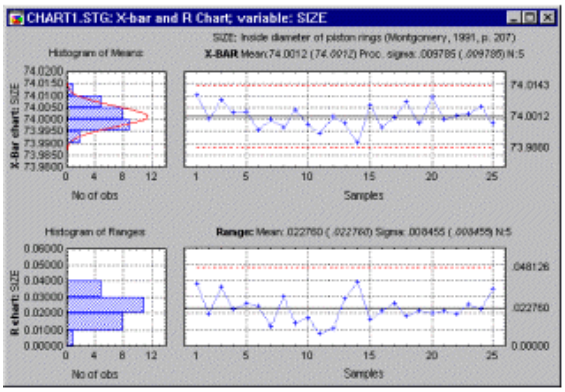
Vistron Electronics (US) Co., Ltd.
06 Mallo Center Queen-way, Suite 2230 Pleasanton, CA 94566 USA
Tel: +1 925.833.0000 Fax: +1 925.833.1090

Vistron Electronics Quality Control Procedure

General Purpose

In all production processes, we need to monitor the extent to which our products meet specifications. In the most general terms, there are two "enemies" of product quality: (1) deviations from target specifications, and (2) excessive variability around target specifications. the methods provided in *Quality Control* are *on-line* or *in-process* quality control procedures to monitor an on-going production process. For detailed descriptions of these charts and extensive annotated examples, Vistron Electronics provide very strong quality control procedure on the production we supply to our customer with RMA 30 days quality guarantee period of time under Vistron Electronics Quality COC agreement term.

General Approach



The general approach to on-line quality control is straightforward: We simply extract samples of a certain size from the ongoing production process. We then produce line charts of the variability in those samples, and consider their closeness to target specifications. If a trend emerges in those lines, or if samples fall outside pre-specified limits, then we declare the process to be out of control and take action to find the cause of the problem. These types of charts are sometimes also referred to as Vistron Electronics quality control charts which is generally credited as being the first position to solve it.

Process Capability Indices

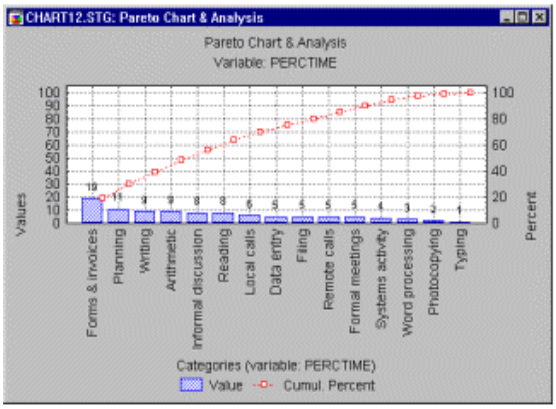
For variable control charts, it is often desired to include so-called *process capability* indices in the summary graph. In short, process capability indices express (as a ratio) the proportion of parts or items produced by the current process that fall within user-specified limits (e.g., engineering tolerances).

For example, the so-called Cp index is computed as:

C_p = (USL-LSL)/(6*sigma)

where *sigma* is the estimated process standard deviation, and *USL* and *LSL* are the upper and lower specification (engineering) limits, respectively. If the distribution of the respective quality characteristic or variable (e.g., size of piston rings) is normal, and the process is perfectly centered (i.e., the mean is equal to the design center), then this index can be

interpreted as the proportion of the range of the standard normal curve (the process width) that falls within the engineering specification limits. If the process is not centered, an adjusted index C_{pk} is used instead. For a "capable" process, the C_p index should be greater than 1, that is, the specification limits would be larger than *6* times the *sigma* limits, so that over 99% of all items or parts produced could be expected to fall inside the acceptable engineering specifications. For a detailed discussion of this and other indices, refer to *Process Analysis.*



which simply amounts to a histogram showing the distribution of the quality loss (e.g., dollar loss) across some meaningful categories; usually, the categories are sorted into descending order of importance (frequency, dollar amounts, etc.). Very often, this chart provides useful guidance as to where to direct quality improvement efforts.

