

Operations Improvement: Reduced Rework from 55% to 20%, Saving \$325,000 Annual

An SBTI White Paper

Industry Department:

Manufacturing- Assembly

Process:

Production

Objectives:

- Reduce the rework rate
 - This also involves an examination of what requires rework
 - Goal of reducing from 55% to 27% of output requiring rework
- Increase the output
 - 3,500 to 5,000 units per day
- Decrease labor costs
 - \$1.60 to \$1.36 per unit

Timeline:

- This project spanned a few months.

Key Tools Used:

- Black belt skills were used here. Some of which were:
 - Process Mapping
 - Cause and Effects Matrix
 - Process FMEA
 - Hypothesis Testing
 - Process Capability Study
 - Design of Experiments
- SBTI can teach your company and employees these skills

Deliverables:

- One inspection process was removed
- A direct link to product performance was established

Metrics or Results:

- Rework rate was reduced from 55% to under 20%
- \$325,000 Annual Savings to the Company
- Reduction on the amount of inspection required by over 5 people

Lessons Learned:

- Previous definition of what requires rework was very subjective and had no direct link to performance
- Before project, there was no clear definition of “good” and “bad”
- Before the project, different levels of defect detection were present