

Editor's note: This department features Six Sigma related content excerpted from the annual reports and other communications produced by a variety of the world's most successful companies.

FEATURED COMPANY:

Bechtel



*Mary Moreton,
Six Sigma
program manager*

FROM BECHTEL REPORTS
AND NEWSLETTERS

From the *Bechtel Report 2003:* Bechtel was the first major engineering and construction company to embrace Six Sigma, a methodology that uses statistics to identify and eliminate errors in work processes. In conjunction with our performance based leadership program, Six Sigma has made us more efficient while saving our customers, our partners and us time and money.

Last year we continued to implement Six Sigma in offices and business units around the world. Total savings from the initiative rose to more than \$200 million in 2002 from \$15 million in 2001. Moreover, our investment in Six Sigma reached the break-even point in less than three years.

Equally impressive is the increased efficiency Six Sigma has brought to Bechtel projects. At the Aberdeen Proving Ground in Maryland, for example, our project team used Six Sigma to streamline the process of neutralizing chemical agents. And at a nationwide telecommunications project, Six Sigma helped optimize the management of cost and schedules.

Six Sigma is the most important initiative for change we have ever undertaken.

From *Bechtel Briefs*, www.bechtel.com/briefs/0803/perfection: Every company strives for perfection, but few go as far—or invest as much—to meet that goal as Bechtel. Last year the company devoted \$30 million to a program known as Six Sigma, with the aim of identifying and preventing rework and defects in everything from design

to construction to on-time delivery of employee payroll.

Is it worth it? In a word, yes. ... The theoretical goal is to get to the level known as 6 sigma, defined as no more than 3.4 defects per million measured actions (although, in many cases, it's enough just to approach that level). To put that in perspective, let's say you've got a mail-order company selling candles, and you handle 250,000 customer orders a year. At the 3 sigma level, you would make a mistake in 16,694 of them. But at the 6 sigma level, you'd get only one order wrong.

No wonder Bechtel has thrown itself into the effort. In fact, it was Chairman and Chief Executive Officer Riley Bechtel himself who pushed the company into Six Sigma after seeing its success at General Electric and Motorola. "I think it's the single most important decision I've participated in for the last 10 years—and I think this will be important for the next 30 years," he says.

Since committing to Six Sigma in November 2000, Bechtel has trained more than 10% of its employees as Yellow Belts, Black Belts and Champions—the people who make Six Sigma work.

So far, Six Sigma has been fairly internally focused, but now we're working to improve customer satisfaction, reduce customer costs and, because of that, win more contracts, says Mary Moreton, Bechtel's program manager for Six Sigma. Customers are already reaping benefits as the bulk of the savings go directly to them. **□**