ABSTRACT

The purpose of this research is to: (1) study standard guideline as to audit the status and the accomplishment in ergonomics program implementation in the organization. (2) In order to design and create a program which is contained a guideline and example of ergonomics implementation and can be used to evaluate the status and the achievement of the ergonomics implementation in the organization with a systematization and efficiency. Research methodology is divided into 4 phases. There were: (1) develop standard guideline to be an effective ergonomics program by analytic study from textbooks, existing documents and related research papers,(2)design and develop a software for audit supporting, (3) test the guideline and the software with Organization B to measure the current status in order to control and improve the program implementation within the organization, and (4) test the guideline and the software with Organization C and make a comparison with Organization B for benchmarking. According to the studying, Ergonomics Strategic Radar Scorecard Tree Model and software were created. The model consists of 7 standard elements. There are 35 standard criteria in total. All elements are scored by weighted average method and the full score is equal to 7. The score is divided into 5 levels: Very good(>80%:5.6) Good $(\geq 60\%:4.2)$ Average($\geq 40\%:2.8$) Poor($\geq 20\%:1.4$) Need Improvement($\leq 20\%:1.4$). The score will be updated automatically and display in different colors to distinguish the status. The result of ergonomics program implementation in Organization B found that organization B could make a dramatic rise in the number of scorecards . The progress increased by 35.29%. There were some advantages to the business in ergonomics implementation such as reduced injury recordable case for 2 people from the previous year, the number of the suggestions were higher than the former year by 68%. This also combined the ergonomics tools with lean-six sigma and kaizen methodology to improve safety, quality and productivity. In comparison between Organization B and C by using the developed program found that ergonomics program status of Organization B was more progressive than Organization C. The score was higher by 12.43%.