

A White Paper for Executives in Manufacturing

Avoiding Costly Product Recalls with Proactive SPC

ZONTEC

1389 Kemper Meadow Drive
Cincinnati, OH 45240
(513) 648-9695
www.zontec-spc.com

Avoiding Costly Product Recalls with Proactive SPC

Attention, manufacturers: It's your wake up call!

This year alone, consumer confidence has been shaken over product quality, reliability and safety concerns within the food processing, electronics, automotive, toy, clothing and personal care industries. The next "shoe" is just waiting to fall. Conservatively speaking, if your business is effected, expect to spend more than a million dollars responding to a recall.

While analysts and consultants urge companies to have an actionable crisis management plan in place, Zontec contends that it is possible to prevent a recall situation well before a product ever approaches crisis mode. Betting on recall and/or contamination insurance isn't enough. Because as soon as a product's reputation becomes publicly suspect, the rebuilding of brand equity and lost market share becomes an absolute financial, legal, public relations and logistics nightmare.

Knowing where you stand now, rather than later

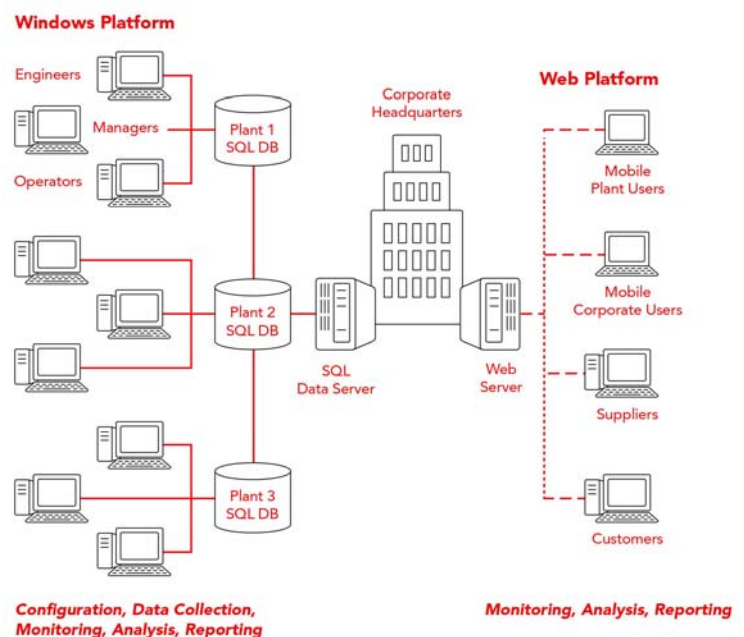
All too many companies depend on the number of customer complaints received over time to indicate problem areas that need to be addressed. If something goes wrong during production, these kinds of issues take months to uncover and fix.

Globalization and outsourcing, today's keys to competitive business survival, have only compounded the problem. Instead of settling for a reactive "wait-and-see" business strategy, companies must be much more proactive about testing, monitoring and supervising their production activities and those of subcontractors in real time. Mistakes aren't a valid excuse just because production occurs half a world away from the headquarters office.

Lowering your risk factor

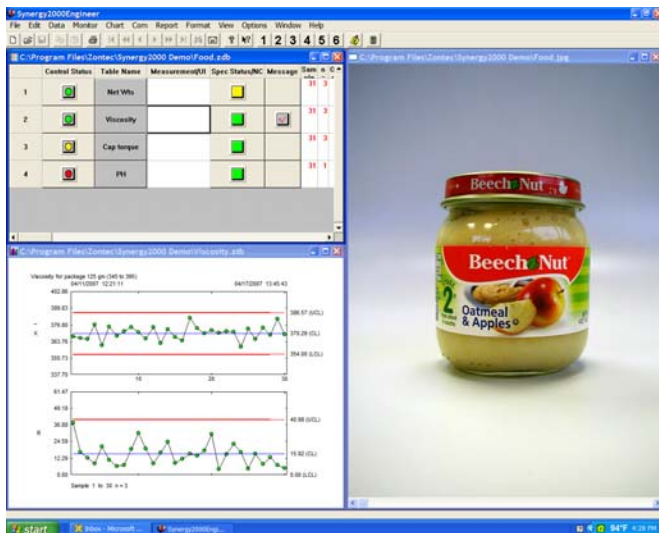
If you believe changing the corporate culture involves a monumental undertaking, you're in for a surprise. Proactive quality can occur quickly, easily and economically. Proven methodology has been in place for 70-some-odd years to address better quality and product accountability. And software technology keeps advancing your potential. Statistical process control (SPC) is a non-industry-specific approach for enforcing conformance to manufacturing, engineering, and customer standards. Think of it in terms of an ounce of prevention in return for a pound of cure. Question is, why aren't more companies (and big-name companies, at that) recognizing it as a low-cost, risk-based analytical alternative?

