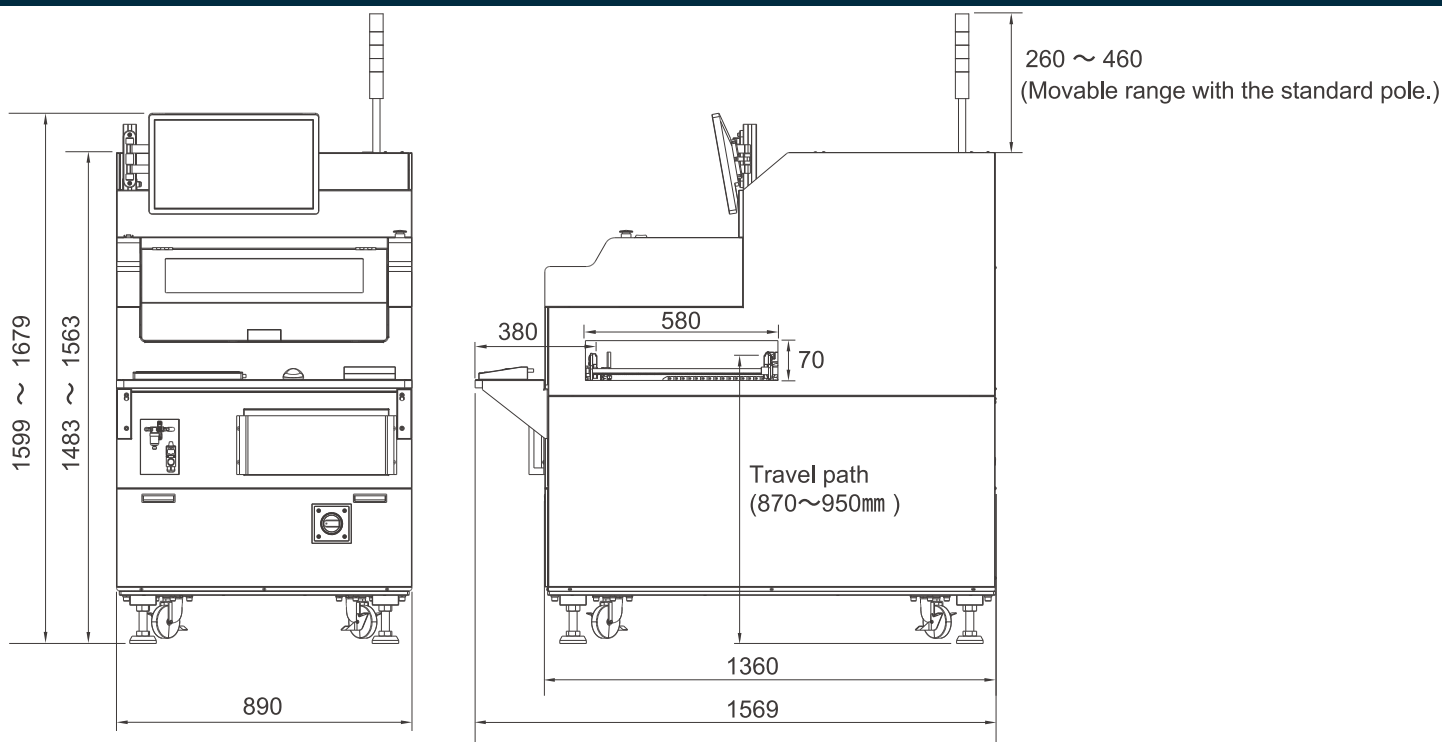
Neoview has a feature that automatically takes pictures of components without human operation. By taking pictures of components in trial production, machine operators can share defective information visually and perform countermeasures quickly.



