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Benefits Realized:

- ▶ Better Business Decisions
- ▶ A Catalyst for Environmental Awareness
- ▶ Crucial Time Savings

### Executive Summary

AVX Corporation, headquartered in Myrtle Beach, South Carolina, is a leader in the electronic component and products industry. With five major research and development centers across the globe and an additional 20 manufacturing facilities in 12 different countries, AVX holds a strong competitive advantage, particularly when dealing with just-in-time inventories.

AVX components can be found in communications, networks, automotive, consumer, military, industrial and mechanical markets. Many of AVX's components contribute to the well-being and safety of consumers' lives, from electronics used to make cars safer to implantable devices that regulate the heart, help the hearing-impaired hear and the visually-impaired see.

As an innovative company, AVX is devoted to being environmentally vigilant. With a goal of total customer satisfaction through continuous improvement, AVX has positioned itself as an exemplary company in environmental preservation and has a sound record to prove it.

International agreements, customer specification and nation-state regulations continuously impose rules regarding the use of hazardous materials – particularly lead. While AVX has met and often times even exceeded these guidelines well ahead of schedule, the company challenged itself to meet the lofty goal of removing all lead from their products. To help meet this challenge, AVX turned to Nerac.

### Major Challenge

The government regulations, customer specifications, and international agreements imposed on the electronics industry, specifically AVX, are not always immediately clear.

“The electronics industry is always changing, and new regulations, such as ROHS, force us to incorporate changes in process that are not always completely understood,” explained John Galvagni, AVX Corporation Fellow.

In particular, John and his team decided to turn to the cross-disciplinary expertise of Nerac's Analysts. AVX's primary concern focused on regulations aimed at eliminating lead associated with tin whiskers and solder fatigue.

Nora Slanski, Bruce Kay and other Nerac Analysts worked closely with John and his team to research viable solutions other companies were already using to remove lead from their production processes.

Nerac research consisted of locating and analyzing crucial phase diagrams, key industry papers and weekly updates to keep the report current. “Nerac has altered our direction and allowed us to incorporate better practices in two key areas: tin whiskers and solder fatigue.”

The tin whiskers project initially took Nerac two weeks to complete. With such a speedy turn-around time, John and his colleagues were able to initiate tests and alter their processes “in order to get compliance and reliability data ahead of others,” explained John.

“In the old days that process would have taken six months or more.” By discovering and implementing improved practices before others in the industry, AVX is able to maintain its competitive edge as well as remain environmentally friendly.

“In the old days [prior to Nerac] the research process would have taken six months or more.”

John Galvagni  
Fellow  
AVX Corporation

Reference:  
[www.avxcorp.com](http://www.avxcorp.com)

## The Nerac Factor

### Better Business Decisions

AVX Corporation relies on Nerac when faced with uncertainty regarding regulatory changes, customer specifications and international agreements. Nerac Analysts Nora Slanski, Bruce Kay and others provide valuable, ongoing research John Galvagni and his team use to make vital business decisions concerning regulatory matters.

### A Catalyst for Environmental Awareness

Nerac supports AVX in its noteworthy initiatives to eliminate environmentally damaging materials from its product lines. AVX's lead-free initiatives are supported through Nerac's research alerts, which contain insightful commentary and direction from Nerac's Analyst staff.

### Crucial Time Savings

Through hard work on both John's team and Nerac's team, AVX is able to stay ahead of the competition when it comes to ingenuity. Expedited projects and timely delivery of reports, diagrams, patents and more allow AVX to successfully adapt to new rules and regulations imposed both internally and externally.



### About Nerac

Scientists, engineers and intellectual property professionals turn to the extra-disciplinary research expertise of Nerac for effective resolution techniques and forward-thinking analysis. Nerac Analysts equip clients with the knowledge to develop or refine a technology, explore market opportunities and evaluate intellectual property strategies. Nerac measures its success by the victories each client achieves, big or small.

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