



Catálogo

VT-S730 PCB Inspection System





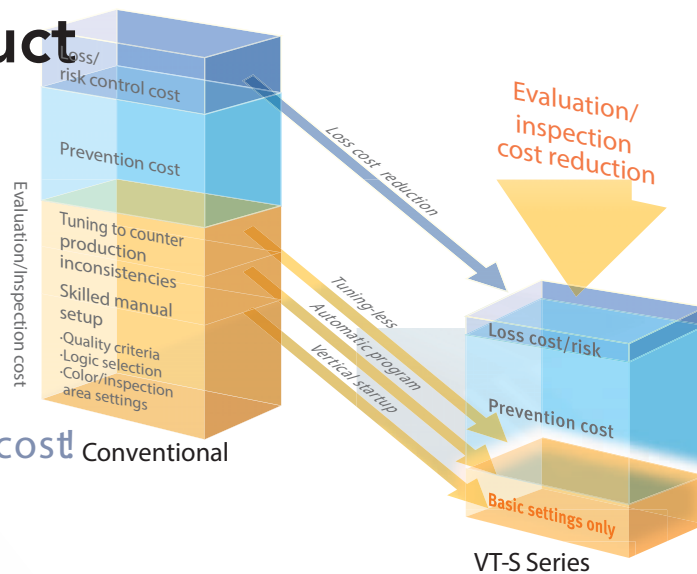
For Efficient Manufacturing Of High-Quality Products

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Improvement Cycle for High-quality Product Manufacturing

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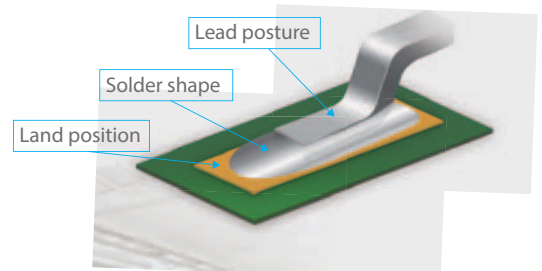
Best Quality@ the Minimum Q cost! Conventional

Detect

Ensure constrainfree design to meet the needs of the market for compact size and lightweight.

Define

Initiatives for quality control based on the same criteria between mother and satellite factories.





Process Control

Quality Management System Q-up Navi

Quality control during the PCB production process and efforts in process improvement with the post-reflow quality as the starting point are possible.

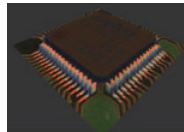
Pass rates and real fault rates can be checked in real time to swiftly manage quality issues.