NVS400LM2 • NVS500LM2



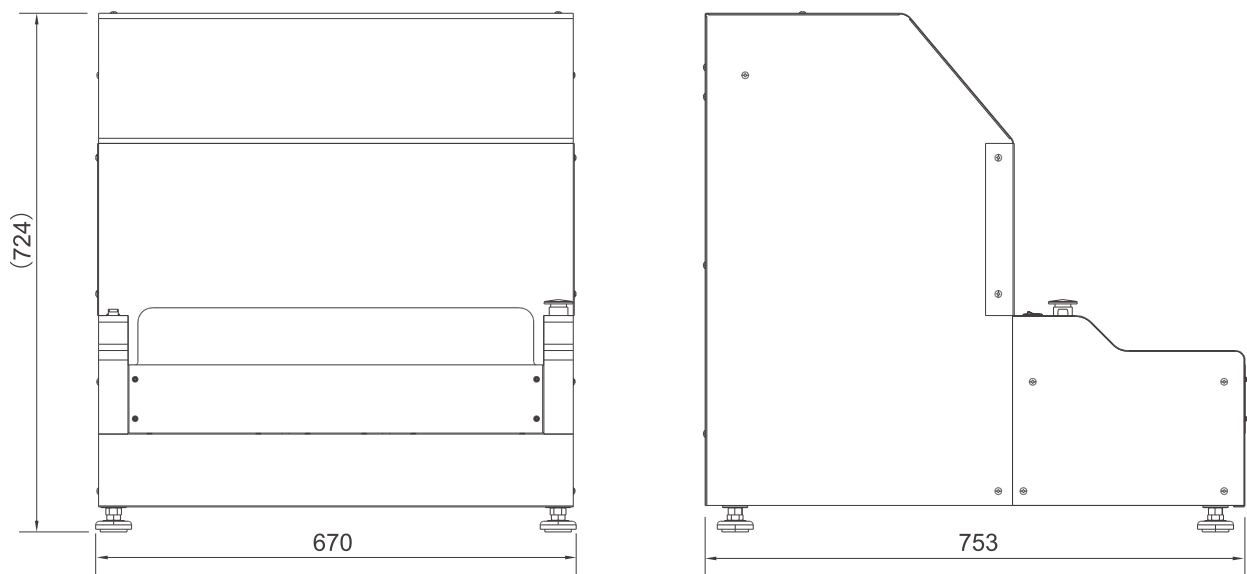
NVS400LL2 • NVS500LL2



Model	NVS400LM2	NVS400LL2	NVS500LM2	NVS500LL2
Inspectable PCB Size	50 x 50 ∼ 330 x 255 mm	50 x 50 ∼ 610 x 510 mm	50 x 50 ∼ 330 x 255 mm	50 x 50 ∼ 610 x 510 mm
Camera Clearance	28 mm (includes board thickness)			
Imaging Unit	1.5 Megapixel CCD Camera x 2		5.0 Megapixel CCD Camera x 2	
Magnification	Top : 13.5x Tilt : 15.2x ∼ 47.5x		Top : 9.7x Tilt : 20.8x	
FOV (Horizontal)	Top : 22.0mm Tilt : 6.5 ∼ 16.5mm		Top : 28.0 x 23.4mm Tilt : 13.0 x 10.9 mm	
Lighting Unit	White-LED (Software control)			
Inspection Data	Stored in a relational database (RDMS)			
Operating Environment	Temperature : 15 ∼ 35℃ RH : 20 ∼ 80%			
Air pressure	0.5 MPa			
Power Supply	100V ∼ 240V (400VA)			
External Dimensions *	W 728 x D 1018 x H 1591 mm	W 890 x D 1569 x H 1629 mm	W 728 x D 1018 x H 1591 mm	W 890 x D 1569 x H 1629 mm
Weight	230 Kg	400 Kg	230 Kg	400 Kg
OS	Windows Embedded Standard 7 64bit			
Standard equipment	Control PC,LCB monitor,Console box			

