**Converge Electronic Components Distribution Podcast**

**Protecting Customers Through Quality Management (12:06)**

Conducting quality inspections in today’s market is not only a necessity for independent distributors, but it is also a fundamental ingredient of success for many. Customers want assurance that they are partnering with a reputable electronic components distributor and receiving top-quality parts for their supply. So how do we provide that assurance while protecting our customers? In this podcast, Ron Wiggins, Operations Manager, and Dwight Gerardi, Manager of Corporate Quality, discuss our commitment to quality improvement, the risks of not partnering with a supplier that has an established quality process, and how we secure quality components through our step-by-step [quality inspection process](http://www.converge.com/quality-inspections.htm). [Download](http://www.converge.com/Collateral/Documents/English-US/Converge_Quality_Management_Podcast.mp3)Procurement file
 **Transcription**

 **Paul Gillan:**

Hi, and welcome to this Converge Podcast, “Protecting Customers Through Quality Management”.
My name is Paul Gillan and I will be your host.

“Quality is a fundamental ingredient of success for many businesses and an essential part of our culture. Many businesses have chosen to adopt a [quality management process](http://www.converge.com/quality-overview.htm) not only to remain competitive in today’s complex electronics marketplace but also as a way of demonstrating to customers their ability to consistently deliver quality products and services throughout the supply chain.”

Today we’re going to discuss the importance of quality in electronic components distribution.
My guests are Ron Wiggins, Operations Manager and Dwight Gerardi, Sr. Manager of Corporate Quality & Compliance at Converge. They’ll talk about how Converge approaches quality within their supply chain.

Before we begin, I’d like to ask each of my guests to tell us a bit about his background?
Let’s start with Dwight.

**Dwight Gerardi:**

My name is Dwight Gerardi I am the Senior Manager of Corporate Quality with Converge. I have more than 20 years of experience in the electronic components distribution industry, with over 10 years specifically focused on quality. Currently I oversee Converge’s Global quality and EHS management systems.

**Ron Wiggins:**

I’m Ron Wiggins, the Operations Manager at Converge, and I’ve got over 20 years of experience in managing complex operational organizations. I currently oversee Converge’s North America warehouse operations and all personnel including the quality component engineers, quality inspectors, consignment and inventory control groups.

**Paul Gillan:**

So Dwight, please tell me why it’s so important for an independent distributor to have a quality management program?

**Dwight Gerardi:**

In the world of supplying electronic components, we need to be forever vigilant in protecting our customers from substandard components and that begins with a solid [quality management program](http://www.converge.com/quality-inspections.htm).
Working with an independent distributor that has a robust quality management program greatly reduces the overall risks inherent in the supply chain. It gives structure to our quality processes: ensuring product integrity and vendor accountability.

**Paul Gillan:**

And what would be some risks that a customer might face if conducting business with an independent electronics distributor that didn’t have a quality management program?

**Dwight Gerardi:**

Well, the leading risk would be not receiving the correct part and/or a substandard part which could potentially enter the customers’ supply chain. This is bad for any electronics manufacturer or distributor. This could lead to production line interruption risks as well. That’s why Converge’s inspection process can provide peace of mind.

We have an established [quality management program](http://www.converge.com/quality-inspections.htm) that helps reduce the possible risks our customers could experience in the supply chain. Our program includes our robust multipoint inspection process which is the backbone our inspectors work from.

We also have enhanced reporting which means we document every step of our inspection process and document and record any discrepancies.

Our vendor management program allows us to monitor, evaluate and reevaluate the vendors that we work with.

Our experienced commodity management team is directly involved in product procurement, the results of inspection, discrepancies, and vendor performance.

Continuous training which we provide in house and refresh on a yearly basis. All inspectors globally must pass the [IDEA-ICE-3000](http://www.converge.com/quality-continual-training.htm) professional inspector’s exam. All inspectors including our component engineers must be re-certified every 2 years. We currently have 59 IDEA certified inspectors globally here at Converge.

And our globally networked systems (CVS, ERP and Q-trade system) and standardized global inspection sites in Singapore APAC and Amsterdam EMEA follow the same procedures/checklist.

**Paul Gillan:**

So Ron, Dwight gave us a great overview of Converge’s quality process but could you give us some step by step details on the inspection process and how it can help protect the customers in the supply chain?

**Ron Wiggins:**

Well first at a high level, I’d like to mention that we recently have enhanced our operations and added some programs such as [5S](http://blog.converge.com/2013/01/converge-implements-5s-to-optimize.html) which was popularized by the Japanese automotive industry and in the meantime has been adopted by a lot of other industries. [5S](http://blog.converge.com/2013/01/converge-implements-5s-to-optimize.html) enables a company not only to optimize a workspace for efficiency but also to put a culture into place that sustains these improvements. Back in June of 2012, the warehouse teams started to evaluate the workspaces and list opportunities for improvement in these areas. We then proceeded to formally implement the program and now are scoring fairly high after seven months.

We also looked at our operational layout and applied lean manufacturing principles and Six Sigma guidelines to review our process. We concluded that we could make some significant changes, cut out waste and make efficiency improvements throughout the operations. The changes to the warehouse layout were completed in October of 2012 and have proven very valuable in cost savings and quality improvements already.