• Quality/production control screen



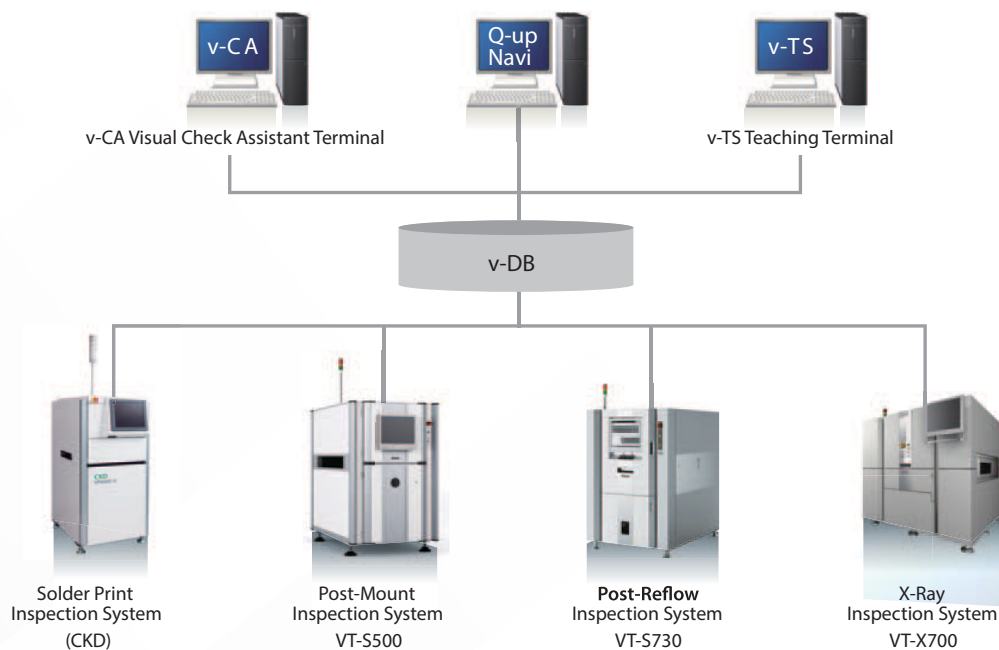
Supports
3D model display



• Process comparison Patent No.3994925



• Analysis function
Shows real faults and false alarms in Pareto chart



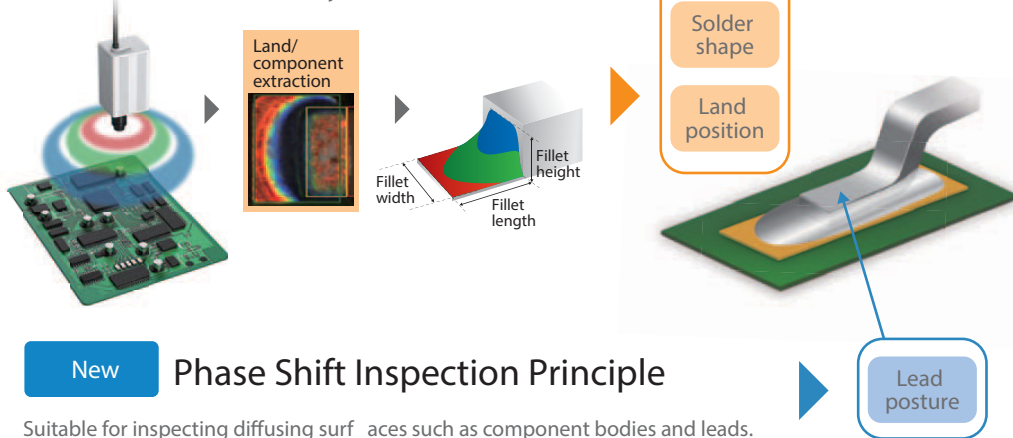
* v-DB compatibility with the X700 is currently under development.

Technologies Supporting 3D-SJI Patent Pending



Omron's Unique Technology TM Color Highlight 3D Shape Reconstruction

Uses an optimal principle enabling a stable inspection of the reflection surface such as a solder joint.



New Phase Shift Inspection Principle

Suitable for inspecting diffusing surfaces such as component bodies and leads. Defects characteristic to component posture (lifted, tilted, etc.) can be easily detected.

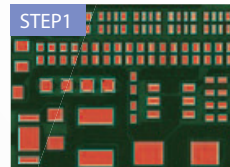
Omron's 3D-SJI can detect "Wettability error" with No lead lifting



Auto Generation of Inspection Programs

The vertical startup of inspection programs is possible thanks to the combination of the Color Highlight TM 3D shape reconstruction and phase-shift principle.

Land extraction



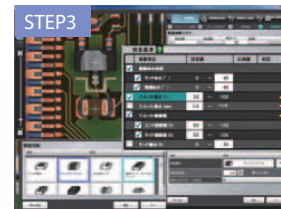
Automatically extracts land positions from a bare board; which makes operator need only check whether the individual window settings are correct or not.

Generation of component body windows

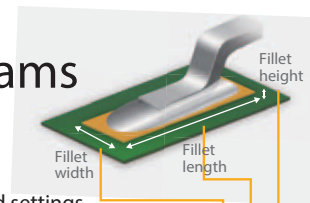


The use of height data eliminates the need of component color tuning, generating component body windows.

Threshold settings



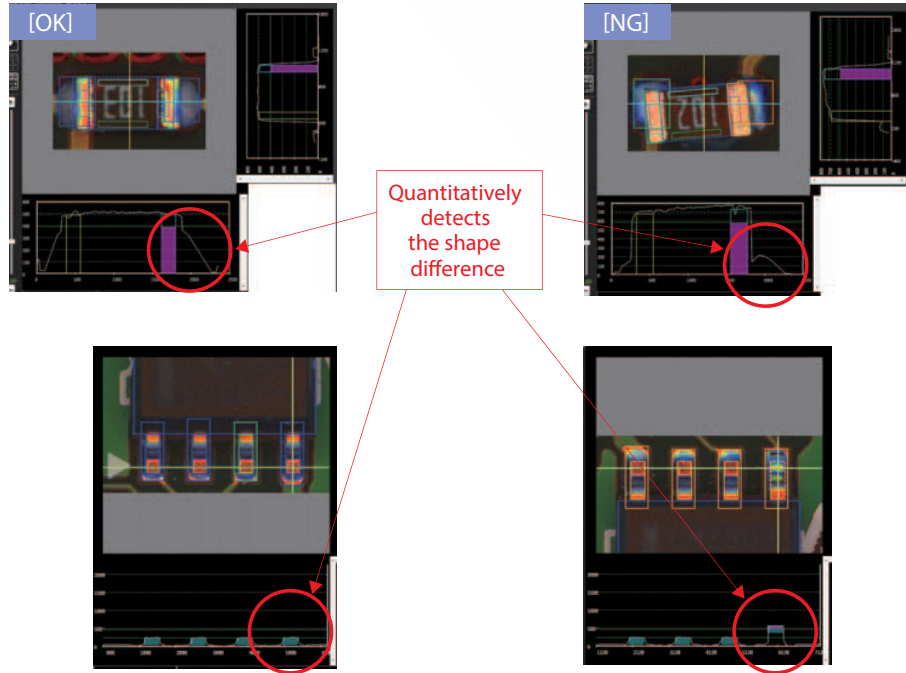
Quality control criteria can be directly set thanks to quantified solder shape data.



* Requires post-reflow PCB and mount data.

Quantitative Inspection

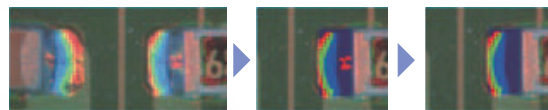
- Solder and component shapes can be measured



Stable Inspection

- Reduces the secondary reflection* and shadow interference

* Light reflection on adjacent components or solders



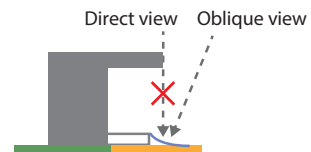
Secondary reflection image example

Conventional system

VT-S730

- Oblique viewing camera incorporated

Enables detecting solders under the components, which is physically undetectable from direct view



- Land position recognition and correction are performed for each individual image screen, enabling the detection of warped or expanded/contracted PCBs

