



**Ten Minutes of Your Time. Lasting Business Impact.**

**Issue 23  
7 July 2005**

## **Introducing Crosby Summer School!**

Want to bring about radical, positive change in your organization? You can learn the philosophy that led Alberto Wisbeck and his team at Siemens on their plant's journey from worst to first. See the results by fall. You can download the course details at [www.philipcrosby.com/summerschool](http://www.philipcrosby.com/summerschool).

To register and reserve your seat, call us at (800) 722-1464 or [e-mail PCA Client Services at info@philipcrosby.com](mailto:info@philipcrosby.com). We accept Visa, MasterCard, and American Express.

### **HOW DOES SIEMENS TAKE A MANUFACTURING PLANT FROM WORST TO FIRST? RELENTLESS IMPLEMENTATION OF CROSBY PHILOSOPHY**

Alberto Wisbeck was either a visionary or a fool.

In 2001 Wisbeck was considering the top job at Siemens' 350-person transformer factory in Jinan, China (STC Jinan). He knew it was the company's worst factory, and Siemens had considered closing the plant due to its poor performance. Still, the plant intrigued Wisbeck.

Many people would have walked away, or committed to little near-term change, but Wisbeck was different. He not only accepted the position, he promised to turn the plant from worst to first in a relatively short period of time.

What was his plan? "Remove the culture that was allowing this factory to be last and install a culture that would enable it to be first," says Wisbeck. "I had worked with Philip Crosby Associates (PCA) before, and I knew that a relentless implementation of Crosby philosophies, methodologies and tools could turn this factory around."

Wisbeck quickly proved himself the visionary and not the fool: 36 months after initiating with PCA, STC Jinan had risen in the Siemens ranks from #12 to #2, and quickly started closing in on the top slot.

"We have the same facility that we had in 2001. We have the same basic workforce that we had in 2001. But thanks to PCA we have a radically different culture, and radically different results," says Wisbeck.

#### **Situation Critical**

The plant's situation was indeed grim by the time Wisbeck arrived on the scene. Production capacity was a dismal 400 MVA (mega volt amps). Sixty-seven percent (67%) of its revenues were spent to acquire raw materials. Numerous bottlenecks impeded production. The plant was both wasteful and inefficient.

"We needed to polarize the people. We needed to focus on quality and on meeting customer needs, for both our external and internal customers," says Wisbeck.

**E-mail us at [info@philipcrosby.com](mailto:info@philipcrosby.com) or call 1-800-722-1464**

### **Chinese Culture Presents Unique Concerns**

Wisbeck knew the Chinese culture presented unique challenges. “In China, there is a very strong concept of ‘face’ – the desire to maintain one’s standing in the eyes of others. A worker is extremely nervous to shed light on a problem in his own work area, in part because companies are very quick to punish,” says Wisbeck. He knew PCA could overcome this fear because the Crosby philosophy, which he learned as an executive at ABB in Brazil, focuses on identifying and changing faulty work processes, not reprimanding the people who carry out the work.

“PCA takes the blame out of the discussion by forcing you to identify the processes and procedures that cause the problem. This is critical to success in China with the strong cultural tradition of saving face,” says Wisbeck. “PCA’s focus on processes and organizational culture builds an environment where managers and workers are jointly accountable for performance and continuous improvement.”

As a native of Brazil who is working in China for a German company, Wisbeck is keenly attuned to how cultural differences can impact the workplace. “I have worked with PCA in different plants on separate continents, and the underlying philosophy of quality is one that has been proven to be effective worldwide. A culture of quality, as defined by Philip Crosby, is neither German, Japanese, Chinese nor American. It creates a common language, approach, and purpose that unites teams at the local, national, and multinational levels. Implementing it within a local culture, however, requires a partner who can identify the unique cultural aspects that must be overcome when adopting a philosophy of quality,” says Wisbeck.

Here is where Crosby’s local support played a key role. Crosby aligned the concepts and methods with local customs, value systems, and traditions. “PCA’s deep knowledge of the culture was extremely important to our success,” says Wisbeck.

### **First Things First**

The plant started its Crosby implementation with a strong foundation of education for top managers. From this pool, seven senior leaders were chosen to become resident instructors and receive additional training.

But before the worker education began, Wisbeck wanted to ensure Crosby’s philosophy would be used early and often. So he set an additional graduation requirement: to complete the course and receive a certificate, each worker must complete a project that saves the company least 1,000 RMBs (\$120 USD). Even more challenging, the problem solved had to be in the individual’s work area.

Although the instructors had learned the non-confrontational aspect of the Crosby approach, they were nervous about implementing it so soon. By targeting the individual’s workspace, Wisbeck was directly challenging the nature of ‘face’ in the Siemens plant.

“Even the instructors were doubtful of the project requirement. They worried the workers would not be able to do it,” says Wisbeck. “I thought this was critical to reinforce the idea that we would be critiquing processes, and not people,” says Wisbeck. “In the end, the instructors agreed to trust me and support the project requirement.”