But getting back to your question Paul……Converge’s quality management program starts with our expert [commodity management team](http://www.converge.com/company-market-intelligence.htm) and a [vendor management program](http://www.converge.com/quality-vendor-management-program.htm) that includes a supplier rating systems. Vendors are carefully screened, monitored and scored throughout this process.

Once the product is procured through an approved vendor, Converge follows a rigid, controlled component inspection process that involves a detailed Level I and II program. Our quality inspection process can involve up to 102 receiving inspection and shipping checkpoints that are performed by certified IDEA; in this case it is the ICE-3000 inspectors.

At level I, our inspection process requires us to do visual inspections of incoming packages. We inspect for damage. We look at the weight, the original weight when it came in. We take a lot of details photos and compare bar codes and labeling to the shipping documents that are provided to us. That’s only a few of the steps that we take at Level I. The package is then opened and actual parts are inspected for discrepancies ensuring that they match either PO or SO requirements. Once verified, our checklist is updated and the parts enter what we call a Level II inspection process.

Every lot must go through a Level II inspection – At this level, our certified quality engineers perform additional component testing which includes a microscopic visual review as well as a scrape and swab test to look at the part, the texture of the part to see if anything stands out as having been modified.

Once the material passes the level II inspection, the product is brought back to level I where it is packed and then shipped. We inspect all the documentation and all the product one more time at this step to verify that the parts and the SO requirements match 100%.

**Paul Gillan:**

So what happens if during the inspection process there is a discrepancy found, or suspected substandard part identified?

**Ron Wiggins:**

Well it’s important to understand that a [discrepancy or suspected substandard part](http://www.converge.com/quality-discrepancy-process.htm) can be identified at any point of either in Level I or II. Once the discrepancy is identified, it is noted and reported back to the commodity team. The inspection checklist travels with the order throughout the process. The next step would be the Quality engineer. The documentation is tied into a large historical database of parts that we maintain so we are able to cross check any part that comes in through this database.

We also utilize “golden labels”, our internal databases for verification as well as online service provider we subscribe to that provides us with the– (MDS) Manufacturer datasheet and other information. This allows us to see if the product is active, whether it is obsolete, date code information, other technical information and sometimes even target pricing.

The quality component engineers then would proceed with additional testing and inspection if required. If the discrepancy is confirmed after that additional engineering testing then it is at the discretion of the commodity manager and the customer to decide if more in-depth testing is needed such as X-ray or decapsulation.

X-ray is usually the first step since it is non-destructive. Decapsulation test can also be done by request and with a commodity manager’s approval. A decap test will show dies, serial #, and manufacturer’s logo within the component. You may not see that on X-ray.

If after all the testing in house is completed and a discrepancy is confirmed, the part may be returned or quarantined for our internal Material Revue Board to evaluate and recommend further action. The vendor’s status/classification will also be re-evaluated.

In some cases, we have customers that require us to provide them with a specialized report documenting (customer facing report) the results of the full inspection and all testing of the parts before we even ship them.

**Paul Gillan:**

Is there anything else that Converge does as part of quality management that you didn’t mention Ron?

**Ron Wiggins:**

Well ,we place a high level of effort on continuing education and training for our employees, both through internal and external sources. Certifications, recertification of current programs, seminars, industry meetings, etc are targeted and attended to ensure we are well ahead of the curve in our market space.

We also provide cross-training to the teams as business needs change and we need to stay very flexible, while still providing quality results. And we also conduct a yearly customer satisfaction survey that provides us with valuable feedback for future enhancement and process improvements.

**Paul Gillan:**

Tell about other types of testing equipment Converge has in house and what sets it apart from other independent electronic component distributors? Can you also tell us a little bit about how the testing equipment works?

**Ron Wiggins:**

Well since Converge is committed to continual quality improvement we do have the latest state-of-the-art testing equipment in-house. As I have already mentioned, we have Decapsulation and X-ray machines in-house. We also have an XRF (RoHS) analyzer in house which allows us to test for RoHS compliance which includes detecting such components as lead, bromium or chromium just to mention three of those. The baking oven- if a part has been exposed to any kind of humidity, we use the baking oven to remove any moisture that might have been accumulated on or in the part. We have numerous webcams used for the incoming receiving inspection at Level I and Level II with up to 500x power. We have vacuum sealers for shipping where we can reseal the part appropriately and we also secure outside services for solder ability and electrical testing should that be necessary.

**Paul Gillan:**

So to sum things up Dwight, can you tell us how does partnering with an independent distributor (like Converge) with this type of quality management process benefit the customer?

**Dwight Gerardi:**

Well we’re always looking towards continual improvement and having a world-class lean processing environment because lean manufacturing principles = operational excellence!

Quality has always been the number one goal here at Converge And we want every order to be a perfect order. We look for feedback on 8 measurables for that perfect order. They are: Right product, Right quantity, right delivery, right condition, right cost, right documentation, right special requirements, and at the right time. Customer feedback has helped us monitor and improve. Striving for the perfect order reduces costs for both the customer and Converge so its having the security and peace of mind that you are getting what you ordered.

**Paul Gillan:**

I’d like to thank my guests Ron Wiggins and Dwight Gerardi for their insight on how Converge protects customers through quality management.

We hope you’ll download and listen to other programs in the Converge podcast series.

Thanks for listening. My name is Paul Gillan.