● Responsibility

Vistron Electronics to test and troubleshoot the electronic component and other electronic components to the component level, using oscilloscope, DVM's and other hand-held, visual and electronic test equipment. Performs standard testing processes on a variety of equipment and records results. Able to develop electronic test fixtures and writing Visual Basic software to automate testing, troubleshooting and diagnoses of electronics. Testing and evaluation of returned product for functionality and determine cause of failure through the use of volt-meters and ammeters. Determine disposition, conduct any possible repairs and develop detailed analysis for customer to returned product to prepare for resale. This position will provide technical support of engineering, new product development and on-going development projects including but not limited to test/evaluation/design/manufacture of products. Requires knowledge of electronic specific tests and testing equipment.

● Professional and experience quality control Team

• Requires an associate's degree AAS and 4-9 years of experience in the field or in a related area.
• Able to read schematics and understand analog and digital circuits.
• Able to use common test equipment: oscilloscopes, volt-meters, function gauges,

generators.

• Strong mechanical and electronic understanding, preferably with automation and fixturing development.

• Understanding of ISO 9000 product development standards a plus.

• Eexperience and judgment with a wide degree of creativity to plan and accomplish goals in a variety of tasks.

• Demonstrated organized approach for efficiency and ease of understanding; such as documentation standards and use of control tools.

• Ability to communicate effectively with customers is required.

• Strong attention to detail with excellent prioritization and follow up skills.

• Strong multi-tasking skills. Completes several concurrent tasks.

• Emphasizes personal and professional growth. Keeps knowledge and skills current.

• Ability to document and organize work activities so that other employees can understand the processes you have implemented. To be able to organize data in a manner that it can be located and understood by the team.

While performing the duties of this job, the employee is regularly required to use hands to finger, handle, or feel; reach with hands and arms, and talk or hear.

● Test in detailed

1. X-ray Scan for the hard component

Vistron Electronics operate the Faxitron X-ray Systems in testing instrumentation used by manufacturers of electronic components, semiconductors and printed circuit boards. A microfocus X-ray source providing X-ray magnification of inspection samples and several real-time X-ray imaging packages designed to provide the flexibility for meeting specific applications. It also has a modular design so owners can start with the standard film imaging cabinet and upgrade to real-time capability at any time.

Image acquisition is achieved through the use of an X-ray image intensifier device coupled with a high resolution CCD camera. Four different intensifier packages are offered with 9", 6", and 4" image areas. The magnification factor and image resolution will vary with intensifier selection. This high resolution video image is then analyzed with an image processing system and stored for later review. Inspection samples are orientated for optimum imaging to make sure the component is the same as the component sample from the original manufacture.

2. Running Testing

Vistron Electronics will used the multi-function electronics run test machine to determine the parameter of electronic component for the technical specification, resistance of materials in any environment. A test specimen in the form of a square-section bar with coplanar notches in each face at the center, is subjected to a static tensile load in a temperature-controlled environment, for example air, water, surfactant solution. The geometry of the specimen is such that plane strain conditions are obtained and brittle failure occurs under appropriate tensile load and temperature conditions. The time for this brittle failure to occur after loading is recorded.
Test method: Full Notch creep test—ISO 16770
Tensile creep ---ISO 899
Test of resistance to pull out of joins between polyethylene pressure pipes and fittings—ISO3501 ,High accuracy and stability.

