



Components and Distribution



Not a Foreign Concept, Gowanda Exports to China

By Claude Badawy, Chief Operating Officer, Gowanda Electronics, Gowanda, NY and
Mary T. Spohn, Technical Marketing Consultant, Getzville, NY

We are all familiar with China being a major exporter of goods to the United States. But how many times do we hear of a company — no less a US manufacturer of electronic components — exporting products to China? It is almost a foreign concept.

The export/import of electronic components varies widely around the world. For example, according to Dennis Zogbi of Paumanok Publications (the world's largest supplier of market research and consulting services to the passive electronic component industry), "Data for 2009 indicate that while the US imported \$3,068 Million USD of magnetic components (defined as electrical transformers, static converters and inductors) from the People's Republic of China (shipped from the PRC, Hong Kong and Macao), the US exported only \$338 Million of such components to The People's Republic of China". It

is reasonable to assume that this almost 10:1 ratio (based on dollar value) would be even higher if it was based on the number of magnetic components imported vs. exported.

Gowanda Electronics is proud to be an exporter of its high performance passive components to China. But the company is also humble about its success. There is no magic formula that Gowanda has used to sell their products in China and other parts of Asia. What Gowanda will tell you is that their success in China — and elsewhere around the world — is derived from simply doing the "right things" to provide cost-effective solutions that address customer needs. These right things include innovation, process control and flexibility.

Many electronic component manufacturers have production lines that focus expressly on volume. They churn out standard products in large volumes in order to reduce unit costs. Gowanda Electronics, however, focuses on providing solutions that respond to customers' challenges. This often requires shorter runs for smaller volumes. It is also common for Gowanda's solutions to require unique or innovative approaches in the design or manufacture of a component. The

company's engineering staff and Technology Center offer breadth and depth when it comes to finding such solutions.

Gowanda's engineers are very familiar with inductor materials, designs and real-world applications. The company's engineers represent over 125

man-years of experience. That said, if a special or proprietary material or design configuration is needed, Gowanda has the requisite skills, knowledge and experience to do what it takes to achieve the desired performance and design goals for the component solution.

High Performance Needed

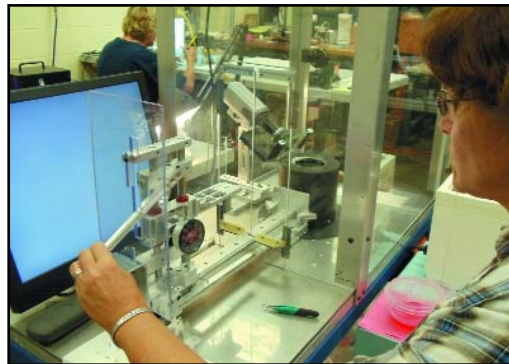
A reference design company, trying to achieve a specific level of performance from an electrical circuit, needed an inductor with an SRF (self-resonant frequency) well above what is considered typical. By using a proprietary material, in conjunction with the

capability to manipulate the mechanical construction and winding of the component, Gowanda achieved the higher SRF requirement. Result: the reference design was chosen by an Asian manufacturer and Gowanda was awarded the business.

The Tech Center at Gowanda — in a separate facility — has CNC (computer numerical control) capability and various tooling options to aid in the product design and development stages providing quick prototyping and soft tooling. Innovation at the company extends to the factory floor. If a special piece of equipment is needed to produce a component,

Using one-of-a-kind machinery that it builds in-house, the company has developed the knack of making very specialized magnetic components.

the company has the capability to create what is needed. So it is not unusual to see one-of-a-kind equipment on the main plant floor. A recent investment in cleanroom facilities, now operational there, enables the company to respond to the



High-tech equipment helps the company achieve and maintain product specifications as required by customers.

growing demand for component testing and/or production in a controlled low-particulate environment.

Optimizing a Circuit

A Chinese manufacturer of video equipment was attempting to optimize the performance of a circuit, while eliminating tuning needs. Gowanda utilized its understanding of materials and processes to design a component that met the desired specifications. The company also met the desired ramp-up volumes/timing, even with the complex logistics of shipping to China. As a result, Gowanda was selected as the primary component supplier for the complete life cycle of this digital video product.