### **Projects Change the Game...and Save 5 Million RMB**

The instructors’ trust was well placed: a stunning 97 percent of the employees finished their projects. “The results were beyond our wildest dreams,” says Wisbeck. “We were astonished by the quality and thoughtfulness that went into these projects. These were not trivial projects—they had a dramatic impact on the bottom line.”

Dramatic indeed: those 300-plus projects dramatically eclipsed the 350,000 RMB (\$42,000 USD) savings Wisbeck had asked for. They totaled a stunning 5 million RMB (\$604,000 USD) annual savings.

**E-mail us at [info@philipcrosby.com](mailto:info@philipcrosby.com) or call 1-800-722-1464**

One assemblyman focused on a longstanding bottleneck problem. For each of the 100-plus transformers the plant makes each year, this worker needed to procure a custom-made piece of insulation from a Swiss supplier. Not only were these parts expensive, delivery was unreliable. His solution: build a simple machine to mold custom pieces of insulation from in-house scraps. This not only solved the delivery problem, it created a major cost savings.

“A regular worker —a frontline worker— used his Crosby education to identify a problem that management would not have seen, and develop a solution management would not have created. In so doing, he has saved the company 80,000 RMB (\$10,000 USD) annually,” says Wisbeck. “What should that tell managers? Do not underestimate your workers; train them, educate them, invest in them. They are the only ones who can make that type of difference.”

But the benefits aren't limited to the shop floor. The Siemens plant applied the Crosby philosophy to all areas of the business and Wisbeck notes dramatic benefits as a result:

- **Getting Ahead of the Pack.** “More than 500 companies produce transformers in China, while in the US there are maybe 10. Competition here is fierce. But our transformers are well-constructed and customers know it. That's why they are willing to pay 3 to 5 percent more for our transformers than for those made by competitors.”
- **Collecting Cash? No Problem!** “In China, customers avoid payment for the slightest reason. But we are able to collect because we leave no reason for the customer to withhold payment. As a result, our 2004 net working capital was a negative number. Within Siemens we are the best in terms of cash performance.”
- **Boosting Capacity and Margins.** “Today, our output is up from 400MVA to 1,200 and the plant will increase to 1,500 very soon. The 67 percent of revenues spent on materials is down to 61 percent due to all the waste we've removed. That's six percent added right to the bottom line.”
- **Applying “Productive Stress”.** “The domestic China market is so hot that we *could* take only ‘easy jobs’. But we know that to grow, we need to take the hardest assignments. We need the most demanding clients— ones who always make us push the envelope. Our quality processes and training make certain we can handle that kind of stress. This helps us develop our capabilities for the future and drives innovation.”
- **Tackling the Export Market.** “While China is a hot market now, it won't be forever. I knew when I came here that we needed to export. We cannot wait until the Chinese market fluctuates; the time is now. However, exporting is costly if you aren't prepared. If a customer in Beijing has a problem, that's one thing, but if the transformer is on the other side of the globe your rework costs go up tenfold. We did not enter the export market lightly, and it is a testament to the commitment of our workers that we will ship our first transformers to Burma and Thailand in October 2005. Our relentless focus on quality is enabling us to chart our own course. Our mantra is, ‘no quality, no future’.”
- **Turning Management Heads.** “Even top managers in Germany are aware of the amazing turnaround that has occurred here. We have been asked to apply for a very prestigious award within Siemens to recognize our performance.”

#### **Next Step: Better Project Scoping and Six Sigma**

The focus on improvement continues at STC Jinan. As a trained Six Sigma black belt, it was clear to Wisbeck that the Crosby foundation was the perfect launching pad for a successful Six Sigma effort. “We will work with PCA to build upon our Crosby foundation, and evolve our philosophy and our toolset to solve ever-bigger problems,” says Wisbeck. So out of the 340 employees who finished projects, 35 were selected for additional

training. "It was very natural to select the people ready for advanced training, as some of the individual projects were just so good," says Wisbeck.

While the initial projects dealt with the worker's own environment, this second phase focused on projects of a cross-functional nature. The projects will be finished and evaluated soon.

Those with the best advanced projects will be selected for Six Sigma black belt training, and Wisbeck says it is the Crosby foundation that will make their Six Sigma effort successful. "I have seen Six Sigma fail before when companies hire a few young, clever statisticians and have them run around the organization solving problems. What happens is they become totally disconnected from the organization. They have no support or ownership from the rest of the company. Our effort starts with a solid Crosby foundation and expands outward, always building on the philosophy and toolset as we go," says Wisbeck. "We are committed to change and to the Crosby philosophy."

At STC Jinan, everyone will have a stake in Six Sigma's success. Since people are chosen for advanced training based on their contribution to quality, everyone knows that participation leads to success for the plant – and themselves.

Wisbeck stresses that this is only the beginning. "We have achieved remarkable results with PCA already," says Wisbeck. "But quality is a never-ending process. We want to get better at finding and scoping improvement projects— at making sure we break big projects into smaller, more manageable bites. We want to see what Six Sigma can do for our plant. We are not stopping now." Every employee at STC Jinan knows their future depends on it.