3. Baking Machine for component moisture re-movement.

Vistron Electronics owns the hinge-with-bolt tunnel baking machine, which is outstanding in function, can make the mixture and baking process done automatically for the electronics component which is sensitive for moisture..
test for:
Adjusting range of wafer block thickness: 2.5mm-3.2mm
Demoulding method: automatic demoulding

Adjusting range of temperature: normal temperature to 180ºC
Temperature error: 1ºC
External dimensions (L*W*H): 8.5m*1.56m*2.4m
Others:
Equipped with 10.4 inch color touch screen for high accuracy component
display and control the setting temperature and actual temperature on the touch screen for different electronic component for purpose destination;
display and control the display, adjustment and setting of the running speed of template in different way.
Re-move the moisture from the component for the purpose to repack it without any moisture risk.

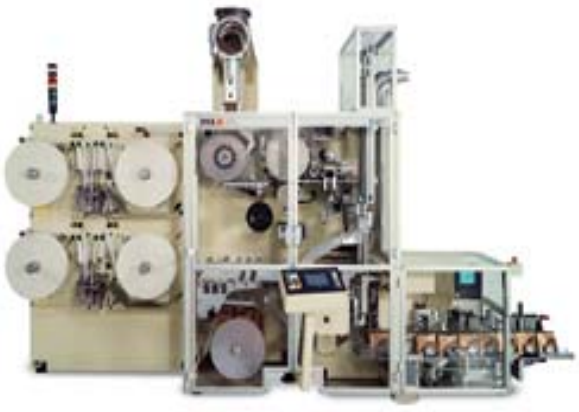
4. Rohs Compliance Inspection

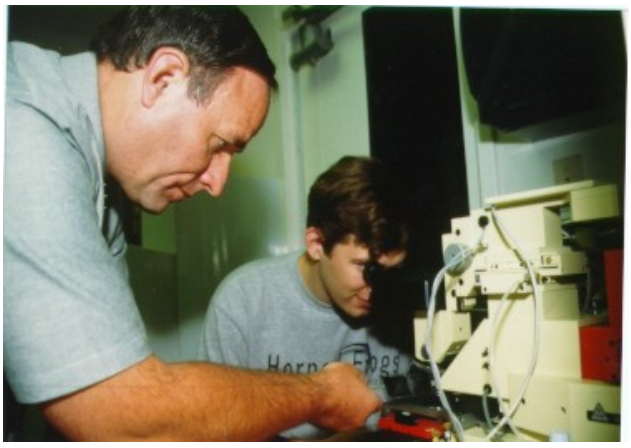
Vistron Electronics uses the Rohs test equipment which is dependent on electric currents or electromagnetic fields in order to identify the Rohs status for the electronic component.
there is currently an amendment to the Rohs Directive under consideration which sets Maximum Concentration Values (MCVs) for the restricted substances and also states that the materials to be tested are 'each homogeneous material' comprising a product. This will advise our customer the exact parameter for each composition of each heavy metal volume.

5. Test machine for Electronics

Vistron Electronics use every electronics test machine to test the component which is needed. We are developing a quality acceptance test (QAT) for placement machines is to ensure that the parameters being measured will accurately represent the long-term performance of the machine, In addition to specific machine performance data, estimates of intrinsic availability, throughput and meassures of reliability should be provided based on historical data accumulated over proliminary dry cycle and set-up procedures, including mapping and calibration, the quality acceptance criteria (QAC) process begins.

6. Repacking Machine for after test





Vistron Electronics will finish the final test, then we will repack the pack after moisture re-moved, which was said to be the first of the first important to insure the final quality test procedure. Functions include counting, stacking and packing them in a vertical, heat-sealed package that also guarantees simplified maintenance and user-friendliness with best quality control, test and inspection finish.

- **Our US Laboratory for the electronic component**

Vistron Electronics has two quality test and inspection location, one of which is located in US headquarter, it is the Laboratory for the electronic component test which is the only one broker owns laboratory for electronic component all over the world with strong power for the electronics test. One of which is in Asia for after shipping test. Vistron Electronics' principle is to supply our customer the best of the best parts and the guarantee quality without any problem occurs.

The property right for all the above information of quality control procedure owned by Vistron Electronics without any being copied by others.