Global SPC Architecture



A global SPC implementation can integrate multiple production facilities, subcontractors, suppliers and mobile employees who need a 24/7 view of production.

For almost 25 years, Zontec has been helping companies successfully manage quality at the point of production in real time using SPC software technology. The premise is extremely straightforward: you define the characteristics that are critical to your product quality; you measure, inspect and monitor those characteristics and adjust the process when unacceptable variation occurs. The software manages the data for you, providing immediate feedback via visual cues (typically control charts), operator alarms, user warnings, e-mail, cell phone and pager alerts. Immediately, you have a powerful enterprise-wide tool for controlling your products *before* they reach the shipping department.



Users monitor a process as data collection takes place. Color-coded status flags indicate process conditions in combination with control charts.

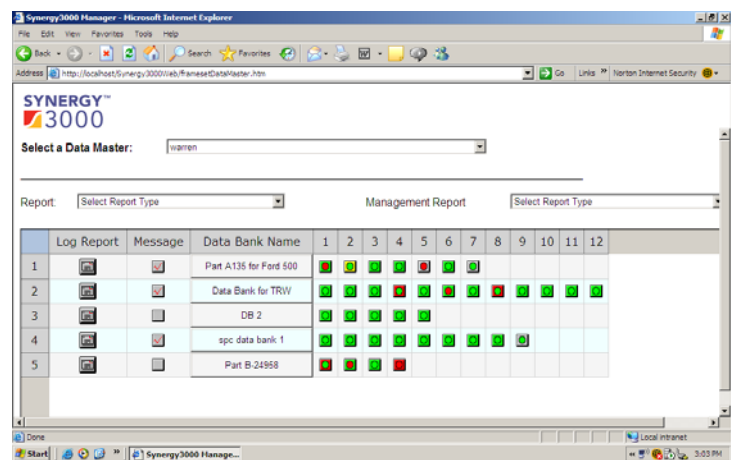
manufacturers even mandate that their outsourcing partners provide evidence that SPC was used as a part of the manufacturing process.

SPC can not only police what is occurring as it's occurring on the production floor, but SPC data can be invaluable when it comes to post-production analysis, lot or batch traceability, documenting supplier quality during incoming material inspections, and generating ad hoc quality reports. It functions remarkably well as both an on-demand repository of historical production information and as a decision support system to complement Six Sigma initiatives.

Much of the blame for product recalls can be attributed to distinct miscommunication between vendors and their suppliers regarding contract requirements. In some cases,

Improving confidence levels

At the most technologically evolved implementation of SPC, a contractor can use secure networked or Web connections to monitor multiple suppliers at geographically dispersed facilities in real-time, and utilize the software in the form of a state-of-the-art troubleshooting, communication and problem-solving dashboard. Process participants, in effect, help themselves to the quality, reliability and safety data, whenever and wherever they desire. Over and above a Certificate of Analysis from the supplier, contractors themselves focus on parts-per-million (PPM) data to provide higher confidence that the entire product shipment falls within accepted tolerances.



A web SPC dashboard allows authorized users access to an enterprise-wide view of every process, SPC charts, spreadsheets and reporting tools in real time by simply logging onto their web browser.

But don't think of SPC as a solution for just the here and now. There's a longer-term payoff, too. It establishes a foundation for on-going continuous process improvement efforts. As organizations collect data and refine their processes over time, they can actually tighten their controls again and again or replace high-performing characteristics with new ones that have escalated in urgency. Thus, quality becomes a constant pursuit and the company gains a higher reputation for its customer focus.

Could your brand survive a product recall? With SPC, you may never have to face that possibility. It's a solid investment that's a slight fraction of the cost of a recall without gambling that the odds are in your favor.

###