



## Case Study: Filtration Product Process Preparation

**Client:** Filtration products company

A filtration products company developed a revolutionary product for a long-term customer. The product launch, however, was mired in design and material issues and projected cost overruns. With the design still in flux, a startup date less than three months away and a \$500,000 capital overrun pending; the project and customer were in serious jeopardy. Prior to the launch, \$1,000,000 in capital was budgeted and quotes were coming in at \$1,500,000. The piece part cost was quoted at \$.49/each.

Product and Process Preparation (3P) was used to help the client design, simulate and test a new product design and new manufacturing process. These tasks enabled the client to meet the launch date, reverse cost overruns and significantly reduce the piece-part cost.

The first phase of the process was operational within ten weeks at a total cost of \$10,000. The piece-part actual cost dropped from \$.49 to \$.41/each. The second phase of the process was operational within three months and met the increased production demands. In all, the new process cost \$650,000 (well below the \$1,000,000 budget) and produced a finished unit \$.38 lower than the initial quote of \$.49 each. Additionally, the volume on this new process was four million units a year the first year and ten million units a year the second year.

The kaizen team's success was a result of their ability to dissolve existing barriers between product development, manufacturing engineering and production. Because various departments now understand how to effectively collaborate, all future new product launches are required to go through this same process.

This opportunity was beneficial for the filtration products company because in addition to learning the tools of Product and Process Preparation, they learned how to use existing resources to solve a problem instead of always looking to new technology to provide the answers.