

ABSTRACT

Manufacturing Process Laboratory is one of the laboratories in the Department of Industrial Engineering Faculty of Industrial Engineering University of Telkom. This Laboratory organizes and conducting practicum to support Manufacturing Processes subject (IEG2G3). In the implementation of practicum activities, Laboratory Manufacturing Process using Haas Control Simulator as one of the learning facilities. Haas Control Simulator is a simulator of control CNC machines where the user can simulate the operation processes from the CNC machine. In the existing condition, the simulator is placed on a hexagonal-shaped table which is less safe because it can caused the simulator falls. In addition, the existing table also caused awkward work postures and activities that contributed to the risk of Repetitive Strain Injuries (RSIS) or Musculoskeletal Disorders (MSDs).

In previous research, the target specifications and concepts selected products has been found. By using a job plan on value engineering methods which are phase information, creative phase, the evaluation phase, the development phase and the recommendation phase, expected at this stage will obtained the detailed design and specification targets selected product concepts that have been defined.

Proposed formulation is based on the results of data that has been processed, analysis and brainstorming among the team of developers with Manufacturing Process Laboratory Assistant. It is intended that the detailed design produced is based with the needs of practical activities in Manufacturing Processes Laboratory.

Key words : *improving detail, the holder Haas Control Simulator, value engineering*