

## ***ABSTRACT***

In the faculty of industrial engineering at Telkom University has several laboratory facilities to support the understanding of industrial engineering students, one of which is the Facility Layout Design Lab (PTLF). But in the course of PTLF itself has not been available learning media shaped model or simulator. By using *Design For Assembly* the author analyzes the design concepts of previous researcher simulators and provides proposed designs to reduce the number of parts on the design concepts and increase the value of efficiency on design concepts.

*Design For Assembly* is a design technique that is needed to provide ease in consideration of making a product design. Boothroyd Dewhurst method with Manual Assembly was chosen because the product was not mass-produced but only used for instructional media in the Facility Layout Design laboratory at the faculty of industrial engineering at Telkom University.

The authors analyzed the DFA values of existing design concepts and then designed simulator designs for layout learning facilities from previous research design concepts to get designs that had fewer components, had faster assembly time and higher assembly efficiency.

**Keywords:** *Detail Design, Design for Assembly, DFA, Simulator, Props.*