Abstract

The following report details the analysis and procedure taken not only to determine the issues limiting J. Carroll’s screen printing capacity, but also provides the solutions necessary to address these issues. The report addresses one crucial operation in the screen printing process, changeovers, which contribute to roughly 24% of the screen printing process time and more than any other operation in the screen printing process. Within the changeover operation two specific tasks appear to be plaguing long changeover times: they are test print and design approval. The report elaborates on the Fishbone Diagrams utilized to bring up the potential causes of why these two tasks contribute roughly 60% of the changeover times. From this analysis numerous issues such as: unnecessary design approvals, designers not being available to approve design, miscommunication, operator error, and bad item placement (test print shirts) were mentioned. As a result the following cost effect solutions were implemented: implementation of new design approval policy, relocation of test print shirts, staging for next job initiative, and the use of a PDF as a reference for screen printers to check work. After implementation of the previously mentioned solutions a 25% reduction in changeover times or 5 minute savings in machine idle time was observed which constitutes an annual cost savings of $31,200.