## Lean Thinking Results at a Salt Lake City Diamond-Impregnated Drill bit Company

The Salt Lake Bit Plant ran a "Lean Thinking" project with Manufacturing Consulting Services from May 2001 to March 2002. Plans and recommendations were substantially implemented by July 2002. With a $40 \%$ decrease in staff and floor space, including the closure of a sister plant, and some additional standard capital equipment they achieved a $316 \%$ increase in plant production between 2000, the year before the project, and 2003, the year after the project. At the same time they dropped their Salt Lake order-to-delivery lead times for regularly-stocked product from 10 days to $2-3$ days. Lead times for product to the customers of the closed sister plant dropped from 3-4 weeks to 2-3 days.

The following tables summarize the percentage changes in relevant operational parameters for the Salt Lake Plant. Both performance increases and decreases were achieved simultaneously over the course of the project - with May 2001 equal to the " 100 " index. The July 2002 figures represent performance improvements up to the end of the formal project. The third column in each graph represents the status of these measures as of July 2004 and reflects how well plant staff learned the lessons of "Lean Thinking"! They not only sustained but improved upon project performance gains after the formal project ended!

## Increases in Productivity




Decreases in Required Resources

- —Floor space w/ May 2001 equip. (Index)
$\square —$ Mold to F/G Travel Distance (Feet)
$\triangle$ Work Order Paper Shufflers (\#)
$\cdots$ Stock Bit Fab Time (Days)
* Open Work Order Time (July $02=0.104$ ) (Days)
——Overtime / Week (July $02=0$ ) (Hours)
1 Stocked Product Stock-outs (July $02=0$ ) (Index)


