## **ABSTRACT**

Telkom University has built educational support facilities such as laboratory / studio / workshops scattered across the faculty. There are 110 laboratory / studio / workshop which continues to grow in line with increasing demand for such sara. The main function of Laboratory / studio / workshop is practical where there are supporting equipment to practice the theories that have been gained in college. In addition, the facility also serves to make the scientific work of students and teachers and may even be a place for research collaboration for parties outside the University Telkom. So that Telkom University plan to implement Quality Assurance Standards for Laboratories in order to achieve reliable Laboratorium and improve competitiveness in scientific work and research. As for standards such as ISO 17025 are implemented by sampling for being the object of the research is Manufacturing Processes Laboratory is engaged in manufacturing production.

ISO 17025: 2008 is a standard for calibration laboratory or a laboratory test that is suitable to be applied to the Manufacturing Process Laboratory approaching the laboratory criteria. To assist in the application, it takes a design by first comparing the requirements stipulated by the condition of the existing ISO laboratory so that it can be seen GAP between the two needs a proposal which is then designed to meet the requirements which have GAP between the existing condition. The design of this research to meet the requirements of ISO 17025: 2008 is a standard-setting operating procedure (SOP) Control of Recording guided by clause 4.13. So that the design can produce an adequate output is needed benchmarking laboratory that has been certified ISO 17025: 2008

Keyword: ISO 17025: 2008, Benchmarking, Laboratory, Manufacturing Processes, Telkom University.