

Abstract

The independent study title is “an improvement on cycle time for the hard disk drive assembly machine”. The objective of study is to enhance the production capacity suitable for customer demands that are increase continuously. This research considers controlling factors which are effecting the cycle time of machine, such as the traverse distance of end-effector on Z axis and X-Y plane. The factors are investigated the assumption by the design of experimental method. The results show that the factors effect the cycle time statistically. The traverse distances, then, are adjusted and reduced cycle time from 15.24 second to 10.27 second or 33 percent. The production capacity increased equivalent to add 11 new machines into production line or the benefit of 16,500,000 Baht under investment about 1,387,000 Baht