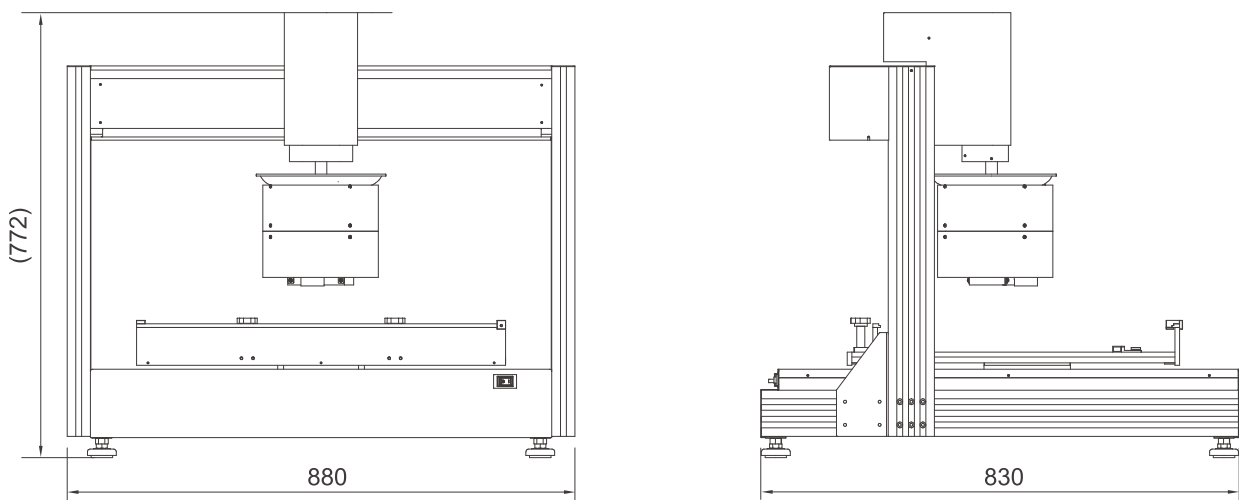
* Dimensions when the travel path is set to 900mm.

NVS400DM • NVS500DM



Model	NVS400DM		NVS500DM	
Inspectable PCB Size	50 x 50 ~ 330 x 255 mm			
Camera Clearance	28 mm (includes board thickness)			
Imaging Unit	1.5 Megapixel CCD Camera x 2		5.0 Megapixel CCD Camera x 2	
Magnification	Top : 13.5x	Tilt : 15.2 ~ 47.5x	Top : 9.7x	Tilt : 20.8x
FOV (Horizontal)	Top : 22.0mm	Tilt : 6.5 ~ 16.5mm	Top : 22.0mm	Tilt : 6.5 ~ 16.5mm
Lighting Unit	White-LED (Software control)			
Inspection Data	Stored in a relational database (RDMS)			
Operating Environment	Temperature : 15 ~ 35℃ RH : 20 ~ 80%			
Power Supply	100V ~ 240V (400VA)			
External Dimensions	W 670 x D 753 x H 724 ~ 747 mm			
Weight	80 Kg			
OS	Windows10 Pro 64-bit			
Standard equipment	Control PC,LCB monitor,Console box			

NVS400DL



Inspectable PCB Size	50 x 50 ~ 610 x 510mm
Camera Clearance	28 mm (includes board thickness)
Imaging Unit	1.5 Megapixel CCD Camera x 2
Magnification	Top : 13.5x Tilt : 15.2 ~ 47.5x
Lighting Unit	White-LED (Software control)
Inspection Data	Stored in a relational database (RDMS)
Operating Environment	Temperature : 15 ~ 35°C RH : 20 ~ 80%
Power Supply	100V ~ 240V (400VA)
External Dimensions	W 880 x D 830 x H 772 mm
Weight	85Kg
OS	Windows10 Pro 64-bit
Standard equipment	Control PC,LCB monitor,Console box

Visual Inspection Support Machine

neoview

Contact

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* Specifications are subject to change without notice.

* Patented. Please be aware of unauthorized copies and counterfeit items.