Process control is also important — the importance of manufacturing the customer's component consistently, within spec, day in and day out is a staple of the company's mantra. The company has several quality standards in place to aid in this endeavor — AS9100, ISO9001, ISO13485 — and everyone who works there is well aware of the training, discipline and team effort required for these highly documented/audited quality systems. Process control software and related tools, including SPC (statistical process control) charting, are utilized and upgraded as technology advancements occur. For mission-critical applications, the company has in-house environmental testing facilities and processes in place to achieve QPL (Qualified Product List) approval for its components destined for use in military, aerospace or other demanding environments. These robust components offer added-value and peace of mind in other applications too, where components play a critical role even if they are not military in nature.

High Reliability Needed

An Asian OEM in need of a high reliability component pursued Gowanda for QPL (Qualified Product Listing) products, because they were impressed with the reliability, robustness, and supportive internal environmental testing data associated with Gowanda's US Military QPL-approved components. The result: a Gowanda design has been chosen by the OEM for the next stage of development, awarding pre-production order quantities of the component.

The third and perhaps most critical "right thing" contributing to the company's success is the ability to be flexible, nimble and responsive. The people who work at Gowanda Electronics, a privately-held company located about one-hour's drive south of Niagara Falls/Buffalo, NY, are always willing to listen to a customer request. They enjoy the challenge of finding a solution, whether that arises from the design team, production team or a cross-functional team involving many disciplines — often including design engineers from the OEM/customer. The solution often requires something different than a standard product. So while many other component manufacturers provide exclusively standard products, with no deviations allowed, the company has demonstrated time and time again its willingness to work with its cus-

tomers to jointly design and develop a solution which meets their needs. This concept of flexibility is embraced at Gowanda, as sales, engineering, production and management work together to help customers achieve their goals.

Next-Generation Product

A company utilizing an Asian contract manufacturer was developing a next generation product. Their circuit board required a mirror image version of an existing asymmetrical Gowanda component. Many other suppliers would have walked away from this opportunity, but the company took the steps necessary to adjust the design and production processes. As a result, Gowanda was awarded sole supplier status for this business.

This flexibility also translates into responsiveness. Gowanda prides itself on being able to respond to customer requests faster than most other component manufacturers. Customers appreciate the company's efforts in this regard, especially in critical time-to-market or uptime-sensitive applications. In many cases, Gowanda's responsiveness delivers dollars to the customer's bottom line in terms of product integrity, end-user satisfac-

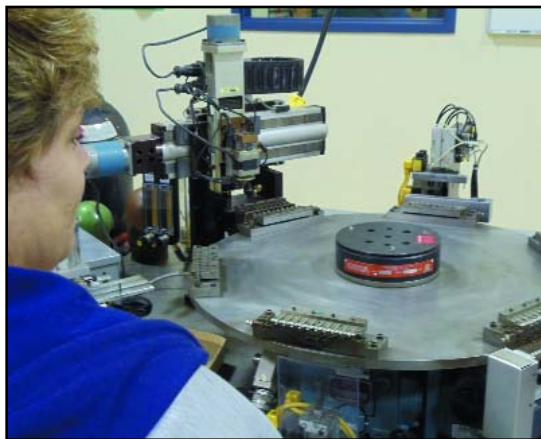
tion, and reductions in rework/downtime.

Avoiding Rework

An Asian manufacturer of potentiometers for power tools approached the company for a solution to the quality issues and related rework costs of another supplier's component. The OEM apparently knew how to resolve the component problem, but the original supplier would not make the necessary processing adjustments. Gowanda's willingness to take on the challenge, including the creation of tooling to control a specific dimension of the component, solved the problem and impressed the OEM. Result: A very satisfied new customer. Even though companies, including those in China, may say they want components at the lowest price, a low price often comes with additional hidden costs relating to quality, rework, design issues, specs, time-to-market, and up-time.

As Gowanda can attest from its many satisfied customers, those additional costs can far exceed the theoretical savings expected when purchasing at a low unit price. From its own perspective, by maintaining a strategy of supplying component solutions that address customer needs, the added value Gowanda wraps around each component allows the company to be competitive in the global marketplace on more than just price. Looking at the company's success, that strategy is "right on". All these "right things" enable the company to work closely with customers to assure that the component they need is the component Gowanda provides — when they need it and where they need it — whether it's needed in Bismarck, Beijing or Budapest.

Contact: Gowanda Electronics, P.O. Box 111, Gowanda, NY 14070-0111 ☎ 716-532-2234
fax: 716-532-2702 E-mail: sales@gowanda.com
Web: www.gowanda.com ☐



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Statistical process control tools support and guide production of electronic components to meet customer specs.

