

應用模糊多目標策略於成本品質控制的最佳公稱與機械容差設計

This paper introduces an integrated multi-fuzzy objectives optimum design process for determining the best nominal sizes and tolerances of a mechanical component assembly by applying the quality control and manufacturing cost functions. The 3 .sigma. deviation is used for representing the range of tolerances corresponding to each design variables. The variation of the design objective function has been minimized for obtaining the robust performance result. A mechanical piston assembly problem has been created and utilized to be the illustrative example for proposed robust performance design including tolerances.